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ABIOMED INC  
Form 10-K/A  
August 28, 2002

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-K/A
(Amendment No. 3)

FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO
SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(MARK ONE)

/X/ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934
For fiscal year ended March 31, 2002

OR

/ / TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934
For the transition period from to

Commission File Number : 0-20584

ABIOMED, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE

04-2743260

(State or Other Jurisdiction of
Incorporation or Organization)

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

22 CHERRY HILL DRIVE
DANVERS, MASSACHUSETTS

01923
(Zip Code)

(Address of Principal Executive Offices)

(978) 777-5410

(Registrant's Telephone Number, Including Area Code)

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

TITLE OF EACH CLASS NAME OF EACH EXCHANGE ON WHICH REGISTERED
None None

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, \$.01 par value

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

Indicate by check mark if disclosure of delinquent filers pursuant to Rule
405 of Regulation S-K is not contained herein, and will not be contained, to the

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best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. /X/

The aggregate market value of the voting stock held by non-affiliates of the registrant as of July 10, 2002 was \$103,475,112 based on the closing price of \$6.633 on that date as reported on the Nasdaq Stock Market's National Market. As of July 10, 2002, 20,956,587 shares of the registrant's Common Stock, \$.01 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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The Undersigned Registrant hereby amends its Annual Report on Form 10-K to include audited consolidated financial statements for its fiscal years ended March 31, 2000, 2001 and 2002. The Registrant's prior filing of its Form 10-K had excluded audited consolidated financial statements as a result of the Registrant's replacement, as announced on June 6, 2002, of Arthur Andersen LLP as its independent accountants and time required to make certain restatements of its previously audited financial statements.

In conjunction with the completion of the above described audits, and with the benefit of subsequent information, we have made certain modifications to the Registrant's unaudited financial statements. The largest of these modifications was a \$443,000 reduction in accrued incentive compensation as of March 31, 2002, which based upon subsequent information, will not be paid in conjunction with the year ended March 31, 2002. We also increased product revenues by \$96,000 and \$103,000 for the fiscal years ended March 31, 2000 and 2002, respectively, reduced product revenues by \$190,000 for the fiscal year ended March 31, 2001 and reduced accumulated deficit as of March 31, 1999 by \$211,000. We also made certain reclassifications of information in our consolidated balance sheets.

These modifications of reported financial information are discussed further under the section entitled Restatement of Prior Year's Financial Statements under Item 7 of this Annual Report on Form 10-K. The Registrant's audited consolidated financial statements and supplemental schedules of quarterly results of operations, as modified hereunder, are presented in Item 14 of this Annual Report. Also updated in this report is Management's Discussion and Analysis of Financial Conditions and Results of Operations in Item 7 to reflect these audited results as well as other sections of the Form 10-K that either referred to the Registrant's consolidated financial statements or indicated that the consolidated financial statements presented in this Form 10-K were unaudited.

While this amendment also includes modifications to certain parts of other Items within this Annual Report, Registrant has not undertaken in this

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amendment to update all information, particularly non-financial information, in this Annual Report from its original presentation on July 16, 2002.

### INTRODUCTORY NOTE

THIS REPORT, INCLUDING THE DOCUMENTS INCORPORATED BY REFERENCE IN THIS REPORT, INCLUDES FORWARD-LOOKING STATEMENTS. WE HAVE BASED THESE FORWARD-LOOKING STATEMENTS ON OUR CURRENT EXPECTATIONS AND PROJECTIONS ABOUT FUTURE EVENTS. OUR ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE DISCUSSED IN, OR IMPLIED BY, THESE FORWARD-LOOKING STATEMENTS. FORWARD-LOOKING STATEMENTS ARE IDENTIFIED BY WORDS SUCH AS "BELIEVE," "ANTICIPATE," "EXPECT," "INTEND," "PLAN," "WILL," "MAY" AND OTHER SIMILAR EXPRESSIONS. IN ADDITION, ANY STATEMENTS THAT REFER TO EXPECTATIONS, PROJECTIONS OR OTHER CHARACTERIZATIONS OF FUTURE EVENTS OR CIRCUMSTANCES ARE FORWARD-LOOKING STATEMENTS. FORWARD-LOOKING STATEMENTS IN THESE DOCUMENTS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THOSE RELATING TO:

- OUR PLANS REGARDING THE TIMING AND OUTCOME OF INITIAL CLINICAL TRIALS FOR OUR ABIOCOR IMPLANTABLE REPLACEMENT HEART;
- OUR INTENTION TO EXPAND THE MARKET FOR OUR BVS PRODUCT LINE;
- OUR ABILITY TO OBTAIN AND MAINTAIN REGULATORY APPROVAL OF OUR PRODUCTS IN THE U.S. AND INTERNATIONALLY;
- THE OTHER COMPETING THERAPIES THAT MAY IN THE FUTURE BE AVAILABLE TO HEART FAILURE PATIENTS; AND
- OUR PLANS TO DEVELOP AND MARKET NEW PRODUCTS AND IMPROVE EXISTING PRODUCTS.

FACTORS THAT COULD CAUSE ACTUAL RESULTS OR CONDITIONS TO DIFFER FROM THOSE ANTICIPATED BY THESE AND OTHER FORWARD-LOOKING STATEMENTS INCLUDE THOSE MORE FULLY DESCRIBED IN THE "RISK FACTORS" SECTION AND ELSEWHERE IN THIS REPORT. WE ARE NOT OBLIGATED TO UPDATE OR REVISE THESE FORWARD-LOOKING STATEMENTS TO REFLECT NEW EVENTS OR CIRCUMSTANCES.

### PART I

#### ITEM 1. BUSINESS

##### OVERVIEW

ABIOMED is a leading developer, manufacturer and marketer of medical products designed to safely and effectively assist or replace the pumping function of the failing heart. In July, 2001, initial human clinical trials commenced in the U.S. for our AbioCor Implantable Replacement Heart. The AbioCor is the world's first battery-powered implantable replacement heart system. The AbioCor, the development of which follows decades of fundamental and applied research, development and testing, is intended to extend life and provide an improved quality of life for end-stage heart failure patients. The initial clinical trial of the AbioCor in the U.S. has commenced at four (4) among six (6) initial medical teams approved by the U.S. Food and Drug Administration, known as the FDA. Clinical testing of the AbioCor is anticipated to commence at select medical centers in Europe during 2002, subject to applicable regulatory approvals. We currently manufacture and sell the BVS, a FDA approved heart assist device. The BVS is the most widely used advanced heart assist device for the temporary treatment of all patients with failing but potentially recoverable hearts in the U.S.. We are also engaged in research and development relating to other devices to replace or support the pumping function of the heart. One such focused effort is towards further developing replacement heart technology

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acquired by us in 2000 from The Pennsylvania State University, the Penn State Heart. The Penn State Heart has a drive mechanism that is different than the AbioCor design. The Penn State Heart is, in addition to the AbioCor, the only

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other implantable heart system to survive the rigor of the replacement heart development program funded by the U.S. National Heart Lung and Blood Institute, the NHLBI. Development of the AbioCor and the Penn State Heart reinforces our commitment to providing the best solutions for end-stage heart failure patients in need of a replacement heart.

Our AbioCor is a heart replacement device that replaces the failing ventricles of a patient's diseased heart and takes over the heart's blood pumping function. It is designed for use in patients at risk of imminent death due to irreparably damaged hearts, but whose other vital organs remain viable. We believe the AbioCor will provide a much-needed treatment option for those patients in the U.S. for whom there is currently no effective therapy available. If and when approved by applicable U.S. and international regulatory authorities, we anticipate that we should be able to sell the first generation AbioCor systems for approximately \$100,000 each, subject to the establishment of reimbursement levels by third-party payers. To date, more than \$80 million have been invested in the development and testing of the AbioCor, including over \$20 million in funding from the NHLBI. We have built a pilot-scale manufacturing facility for the AbioCor. We have over 130 employees working on the AbioCor program, including over 90 engineers, scientists and other technically educated personnel. We are collaborating with leading medical centers and healthcare professionals.

Our BVS is a "bridge-to-recovery" device that can temporarily assume the full pumping function of the heart for patients with potentially reversible heart failure. It is intended for use in patients whose hearts can recover within a period of up to fourteen days. In 1992, the BVS became the first heart assist device capable of providing full circulatory support to be approved by the FDA. The BVS is the most widely used FDA-approved temporary heart assist device, and to date has been used to support thousands of patients at over 600 medical centers worldwide. The BVS, which primarily consists of single-use external blood pumps, cannulae and drive and control consoles, has been a profitable product line since fiscal 1995. We believe our experience in developing, manufacturing and selling the BVS will provide us with a competitive advantage in commercializing the AbioCor, as well as other future products.

Our Penn State Heart is intended to serve end-stage heart failure patients similar to those addressed by the AbioCor. We have designed the current version of the Penn State Heart to be smaller than the current clinical version of the AbioCor. The Penn State Heart is in a pre-clinical development and testing stage.

Our focused research and development related to the AbioCor, BVS and the Penn State Heart has provided us with the proprietary technology, know-how and experience to develop additional products. We believe we are the only company in the world with technical background and expertise in the full range of technology to support the pumping function of the heart. We believe that there are many opportunities to apply our expertise to address the needs of heart failure patients. We seek to be first to market with high-quality and cost-effective technologies for heart failure patients who currently lack adequate therapies.

ABIOMED is a Delaware corporation. We commenced operation in 1981. As used herein, ABIOMED includes ABIOMED, Inc. together with our subsidiaries. ABIOMED, the ABIOMED logo and BVS are our registered trademarks. AbioCor and Angioflex

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are our trademarks. This Report may also include trademarks of companies other than ABIOMED.

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### INDUSTRY OVERVIEW

#### THE HUMAN HEART

The human heart is the pump for the body's circulatory system. The heart has four chambers: the left and the right atria and the left and the right ventricles. The two atria serve as the inflow chambers of the heart, collecting blood for delivery to the ventricles. The ventricles are the pumping chambers of the heart, pumping blood to the lungs and the rest of the body.

The right ventricle of the heart pumps oxygen-depleted blood returning from the body to the lungs where it is re-oxygenated. The left ventricle receives oxygen-rich blood returning from the lungs and pumps it back to the rest of the body. The chambers of the heart are formed of muscle tissue known as myocardium. The coronary arteries, a specialized network of blood vessels within the heart, provide oxygen and other nutrients to the heart itself.

The human heart has four valves that help ensure that blood flows in the proper direction into and out of the ventricles as they are repeatedly filled and then discharged with the pumping of blood. The timing and rate at which the heart beats, referred to as its rhythm, is controlled by electrical impulses in the conduction system of the heart.

#### HEART DISEASE

Heart disease has been responsible for more than 700,000 deaths per year in the U.S. It is the number one cause of death in the U.S., responsible for more deaths than all forms of cancer combined. Illnesses and deaths from heart disease create an immense burden to many individuals and their families. Patients frequently experience extended suffering, and the economic cost is substantial. While a number of therapies exist for the treatment of patients in early stages of heart disease, limited therapies exist today for most patients with severe, end-stage, heart failure.

The majority of deaths from heart disease can be attributed to coronary heart disease, or CHD, and congestive heart failure, or CHF. Other types of heart disease include rhythm disorders and diseases of the valves.

CHD is a disease of the coronary arteries causing reduced blood flow and insufficient oxygen delivery to the affected portion of the heart. CHD can lead to a heart attack, also known as an acute myocardial infarction, resulting in permanent damage to the heart muscle. In severe heart attacks, death can occur suddenly or gradually over days and weeks.

CHF is a condition resulting from the progressive deterioration of the heart over extended periods of time. The patient's heart cannot provide adequate blood flow and oxygen to meet the needs of the body. CHF may be initiated and aggravated by a variety of factors, including high blood pressure, defective heart valves, CHD, infections of the heart muscle or the valves and heart problems resulting from heart defects. Due to the progressive nature of CHF, medical interventions often take place over periods of months or years.

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In general, heart failure is progressive. While approximately 60% of all heart failure patients experience sudden death as a result of cardiac arrest, the remaining patients who die from heart failure typically do so in hospitals or long-term care facilities.

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### PREVALENCE AND MORTALITY

The number of patients both suffering and dying from heart disease has been rising on an annual basis. Statistics indicate that there are over 12 million people with CHD and over 4 million people with CHF in the U.S., with similar incidence outside the U.S.

Approximately 60% of the approximate 700,000 deaths from heart disease in the US were sudden deaths. Of the deaths that did not occur suddenly, most were associated with CHD and approximately 10% with CHF. Current therapies to support these patients are inadequate because they cannot stop the progression of the disease. We believe that a significant number of such CHD and CHF patients could benefit from our AbioCor and our Penn State Heart.

### THERAPIES FOR HEART DISEASE

A broad spectrum of treatment is available for heart failure patients. Treatments include drug therapies, cardiological interventions, including closed chest procedures and rhythm management therapies, or surgical corrections, such as coronary bypass surgery and valve replacement. For patients with end-stage heart disease, however, these treatments are typically inadequate. Patients with severe heart disease frequently are in need of heart replacement. Because the supply of available donor hearts is limited, with fewer than 2,500 per year available in the U.S., heart assist and replacement treatments have been and continue to be developed with the goal of extending and improving the lives of these patients.

### DEVICES FOR CIRCULATORY SUPPORT TREATMENTS

Circulatory support treatments can be divided into two categories: (a) destination therapies, including heart replacement and permanent heart assist devices, and (b) temporary heart assist devices.

**DESTINATION THERAPY.** Devices intended to be within or attached to patients for their remaining lives are classified as destination therapies. Destination therapy devices consist of replacement hearts and permanent assist devices, including quality-of-life support devices that provide partial support to the heart on a permanent basis.

**HEART REPLACEMENT.** The goal of heart replacement, whether with a donor heart or a mechanical device, is to replace the failing human heart with a viable alternative. Patients with irreparably damaged hearts who are facing imminent death due to CHD or severe CHF are potential candidates for heart replacement provided that their other vital organs remain viable. The supply of human donor hearts is currently inadequate to meet the needs of these patients and no device is yet approved for use in these patients.

We believe that tens of thousands of patients per year, out of more than 100,000 potential patients, might eventually benefit from an implantable replacement heart once it is proven safe, effective and reliable. The fewer than

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2,500 patients saved by heart transplant in the U.S. annually represent a fraction of those that might be returned to a normal life if a greater supply of donor hearts or alternative therapy were available. In addition, a significant portion of heart transplant patients must endure a long waiting period before a suitable donor heart is identified, if at all. The development of an implantable mechanical heart could help alleviate this long and difficult wait. No heart replacement device has yet been approved for commercial use as a destination device. The AbioCor is the first heart replacement device to commence clinical trials for this purpose.

**PERMANENT HEART ASSIST.** Permanent assist devices are being developed to supplement the function of the diseased heart or to stop or slow the progression of the disease, while leaving the diseased

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heart in place. These devices contrast with replacement hearts, which are intended to replace a severely and irreversibly damaged heart. A number of companies are developing permanent heart assist devices, some of which are in clinical trials in the U.S. and overseas. Certain of these assist devices are in advanced stages of clinical testing and pursuing regulatory approval. One implantable left ventricular assist device has received recommendation from a FDA Advisory Panel as approvable, subject to certain conditions, but no assist device has yet been approved in the U.S. for commercial use as a destination device. Permanent assist devices under development can be grouped into two categories: those that pump blood directly, known as ventricular assist devices or VADs, and less invasive devices that are intended to help the heart without the risk of directly contacting flowing blood. The less invasive devices include those that wrap around the heart, either to help the heart pump blood or to inhibit deterioration of the heart by preventing its further enlargement, and those that attempt to synchronize the actions of the heart ventricles with electrical impulses. We believe that all types of permanent heart assist devices potentially may be used to treat certain heart failure patients who are near death as well as those patients who are not at imminent risk of death but whose daily activities are significantly restricted due to their weakened hearts.

VADs, the more invasive of the two categories, may prove the most appropriate permanent heart assist devices for certain end-stage CHF patients. Implantable VADs are intended primarily for patients with severe left ventricular failure. We believe that VADs are being primarily developed for CHF patients and that VADs would not be appropriate for long-term support of a very large fraction of heart failure patients, including those with massive heart damage, severe rhythm disorders, blood clots in the ventricles, severe lung disease, ventricular rupture, chronic right ventricular failure or heart transplant rejection.

**TEMPORARY HEART ASSIST.** Candidates for temporary heart assist devices include patients with severe but potentially reversible heart failure and patients whose hearts need help pumping blood while they await transplantation or other therapies. Temporary heart assist devices typically consist of a specialized pump that is attached to a patient's heart and driven by a console or powered by an external battery pack. Such devices are intended to be removed from a patient's body once the patient's heart has had the opportunity to recover its normal function or the heart is replaced. Temporary heart assist devices can be grouped into three categories:

**BRIDGE-TO-RECOVERY.** Bridge-to-recovery devices are used to support patients with potentially reversible failing hearts. These devices are most frequently used to support patients whose hearts do not fully restart following open-heart surgery, and who cannot be weaned off the heart-lung machine. Of the patients who experience such complications, many thousands die each year whose lives

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could potentially be saved with a temporary assist device as a "bridge to recovery". Bridge-to-recovery devices temporarily assume the pumping function of the heart, while allowing the heart to rest, heal and recover its normal function. These devices can also be used for patients who have not undergone surgery but whose lives are threatened by viral infections that attack the heart muscle. In addition, bridge-to-recovery devices may prove beneficial to certain patients who have suffered from a recent heart attack.

BRIDGE-TO-TRANSPLANT. Bridge-to-transplant devices are used to support patients who have experienced life-threatening heart disease and are awaiting heart transplantation. We believe that the market for this category of device is limited by the availability of qualified donor hearts.

STAGING. Staging devices are used to support patients before or during application of other therapies and to support patients with failing hearts being transported to other facilities. At present, for reasons of specialized care, patients are transported between medical centers with the assistance of such devices under hospital guidelines. In the future, staging devices may be used to support heart failure patients prior to implantation of a permanent heart assist device or a heart replacement. These devices

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could help stabilize the patient and provide the medical team with time to better assess the patient's condition before selecting an appropriate therapy. In addition, while bridge-to-recovery devices are approved and used today to assist heart transplant patients when rejection occurs, in the future staging devices may be used with transplant patients who have rejected their donor heart and need life support before receiving an implantable replacement heart.

### ABIOMED PRODUCTS AND PRODUCTS UNDER DEVELOPMENT

Our current commercial product line is the BVS. Our primary products under development are the AbioCor system and the Penn State Heart. Each of these products are systems, or product lines, that consist of various component products. In addition, we are in the early stages of research and development of other potential products for heart failure patients.

### THE ABIOCOR IMPLANTABLE REPLACEMENT HEART

The AbioCor is a battery-powered totally implantable replacement heart system. The AbioCor is referred to as totally implantable because it has been designed to operate primarily on portable external battery power, without wires or any other material penetrating the patient's skin. The AbioCor is referred to as a replacement heart because it has been designed for implantation in the space vacated by the removal of a patient's diseased ventricles, where it will take over the full pumping function of the heart. The AbioCor is intended for use as destination therapy by patients with irreparably damaged hearts who are at risk of imminent death due to CHD or severe CHF but whose other vital organs remain viable.

In 1988, we began to receive funding for AbioCor development from the National Heart, Lung and Blood Institute, known as the NHLBI, to support our development and testing of the AbioCor. We have maintained this support through the research phase of our AbioCor development program by achieving various designated milestones. The NHLBI has provided over \$20 million of the more than \$80 million that has been invested to date for the development of the AbioCor.

DESIGN OF THE ABIOCOR. The following diagram illustrates the principal components of the AbioCor.



[GRAPHIC]

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The AbioCor system consists of the following principal components:

- A thoracic unit, or "replacement heart," which includes two artificial ventricles with their associated valves and a hydraulic pumping system. The unit weighs approximately two pounds and provides complete blood circulation to the lungs and the rest of the body. The ventricles and their associated valves have seamless surfaces made from our blood-contacting material, Angioflex, and special geometries with flow patterns designed to reduce the risk of blood cell damage and blood clots. Our current configuration of the thoracic unit is sized for patients with relatively large chest cavities. If our testing of this configuration is successful, we plan to develop thoracic units of different sizes to fit a larger portion of the patients who might benefit from a replacement heart.
- A rechargeable internal battery, that is implanted beneath the skin in the abdomen of AbioCor recipients and allows the AbioCor to operate without any external power supply for limited periods of time.
- A microprocessor-based internal electronic device, or "controller", that is implanted beneath the skin in the abdomen of AbioCor recipients and controls and monitors the thoracic unit and provides radio communication with an external monitor affording patients and caregivers the opportunity for real-time information on its operating status.
- An across-the-skin, or transcutaneous, energy transmission system, which eliminates the need for wires penetrating the patient's skin and the inherent associated risks of infection. It transfers the power to operate the AbioCor system and to recharge the implantable battery without tethering the patient to an external drive console. This system includes an internal energy coil that is implanted beneath the skin and an external coil that is aligned in proximity to the internal coil but resides outside the skin. The external coil emits power that is received by the internal coil.
- An external rechargeable battery pack and monitor designed to be worn by the patient. These components supply primary power to the system, allow patient mobility, provide system diagnostic information, and recharge the implanted back-up battery as needed.

The AbioCor design is intended to preserve life and to restore the quality of a patient's life to an acceptable level. Restoration of the quality of a patient's life means that the patient should be able to return to a comfortable lifestyle, free from pain, with good mental acuity and an ability to carry out everyday activities. Among the quality-of-life features of the AbioCor design are quiet heart valves, no penetration of the skin, no tethering to a large external drive console and no need for immuno-suppression therapies. The AbioCor system is designed for both low maintenance and low patient involvement. However, during our ongoing initial clinical trial of the first generation AbioCor, patients have largely remained under sustained medical supervision in the hospital and have more frequently used a portable monitoring device in lieu of the patient-carried external battery pack and electronics until such time as their health has recovered and a greater degree of independence has been demonstrated. In

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addition, except when clinical factors dictate otherwise, we are using a conservative anti-coagulation regimen and imposing greater limits on patient activities until we gain more clinical experience, especially in the home setting.

We have also created tools and methods intended to make the AbioCor system easier to implant. These tools include quick-connectors for relatively easy attachment of the AbioCor to the human anatomy and a virtual surgery software tool to allow for the simulated implant of the AbioCor into a

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three-dimensional anatomical computerized model of a particular patient prior to opening that patient's chest.

INITIAL CLINICAL TRIAL. In our initial clinical trial we are seeking to determine whether the first generation AbioCor can effectively and safely extend life with acceptable quality of life for patients who are otherwise likely to die within thirty days and who have no other life-saving option. The results of this initial fifteen patient trial will allow us to better assess our status with regard to obtaining regulatory approval to commercially market and sell the AbioCor for an initial subset of patients in the U.S.

In January 2001, we received FDA permission under an Investigational Device Exemption (IDE) to begin the initial human clinical trial in five patients. Under the terms of the IDE, our initial trial consists of a total of fifteen patients divided into three groups of five each with expansion to each successive group of five patients if the 60-day experience of patients with the AbioCor is satisfactory to the FDA. Patients can be included in this initial clinical trial only if they have bi-ventricular heart failure, are more than eighteen years old, have a predictably high likelihood of dying within the next 30 days, are unresponsive to maximum existing therapies, are ineligible for heart transplantation and are sufficiently large physiologically for the AbioCor to fit and operate adequately. Patients are to be excluded from the clinical trial if their heart failure has a significant potential of being reversible, if they are pregnant, have serious psychiatric illness or an inadequate social support system. Patients may also be excluded if they are suffering from other serious non-cardiac medical ailments.

In July 2001, doctors at Jewish Hospital in Louisville, Kentucky performed the world's first implantation of our AbioCor Implantable Replacement Heart. As of July 15, 2002 seven implantations of the AbioCor had been attempted in critically ill patients meeting the criteria for the clinical trial. Five of these implantations were successful with four of the five patients living on AbioCor support for more than the initial goal of 60 days (i.e. more than twice their expected life expectancy without the AbioCor), three of the patients recovered well enough to take excursions outside the hospitals, two of the patients were discharged from the hospital to intermediate facilities and one of these was discharged and released to his home. As of July 15, 2002, two of these patients are alive. One of these two is living comfortably at home with his family with routine, weekly check-up visits at the hospital. He has been supported by the AbioCor for over ten months (implanted on September 13, 2001). The second of these two patients has been readmitted to the hospital and is being treated for a recurring respiratory condition. He has been supported for over eight months (implanted on November 5, 2001).

In November 2001, under the terms of the FDA approval for the trial, we were allowed to proceed with the second group of five patients. We also have been preparing to commence clinical testing of the AbioCor in a few selected

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clinical sites in Europe. We are focusing on learning as much as possible from the experience of each patient to benefit successive patients. Considerable amounts have been learned about the implant of the AbioCor and the subsequent care of these patients. We are also ensuring that prospective patients are well informed about the risks of the clinical trial. This process has contributed to all of the patients thus far enrolled in the trial being patients with various forms of CHF as opposed to patients dying from more acute events such as CHD. Although pre-existing non-cardiac conditions have made the care of these patients more challenging and their hospital stays longer, the AbioCor's ability to provide normal bi-ventricular blood circulation appears to have helped alleviate some of these conditions in some of these patients.

While we do not yet have a sufficient number of patients to draw statistically meaningful conclusions, we are very encouraged by the early results of the AbioCor clinical trial. As of July 15, 2002, the duration of support for the five patients supported by the AbioCor have ranged from 56 to 305 days, including 305 and 242 days for the two patients who remain alive on AbioCor support. In a cumulative total of approximately 2.4 patient-years of support, the mechanical operation of the AbioCor system has

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been highly reliable, providing appropriate circulatory support without any clinically significant malfunction. All of the patients supported by the AbioCor have lived beyond what would otherwise have been predicted, and the majority have made reference to improved quality of life despite ups and downs during their post-operative recovery course. None of the patients experienced device-related infection or sepsis. Three patients have experienced strokes of uncertain origin. Two of these strokes were serious and one was relatively minor that led to recovery. Among the potential causes of those strokes could be: (1) contact of atrial tissue with a structural element on the surgical cuff used to surgically attach the patients' atria to the AbioCor, (2) the inability to maintain target anticoagulation regimens in some of these patients because of their severely compromised pre-operative status or a combination of the two. Both of these potential issues are being addressed to help mitigate the likelihood of stroke for future patients. Post-mortem examination of the AbioCor thoracic units explanted from the three deceased patients that had been supported with the AbioCor did not exhibit evidence of clinically significant thrombus formation within the device itself, suggesting, we believe, that the blood pumps have performed as designed and were likely not contributing factors for those patients who experienced strokes.

Success of the initial clinical trial will be evaluated based upon periodic review of the survival of AbioCor patients and their quality of life as measured by a variety of assessment criteria. As we gain clinical experience with the most seriously ill patients and demonstrate clinical efficacy and safety, we expect to enhance the performance range, durability and reliability of AbioCor systems and plan to seek regulatory approval for current and subsequent generations of the AbioCor for use in imminently dying patients and in increasingly broad patient populations and with longer intended durations. Such regulatory approval will likely require clinical data and trials beyond this initial trial. This regulatory plan is consistent with our experience with the BVS system.

While the AbioCor is designed as a permanent replacement for the failing heart, the AbioCor today is a first generation device that will likely require improvement over time to incorporate feedback from its clinical use. The patients that will be initially treated with the AbioCor will be relatively large framed adults who are near death and for whom the AbioCor represents the only potential viable alternative to death. We have tested the AbioCor extensively. The results of such testing were part of our IDE submission to the

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FDA from which we gained permission to commence initial clinical trials. We believe that for patients ill enough to qualify for the initial clinical trial, the first generation AbioCor presents the best alternative to potentially extend their lives and to provide them with an acceptable quality of life. However, we understand that this patient category represents only a fraction of the potential patients who might benefit annually from the AbioCor. Our clinical and regulatory strategy of continuing to improve the AbioCor based on clinical experience is intended to allow us to demonstrate that the AbioCor can provide patients with a reasonable quality of life for sustained periods of time. We believe that demonstration of this capability is needed for eventual use of the product in end-stage heart failure patients who are not as ill as is required to qualify for our initial clinical trial.

SUBSEQUENT INFORMATION REGARDING INTITIAL CLINICAL TRIAL. As of August 28, 2002, one AbioCor supported patient remains alive having been supported by the AbioCor for 349 days. The second AbioCor supported patient referenced above died after 293 days of support.

COST EFFECTIVENESS. We are developing the AbioCor with the intent to eventually offer a cost-effective treatment for end-stage heart failure patients. In addition, the AbioCor has the potential to allow patients an opportunity to return to productive lives. This would allow the medical system to save money by discharging the patient from the hospital and allowing the person to become productive and lead a reasonably normal life.

If the safety, effectiveness and durability of the AbioCor are clinically demonstrated for multiple-year durations, it has the potential to be less expensive than heart transplantation over a five-year period. One reason for this reduced cost is that recipients of a mechanical replacement heart are not expected to need immuno-suppression drugs. The blood and tissue contacting portions of the AbioCor are constructed of inert materials, which are not expected to elicit a response from a patient's immune system. Other cost savings could result because the patients can receive a replacement heart sooner and would not

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require extensive tests and biopsies to assess donor heart compatibility. While recipients of the AbioCor will need to purchase new batteries periodically, we anticipate that the annual comparative cost of battery purchases will be significantly less than the cost of immuno-suppression drugs required by donor heart recipients.

While developing the AbioCor, we introduced the BVS, a temporary heart-assist device, which is currently being sold in the U.S. and international markets. Certain key elements of the technology developed for the AbioCor, especially the blood contacting material, Angioflex, have been clinically tested in the BVS and are currently in commercial use. In addition, the BVS has enabled us to develop significant experience in areas such as research and development, manufacturing, regulatory compliance, clinical support and sales and marketing. We believe our experience with the BVS in these areas will provide us with a competitive advantage in commercializing the AbioCor.

### THE BVS 5000 TEMPORARY HEART ASSIST DEVICE

The BVS was the first heart assist device capable of assuming the full pumping function of the heart to be approved by the FDA, and is the most widely

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used heart assist device today, with thousands of patients supported to date. It is a bridge-to-recovery device designed to provide a patient's failing heart with full circulatory assistance while allowing the heart to rest, heal and recover its function. The BVS can support the left, right or both ventricles of the heart. The average age of patients supported with the BVS is 53, however the BVS has been used to support patients as young as 8 and as old as 86 years old.

The BVS is the only device that the FDA has approved for the temporary treatment of all categories of patients with failing but potentially recoverable hearts. The BVS is most frequently used in patients whose hearts fail to recover function immediately following heart surgery. The FDA approved the BVS through its rigorous pre-market approval process for use with these post-surgical patients in November 1992. In 1996, the FDA approved use of the BVS for all other categories of post-surgical patients with potentially reversible heart failure. In 1997, the FDA approved use of the BVS on patients who, prior to BVS insertion, are non-surgical patients with abrupt heart failure as a result of viral attack of the heart or certain heart attacks, expanding its use to the temporary treatment of all patients with potentially reversible heart failure. We market and sell the BVS system in Europe under a CE mark and in 2001 we received regulatory approval to market and sell the BVS in Japan.

The following diagram illustrates the principal components of the BVS.

[GRAPHIC]

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The BVS system consists of the following components:

- Single-use external blood pumps, which provide pumping of blood for the left, right or both sides of a patient's heart and are designed to emulate the function of the natural heart;
- Cannulae, which are specially designed tubes used to connect the blood pumps to a patient's heart; and
- A computer-controlled pneumatic drive and control console, which automatically adjusts the pumping rate to meet the basic needs of the patient.

The integration of the cannulae, blood pumps and console creates an "external heart" system with the ability to reduce the load on the heart, provide pulsatile blood flow to vital organs and allow the heart muscles time to rest and recover. The BVS is designed to be easy to use and does not require a specially trained technician constantly to monitor or adjust the pumping parameters.

The BVS is designed to facilitate the recovery of patients' hearts as quickly as possible. Patients who recover under BVS support typically stabilize in a period of less than one week. It generally takes three to five days for the damaged but recoverable heart muscle to restore its function in a post-cardiotomy patient. While the BVS has been used to support some patients for weeks or months, the BVS is not intended nor approved for long-term use. The BVS, although it is an external VAD, serves a different function than bridge-to-transplant devices, which are intended for long-term use by patients awaiting a heart transplant.

The BVS is most frequently used to support patients who have undergone open-heart surgery, when the heart cannot be successfully restarted and weaned off the heart-lung machine used in surgery. The BVS can assume the full pumping function of the heart for these patients while reducing certain risks associated

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with extended support on the heart-lung machine, including bleeding, strokes and blood cell damage. The traditional therapy for these patients has been the combined use of drugs and intra-aortic balloon pumps. Intra-aortic balloon pumps are capable of providing limited enhancement to the pumping function of a failing heart. Despite the availability of such therapy, many thousands of these patients die each year.

Other categories of patients who can be supported by the BVS include those suffering from viral myocarditis, a viral infection of the heart. For these patients, the BVS assumes the full pumping function of the heart, allowing the patient's immune system to defend against the virus. Other uses of the BVS include supporting patients following failed heart transplants and supporting the right ventricle of a patient's heart in conjunction with the implantation of a device to assist the left ventricle. The BVS is typically used when the patient's chances for survival are small. We are also exploring other potential applications of the BVS, including its use as a staging device to support heart failure patients prior to a permanent heart assist device or heart replacement.

Any hospital performing open-chest heart surgery may use the BVS. There are approximately 900 of these hospitals in the U.S. and more than 1,000 such hospitals outside the U.S. As of March 31, 2002, more than 500 medical centers in the U.S. had purchased the BVS, including 70% of the major U.S. centers that perform more than 500 heart surgeries annually. In marketing the BVS, we are focusing on

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selling additional consoles and disposable blood pumps to existing customers with significant but less emphasis on adding new customers. Approximately 70% of current BVS revenues are derived from sales of BVS single-use blood pumps to existing customers. Our U.S. list prices for the BVS system are \$12,400 for a BVS single-use blood pump and cannulae set and \$64,500 for a BVS console.

Since the BVS received its initial FDA approval, we have made various improvements to the BVS system, primarily to make it easier to use. We continue to enhance the BVS product line and are developing improved blood pumps, cannulae and consoles. In May 2000, we received pre-market supplemental approval from the FDA to begin selling our BVS 5000t Transport/Backup console. This new console allows for transport of a patient by ambulance or aircraft between hospitals as necessary in order to expand patient care. We believe this and other pending improvements may permit use of the BVS for additional patient conditions.

### THE PENN STATE HEART

The Penn State Heart, like the AbioCor, is a battery-powered totally implantable replacement heart system intended for use as destination therapy by patients with irreparably damaged hearts who are at risk of imminent death due to CHD or severe CHF but whose other vital organs remain viable. We acquired the technology rights to the Penn State Heart in 2000, subject to reversion to The Pennsylvania State University on or before September 2003 if we do not make a reasonable effort to commercialize this technology. Similar to the AbioCor, the development of the Penn State Heart was supported by significant funding from the NHLBI. The AbioCor and the Penn State Heart were the only two replacement heart programs that achieved the technological progress needed to qualify for the final pre-clinical rounds of funding from the NHLBI. The Penn State Heart is currently in an advanced stage of pre-clinical development. We are developing this device in collaboration with the scientific team at The Pennsylvania State University.

The Penn State Heart, like the AbioCor, consists of various subsystems

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including a thoracic unit, rechargeable implantable battery, microprocessor-based implantable electronic device, transcutaneous energy transmission system and external rechargeable battery pack and monitor. The key differentiation between the current design of the AbioCor and the Penn State Heart is in the thoracic unit. In areas other than the thoracic unit, effort has been made to utilize AbioCor subsystems where possible. The pumping mechanism in the Penn State Heart's thoracic unit consists of two artificial ventricles but is constructed and actuated differently than in the AbioCor. We believe that the Penn State Heart and the AbioCor each has its unique advantages. The combination strengthens ABIOMED's position to continue to lead in the introduction of heart replacement technologies. It is our intention to continue to develop the Penn State Heart in an effort to determine which device is more suitable for the different classes of end-stage heart failure patients in need of heart replacement. We may find that each is best for certain subsets of patients or that certain features of the two technologies should be combined to produce a better device.

### OTHER PRODUCTS AND TECHNOLOGIES UNDER DEVELOPMENT

We are using the technology and know-how derived from the AbioCor and the BVS in the research and development of other potential cardiovascular products. We are also using our experience and commitment to this field to evaluate potential collaborative arrangements relating to third-party technologies and products.

Other new technologies are in various stages of research, development or evaluation, and include passive and active heart wraps as well as specialized implantable and external heart assist devices. In addition, research and development activities under our product development programs incorporate certain technologies that have potential as separate spin-off products. Examples include implantable

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monitoring systems with remote transmission capability software for virtual surgery, non-invasive power transmission systems, and external monitoring systems.

### RESEARCH AND PRODUCT DEVELOPMENT

As of March 31, 2002, our research and development staff consisted of 166 professional and technical personnel, including 13 with PhDs, and 48 engineers, many with advanced degrees, covering disciplines such as electronics, mechanics, software, reliability engineering, fluid mechanics, physics, materials and physiology. Included among the 166 employees are 52 employees engaged in the pilot manufacturing and quality testing of AbioCor systems. All of the AbioCor systems manufactured are being used for our ongoing initial clinical trial, testing and other investigational purposes. None of the AbioCor systems manufactured are available currently nor approved for commercial sale.

Our research and development efforts are focused on mechanical heart assist and heart replacement, and the continued enhancement of the BVS and related technologies. Interaction continues with the FDA and corresponding foreign regulatory agencies to obtain the necessary clearances and approvals for our products. Sophisticated but established tools, such as three-dimensional computer-aided design systems are used to permit smooth transition of new designs from research to product development and into manufacturing. We have substantial expertise in electro-mechanical systems, cardiac physiology and experimental surgery, blood-material interactions, fluid mechanics and hemodynamics, internal and external electronic hardware, battery technology,

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software, plastics processing, lasers, and optical physics. Our expertise has been primarily focused on addressing challenges associated with the safe and effective pumping of blood.

We expended \$15.6, \$28.7 and \$27.1 million on research and development in fiscal 2000, 2001 and 2002, respectively. These amounts included \$11.5, \$16.6 and \$21.0 million, respectively, for AbioCor development and testing and \$6.4 million in fiscal 2001 for the Company's acquisition of patented technology and marketing rights to the Penn State Heart. Since our inception, U.S. government agencies, particularly the NHLBI, have provided significant support to our product development efforts when such products are in their early stages of research and development. As of March 31, 2002, our total backlog of research and development contracts and grants was \$0.7 million. All of these contracts and grants contain provisions making them terminable at the convenience of the government.

### SALES, CLINICAL SUPPORT, MARKETING AND FIELD SERVICE

We believe that the sales, clinical support, marketing and field service teams established for the BVS product line and the relationships developed with existing customers will be instrumental not only in continuing to expand BVS usage and sales, but also in launching new products such as the AbioCor and the Penn State Heart.

The BVS is sold in the U.S. through direct sales and clinical support teams. As of March 31, 2002, our worldwide BVS sales, clinical support, marketing and field service teams included 47 full-time employees. Our sales force primarily focuses on increasing sales from expanded usage of BVS disposable blood pumps by our large installed base of customers as well as from initial and upgrade sales to new and existing customers. Our clinical support group focuses on training and educating new and existing customers in order to help improve clinical outcomes. We believe that the efforts of our clinical support group contribute significantly to the number of lives saved by physicians using the BVS. This in turn promotes usage and reorders of BVS single-use blood pumps. Approximately 70% of BVS revenues in fiscal 2002 were derived from sales of BVS single-use blood pumps to existing customers. We believe that the reputation and customer relationships of our sales and support teams will be key assets for the

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introduction of future products such as the AbioCor, the Penn State Heart and BVS product extensions and other products under development.

Building on our experience in the U.S., we have expanded our international sales efforts, both for the BVS and in preparation for the AbioCor. Our international BVS product sales increased by \$1.3 million, or 188%, during the fiscal year ended March 31, 2002. In October 2001 we received approval from the Japanese Ministry of Health, Labor and Welfare to market and sell the BVS system in Japan. We conduct our international sales efforts through distributors and by selling directly in selected European markets through ABIOMED B.V., our wholly-owned subsidiary located in The Netherlands.

### MANUFACTURING

We have over 10 years of experience in the manufacture of the BVS console, BVS blood pumps, certain cannulae and related accessories. As of March 31, 2002,



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our BVS manufacturing and quality assurance team consisted of 47 people. The manufacture of our BVS blood pumps and consoles includes assembly, testing and quality control. Key blood-contacting components for the BVS blood pumps, including valves and bladders are manufactured from our proprietary Angioflex polymer. We purchase a majority of the raw materials, parts and peripheral components used in the BVS consoles. Depending on the size and design of the cannulae, they are either purchased or manufactured by us.

As of March 31, 2002, 52 people in our research and development group were engaged in AbioCor pilot manufacturing, process improvement and related quality assurance. The production of the AbioCor is based on some processes that are similar to the processes used for the BVS. We produce the majority of the AbioCor blood contacting components in our facility and all such components are assembled in-house. A majority of the metallic mechanical parts, electronic components and batteries used to produce the AbioCor are purchased. We contract with third parties to manufacture certain of the electronic systems used in the AbioCor and we are increasingly moving such manufacturing to third parties.

In 2000, we moved our AbioCor pilot manufacturing to a new facility that includes a state-of-the-art cleanroom area dedicated to AbioCor production. We also moved our BVS console manufacturing to a dedicated area in this new facility in 2000. In 2001, we completed moving all of our manufacturing operations to this new facility, including moving our BVS blood pump and cannulae manufacturing operations to a new state-of-the-art cleanroom manufacturing area. We believe this new facility gives us the physical capacity to produce sufficient quantities of AbioCor systems throughout the period of our clinical trials as well as produce sufficient quantities of BVS disposable blood pumps and cannulae to meet market demand for the foreseeable future. Our BVS manufacturing area is ISO 9001 certified and operates under the FDA's current Quality Systems Regulations and Good Manufacturing Practices, known as QSR/GMP. Our AbioCor manufacturing areas are ISO 9001 certified and we are taking steps towards ensuring that our AbioCor manufacturing area is QSR/GMP compliant for purposes of eventual commercial distribution of AbioCor, subject to regulatory approvals.

### PROPRIETARY RIGHTS, PATENTS AND KNOW-HOW

We have developed significant know-how and proprietary technology, upon which our business depends. To protect our know-how and proprietary technology, we rely on trade secret laws, patents, copyrights, trademarks, and confidentiality agreements and contracts. However, these methods afford only limited protection. Others may independently develop substantially equivalent proprietary information, gain access to our trade secrets or disclose such technology without our approval.

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A substantial portion of our intellectual property rights relating to the AbioCor, the Penn State Heart and the BVS is in the form of trade secrets, rather than patents. We protect our trade secrets and proprietary knowledge in part through confidentiality agreements with employees, consultants and other parties. We cannot assure that our trade secrets will not become known to or be independently developed by our competitors.

As of July 15, 2002, we own 42 U.S. issued patents, including 12 related to the AbioCor, 5 related to the Penn State Heart, and 2 related to the BVS. We also own a number of corresponding patents in a limited number of foreign countries. Our patents may not provide us with competitive advantages. They may also be challenged by third parties. Our pending or future patent applications may not be approved. The patents of others may render our patents obsolete or otherwise have an adverse effect on our ability to conduct business. Because

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foreign patents may afford less protection than U.S. patents, they may not adequately protect our proprietary information.

The medical device industry is characterized by a large number of patents and by frequent and substantial intellectual property litigation. Our products and technologies could infringe on the proprietary rights of third parties. If third parties successfully assert infringement or other claims against us, we may not be able to sell our products. In addition, patent or intellectual property disputes or litigation may be costly, result in product development delays, or divert the efforts and attention of our management and technical personnel. If any such disputes or litigation arise, we may seek to enter into a royalty or licensing arrangement. However, such an arrangement may not be available on commercially acceptable terms, if at all. We may decide, in the alternative, to litigate the claims or to design around the patented or otherwise proprietary technology.

The government may obtain certain rights to use or disclose technical data developed under government contracts that supported the development of some of our products. We retain the right to obtain patents on any inventions developed under those contracts (subject to a non-exclusive, non-transferable, royalty-free license to the government), provided we follow prescribed procedures.

### COMPETITION

Competition among providers of treatments for the failing heart is intense and subject to rapid technological change and evolving industry requirements and standards. Many of the companies developing or marketing cardiovascular products have substantially greater or broader financial, product development, sales and marketing resources and experience than ABIOMED. These competitors may develop superior products or products of similar quality at the same or lower prices. Moreover, improvements in current or new technologies may make them technically equivalent or superior to our products in addition to providing cost or other advantages. Other advances in medical technology, biotechnology and pharmaceuticals may reduce the size of the potential markets for our products or render those products obsolete.

No implantable replacement heart is commercially available today. We are aware of other heart replacement device development efforts in the U.S., Canada, Europe and Japan but are not aware of any plans for any other totally implantable replacement heart to commence clinical trials in the U.S. or anywhere in the world. We believe that if and when other implantable replacement hearts are available, our AbioCor and Penn State Heart will compete with them based on quality-of-life advantages, cost effectiveness, device reliability, clinical support and customer relationships.

In addition to the developers of implantable replacement hearts, there are a number of companies, including Arrow International, Thoratec Corporation and World Heart Corporation which are developing permanent heart assist products, including implantable LVADs and miniaturized rotary ventricular assist

devices, that may address markets that overlap with certain segments of the markets targeted by AbioCor, the BVS and the Penn State Heart. AbioCor and the Penn State Heart may compete with those devices for some patient groups, notably patients with severe CHF due to predominant left ventricular heart failure. We believe that implantable replacement hearts, LVADs and other VADs, if developed and proven effective for destination therapy, will generally be used to address the needs of different patient populations, with an overlap for certain segments of the heart failure population. We believe that there is a need for both

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implantable LVADs and implantable replacement hearts as destination therapies, and that when both technologies demonstrate the required reliability, surgeons will favor implantable replacement hearts for most CHD patients and a significant fraction of CHF patients.

In addition to devices being developed for patients in need of heart replacement, several companies and institutions have been for many years investigating xenotransplantation, the transplantation of a heart from another species, as a potential therapy. Most notably, some developers are investigating the use of genetically engineered pig hearts as an alternative source of donor hearts. This technology remains in its formative stage and subject to a number of significant scientific challenges, including controlling elevated immunologic reactions leading to heightened rejection problems between cross-species grafting and concerns for cross-species disease transmission to the recipient and the public at large. We believe that this technology will not achieve practical application for heart replacement for decades, if ever.

The BVS is a device that can assume the full pumping function of the heart. The FDA has approved the BVS as a bridge-to-recovery device for the treatment of all patients with potentially reversible heart failure. The BVS competes with a temporary cardiac assist device from Thoratec Corporation, which is also capable of assuming the full pumping function of the heart and is today approved for post-cardiotomy support. The Thoratec device was originally approved for bridge-to-transplant and bridge-to-transplant continues to be the primary use of the device. In addition, the BVS competes with blood pumps, such as intra-aortic balloon pumps and centrifugal pumps, that are used in medical centers for a variety of applications but which are limited to providing partial pumping support of failing hearts, are non-pulsatile, or are not recommended for the duration of support generally required for bridge-to-recovery. We are not aware of any other company that has applied for FDA approval of a device that is directly competitive with the BVS. Approval by the FDA of products that compete directly with the BVS could increase competitive pricing and other pressures. We believe that we can compete with such products based on cost, clinical utility and customer relations.

Our customers frequently have limited budgets. As a result, our products compete against a broad range of medical devices and other therapies for these limited funds. Our success will depend in large part upon our ability to enhance our existing products, to develop new products to meet regulatory and customer requirements, and to achieve market acceptance. We believe that important competitive factors with respect to the development and commercialization of our products include the relative speed with which we can develop products, establish clinical utility, complete clinical trials and regulatory approval processes, obtain reimbursement, and supply commercial quantities of the product to the market.

### THIRD-PARTY REIMBURSEMENT

We sell our BVS product and intend to sell most of our potential products under development to medical institutions. Medical institutions and their physicians typically seek reimbursement for the use of these products from third-party payers, including Medicare, Medicaid, and private health insurers and managed care organizations. As a result, market acceptance of our current and proposed products may depend in large part on the extent to which reimbursement is available to medical institutions and physicians for use of our products.

Coverage and the level of payment provided by U.S. and foreign third-party payers varies according to a number of factors, including the medical procedure,

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payer, location, outcome and cost. In the U.S., many private health care insurance carriers follow the recommendations of the Centers for Medicare and Medicaid Services (CMS), which establishes guidelines for the coverage of procedures, services and medical equipment and the payment of health care providers treating Medicare patients. Internationally, healthcare reimbursement systems vary significantly. In certain countries, medical center budgets are fixed regardless of levels of patient treatment. In other countries, such as Japan, reimbursement from government or third party payers must be applied for and approved. As of the date of this report, the amount that Medicare generally pays a medical institution for in-patient care of Medicare patients is based on a number of considerations, including a patient's diagnosis regardless of the services that are provided. Physicians however bill separately for the procedures that they perform. Medicare does not currently reimburse medical institutions for the incremental cost of using the BVS. Certain private health insurers and managed care providers provide incremental reimbursement to both the medical institutions and their physicians.

The U. S. Department of Health and Human Services has proposed, among other potential changes to the Medicare Hospital Inpatient Prospective Payment System published as a Notice of Proposed Rulemaking in the Federal Register on May 9, 2002, creation of a new Diagnosis Related Group (DRG) for hospital discharges involving implantation of external or implantable advanced mechanical cardiac assist devices. If this proposal, which is subject to public comment and administrative review, is incorporated as proposed into the Final Rule effective October 1, 2002, Medicare program reimbursement to hospitals for patient cases involving the BVS would be increased by approximately 40% over the current level.

No reimbursement levels have been established for our products under development, including the AbioCor. Prior to approving coverage for new medical devices, most third-party payers require evidence that the product has received FDA approval, European Union approval, or clearance for marketing, is safe and effective and not experimental or investigational, and is medically necessary and appropriate for the specific patient for whom the product is being used. Increasing numbers of third-party payers require evidence that the procedures in which the products are used, as well as the products themselves, are cost-effective. Heart transplantation currently qualifies for reimbursement, as does bridge-to-transplant treatment with implantable VADs. Comparatively, we believe that when the AbioCor product reaches maturity, it should cost less over a five-year period than heart transplantation today. We believe that these factors should benefit the AbioCor when our customers begin to seek reimbursement for it from third-party payers. However, we cannot assure that the AbioCor or our other products under development will meet the criteria for coverage and reimbursement or that third-party payers will reimburse physicians and medical institutions at levels sufficient to encourage the widespread use of the products. If the AbioCor receives such coverage, it will likely be reimbursed as an implantable prosthetic device, with payments subject to rules and limitation specific to such devices.

### GOVERNMENT REGULATION

Clinical trials, manufacture and sale of our products and products under development, including the BVS, AbioCor and Penn State Heart are, or will be, subject to regulation by the FDA and corresponding state and foreign regulatory agencies. Noncompliance with applicable regulatory requirements can result in, among other things, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to grant marketing approval for devices, withdrawal of marketing approvals, and criminal prosecution. The FDA also has the authority to request repair, replacement or refund of the cost of any device manufactured or distributed by ABIOMED.

U.S. CLINICAL USE REGULATIONS. The BVS is classified as a Class III medical device under FDA rules, as will be the AbioCor and the Penn State Heart. In the U.S., medical devices are classified into one of three classes (i.e., Class I, II or III) based on the controls deemed necessary by the FDA to reasonably ensure their safety and effectiveness. Class III medical devices are subject to the most rigorous regulation. Class III devices, which are typically life-sustaining, life-supporting or implantable devices, or new devices that have been found not to be substantially equivalent to legally marketed devices, must generally receive pre-market approval by the FDA to ensure their safety and effectiveness. Class III devices are also subject to some of the requirements applicable to Class I and Class II devices, including general controls, such as labeling, pre-market notification, performance standards, post-market surveillance, patient registries and adherence to QSR/GMP requirements, which include testing, control and documentation requirements.

A PMA application must be filed if a proposed device is a Class III device for which the FDA has required PMAs in order to obtain permission to market and sell the device in the U.S. for a particular indication (patient issue). A PMA application must be supported by valid scientific evidence, which typically includes extensive information including relevant bench tests, laboratory and animal studies and clinical trial data to demonstrate the safety and effectiveness of the device. The PMA application also must contain a complete description of the device and its components, a detailed description of the methods, facilities and controls used to manufacture the device, and the proposed labeling, advertising literature and training materials. By regulation, the FDA has 180 days to review the PMA application, and during that time an advisory committee may evaluate the application and provide recommendations to the FDA. Advisory committee reviews often occur over a significantly protracted period, and a number of devices for which FDA approval has been sought have never been cleared for marketing. In addition, modifications to a device that is the subject of an approved PMA, or to its labeling or manufacturing process, may require the submission of PMA supplements or new PMAs and approval by the FDA. On an exception basis, the FDA also provides that certain devices can be distributed for humanitarian purposes prior to gaining PMA approval. FDA approval of a humanitarian device exemption is not broadly available and requires that no other available therapy exists for such indication and that adequate data be available to support that the therapy is reasonably safe, though arguably less data than for a PMA.

If clinical trials of a device are required in order to obtain FDA approval, the sponsor of the trial will have to file an Investigational Device Exemption, known as an IDE, application prior to commencing clinical trials. The IDE application must be supported by data, which typically include the results of animal testing performed in conformance with Good Laboratory Practices and formal laboratory testing and documentation in accordance with appropriate design controls and scientific justification. If the FDA approves the IDE application, and the institutional review boards or IRBs at the institutions at which the clinical trials will be performed approve the clinical protocol and related materials, clinical trials may begin at a specific number of investigational sites with a specific number of patients, as approved by the FDA. Sponsors of clinical trials are permitted to charge for investigational devices distributed in the course of the study provided that compensation does not exceed recovery of the costs of manufacture, research, development and handling. An IDE supplement must be submitted to and approved by the FDA before a sponsor or investigator may make a change to the investigational plan that may affect its scientific soundness or the rights, safety or welfare of human subjects.

In November 1992, the FDA approved our PMA for the BVS. In 1996 and 1997,

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the FDA approved the use of the BVS for additional indications, expanding its use to the treatment of all patients with potentially reversible heart failure. In May 1998, we received notice from the FDA that the BVS had successfully concluded a required post-market surveillance study. The primary purpose of this post-market surveillance study was to provide a warning system to alert the health care community to any potential problems with a device within a reasonable time of the initial marketing of the device. Post-

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market surveillance provides clinical monitoring of the experiences with a device once it is distributed in the general population under actual conditions of use.

The AbioCor is classified as a Class III device and therefore is subject to the IDE and PMA processes and QSR/GMP requirements. In January 2001, the FDA granted an IDE providing us with regulatory permission to commence the initial clinical trial of the AbioCor. The initial clinical trial, which began on July 3, 2001, when doctors at Jewish Hospital in Louisville, Kentucky, performed the world's first implantation of our AbioCor Implantable Replacement Heart, is subject to periodic review and to the readiness of each collaborating medical center, including training of its surgical and post-operative care teams and approval of the clinical trial protocol by the hospital's internal review board. Our clinical trial is being undertaken with patients who, despite all available therapies, have an extremely high probability of death within thirty days due to heart failure.

We anticipate seeking initial FDA approval of the AbioCor for a limited category of indications and patients, and subsequent approval for additional indications and patient populations. After the initial regulatory approval, we will need to complete additional clinical testing and request supplemental approvals for additional indications and broader marketing claims. If we obtain approval of the AbioCor in this manner, the FDA may initially impose restrictions on use of the AbioCor. Nevertheless, we believe that this phased approach will permit us to obtain initial marketing approval for the AbioCor more quickly than if we were to seek a broader approval from the outset.

**U.S. MANUFACTURING AND SALES REGULATION.** Any devices, including the BVS, which we manufacture or distribute pursuant to FDA clearances or approvals, are subject to continuing regulation by the FDA and other regulatory authorities. Manufacturers of medical devices for marketing in the U.S. are required to adhere to QSR/GMP requirements and must also comply with Medical Devices Reporting, or MDR, which requires that a firm report to the FDA any incident in which its product may have caused or contributed to a death or serious injury, or in which its product malfunctioned and, if the malfunction were to recur, it would be likely to cause or contribute to a death or serious injury. Labeling and promotional activities are subject to scrutiny by the FDA and, in certain circumstances, by the Federal Trade Commission. Current FDA enforcement policy prohibits the marketing of approved medical devices for unapproved uses. We are subject to routine inspection by the FDA and other regulatory authorities for compliance with QSR/GMP and MDR requirements, as well as other applicable regulations.

**INTERNATIONAL REGULATION.** We are also subject to regulation in each of the foreign countries in which we sell our products. Many of the regulations applicable to our products in these countries are similar to those of the FDA. We have obtained the requisite foreign regulatory approvals for sale of the BVS in many foreign countries, including most of Western Europe. We believe that foreign regulations relating to the manufacture and sale of medical devices are becoming more stringent. The European Union adopted regulations requiring that medical devices such as the BVS comply with the Medical Devices Directive, which

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includes ISO-9001 and CE certification. In 1998, we received ISO-9001 and CE certification for the BVS. In 2001 we received ISO-9001 certification for the AbioCor. Many manufacturers of medical devices, including ABIOMED, have often relied on foreign markets for the initial commercial introduction of their products. However, an evolving foreign regulatory environment could make it more difficult, costly and time consuming for us to pursue this strategy for new products. In the European Union, implantable devices, such as the AbioCor, must comply with the Active Implantable Medical Devices Directive, known as AIMDD, in order to obtain CE certification. We are working toward CE certification of the AbioCor. Delays in obtaining this certifications for the AbioCor or other products under development on a timely basis could delay commercial sales of the products in the European Union.

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### EMPLOYEES

As of June 30, 2002, we had 295 full-time employees, including:

- 152 in research and development (including 52 people engaged in AbioCor pilot manufacturing);
- 45 in sales, clinical support, marketing and field service; and
- 60 in BVS manufacturing and quality assurance.

Our remaining employees work in a variety of areas, including information technology, human resources, accounting, facilities, corporate development and management. We have entered into contractual agreements with all of our employees, which include confidentiality and non-competition commitments by each and every employee at all levels. None of our employees is represented by a union. We consider our employee relations to be good.

### EXECUTIVE OFFICERS OF THE REGISTRANT

The senior management of the Company consists of the following:

NAME ----	AGE ---	POSITION -----
David M. Lederman, Ph.D.....	58	Chairman of the Board of Directors, President and Chief Executive Officer
Anthony W. Bailey.....	46	Vice President, Business Development
Edward E. Berger, Ph.D.....	57	Vice President, Strategic Planning and Policy
William J. Bolt.....	50	Senior Vice President - Product Engineering and Manufacturing
Robert T.V. Kung, Ph.D.....	58	Senior Vice President - Chief Scientific Officer
Zvi Ladin, Ph.D.....	50	Vice President, Clinical/Regulatory Affairs
Eugene D. Rabe.....	46	Senior Vice President - Global Sales and Marketing
John F. Thero.....	41	Senior Vice President - Treasurer and Chief Financial Officer
Fred Zarinetchi, Ph.D.....	41	Vice President, Research and Development

DR. DAVID M. LEDERMAN founded ABIOMED in 1981, and has served as Chairman of the Board and Chief Executive Officer since that time. He has also served as President of ABIOMED for the majority of time. He was Chairman of the Medical Research Group at the Everett Subsidiary of Avco Corporation, which he joined in 1972. Dr. Lederman conceived and originated the BVS development program and the

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design and development of the ventricles and valves that are integral to the AbioCor implantable replacement heart. He holds various degrees in Physics and Engineering, including a Ph.D. degree in Aerospace Engineering from Cornell University.

MR. ANTHONY W. BAILEY has served ABIOMED since 1997, and has been Vice President, Business Development since 2000 prior to which he was Vice President, Engineering. From 1987 to 1997, he was Vice President and General Manager for Pace Medical, Inc. and from 1982 to 1987, was Manager of

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Design and Development at Shiley Infusaid, Inc. Prior to that, Mr. Bailey served in various engineering functions with manufacturers of implantable pacemakers, data acquisition and control systems and medical monitoring systems. Mr. Bailey received his Bachelor's degree in Electrical Engineering from the University of Lowell.

DR. EDWARD E. BERGER has served ABIOMED since 2001. He has been Vice President Strategic Planning and Policy since 2001, having initially joined ABIOMED as Vice President, Government and External Relations. From 2000 to 2001 he was Senior Consultant for Reimbursement Strategy at Thermo Cardiosystems, Inc. From 1998 to 1999 he was Senior Consultant for Public Policy and Regulatory Affairs for Navix Radiology Services, Inc. From 1983 to 1997 he held various positions for Fresenius Medical Care, including Vice President and Director of Government Relations. Prior to 1983, he held various positions, including as a consultant on healthcare and social service issues for a public health group and Assistant Professor at Boston University. Dr. Berger received his Ph.D. degree in Political Science from Boston University.

MR. WILLIAM J. BOLT has served ABIOMED since 1982 and, has been Senior Vice President, Product Development since August 2000. He is currently responsible for Product Engineering, and pilot-manufacturing activities in the Company, including the AbioCor. From 1999 to present, he was responsible for BVS product development. From 1994 to 1998, he was President of ABIOMED's dental subsidiary, ABIODENT. From 1982 to 1994, he served in various roles, from Vice President of Engineering to Vice President of Operations, where he was the engineer in-charge of the development of the BVS and other systems. Mr. Bolt received his Bachelor's degree in Electrical Engineering and an MBA from Northeastern University.

DR. ROBERT T.V. KUNG has served ABIOMED since 1982 and has been Senior Vice President and Chief Scientific Officer since 1995. He was Vice President of Research and Development from 1987 to 1995 and Chief Scientist from 1982 to 1987. Prior to joining ABIOMED, Dr. Kung was a Principal Research Scientist at Schafer Associates from 1978 to 1982 and at the Avco Everett Research Laboratory from 1972 to 1978. He developed non-linear optical techniques for laser applications and investigated physical and chemical phenomena in re-entry physics. Dr. Kung has been Principal Investigator for ABIOMED's National Institutes of Health-funded AbioCor and AbioBooster programs and has conceived of and directed the development of ABIOMED's laser-based minimally invasive technologies. Dr. Kung received a Ph.D. degree in Physical Chemistry from Cornell University.

DR. ZVI LADIN joined ABIOMED in April of 2002 as Vice President, Clinical/Regulatory Affairs and QA. From 2001 to 2002 he founded RCR Consulting serving as a consultant in Regulatory and Clinical affairs. From 1995 to 2001 he held various positions at ESC Medical Systems, including Corporate Vice President Clinical and Regulatory Affairs where he was involved with the clinical introduction and regulatory approval of various medical devices. Prior to 1995 he was a Science Advisor to the Food and Drug Administration, founder of



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OsteoKinetics Corporation and Associate Professor of Biomedical Engineering at Boston University. Dr. Ladin received his Ph.D. degree in Medical Engineering from the joint program in Health Sciences and Technology from the Massachusetts Institute of Technology and Harvard Medical School.

MR. EUGENE D. RABE has served ABIOMED since 1993 and has been Senior Vice President, Global Sales and Services since 1999. Mr. Rabe assumed responsibility for international sales in 1996, and was Vice President of Sales from 1993 to 1999. Prior to joining ABIOMED, Mr. Rabe was Vice President, Sales and Marketing for Endosonics Corporation. Mr. Rabe was employed as a Sales Manager for St. Jude Medical, Inc. He has been involved in the management of sales and marketing of cardiovascular/cardiological devices for over fifteen years. Mr. Rabe received a Bachelor's degree from St. Cloud State University and an MBA from the University of California.

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MR. JOHN F. THERO has served ABIOMED since 1994 and is currently Senior Vice President, Treasurer and Chief Financial Officer. From 1994 to 1999 he was Vice President of Finance, Treasurer and Chief Financial Officer. Prior to joining ABIOMED, Mr. Thero was Chief Financial Officer and acting President for the restructuring of two venture-backed companies from 1992 to 1995. From 1987 to 1992, he was employed in various capacities including Chief Financial Officer, by Aries Technology, Inc. From 1983 to 1987, he was employed by the commercial audit division of Arthur Andersen LLP during which time he became a Certified Public Accountant. Mr. Thero received a Bachelor's degree in Economics/Accounting from The College of the Holy Cross.

DR. FRED ZARINETCHI has served ABIOMED since 1994 and became Vice President for Research and Development early in 2002. From 2001 to 2002 he served as Program Manager for the Company's Penn State Heart development program and from 1994 to 2001 Dr. Zarinetchi served as Project Manager and Principal Staff Scientist for the NIH-funded AbioCor Implantable Heart development program. From 1992 to 1993 he was Development Manager and co-founder of The Guild, Inc. Mr. Zarinetchi received his Ph.D. degree in Electrical Engineering and Computer Sciences from Massachusetts Institute of Technology and was a post-doctoral fellow at Harvard University.

### ITEM 2. PROPERTIES

Our headquarters is located in an industrial office park located 22 miles north of Boston. This facility, located at 22 Cherry Hill Drive in Danvers, Massachusetts, consists of approximately 80,000 square feet of space under an operating lease that expires in 2010. Construction of this building was completed in fiscal 2001 and it now houses all of our operations, including research and development, manufacturing, sales and marketing and general and administrative departments. During fiscal 2001 we completed construction of new state-of-the-art manufacturing cleanrooms and moved pilot manufacturing and all BVS production to this new facility. The lease contains provisions to allow termination by us, subject to a defined termination fee, in 2005 and contains options to extend beyond 2010 at market rates.

### ITEM 3. LEGAL PROCEEDINGS

As of March 31, 2002, we were not party to any material pending legal proceedings.

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

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year ended March 31, 2002.

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## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

#### MARKET PRICE

Our common stock is traded on the Nasdaq Stock Market National Market under the symbol "ABMD." The following table sets forth the range of high and low sales prices per share of common stock, as reported by the Nasdaq National Market for our two most recent fiscal years:

FISCAL YEAR ENDED MARCH 31, 2001	HIGH	LOW
First Quarter.....	\$ 22.500	\$ 12.625
Second Quarter.....	34.750	15.594
Third Quarter.....	37.750	20.063
Fourth Quarter.....	30.000	13.250
FISCAL YEAR ENDED MARCH 31, 2002	HIGH	LOW
First Quarter.....	\$ 27.500	\$ 10.500
Second Quarter.....	28.230	12.800
Third Quarter.....	24.100	14.140
Fourth Quarter.....	16.780	8.960

#### NUMBER OF STOCKHOLDERS

As of July 10, 2002, there were approximately 573 holders of record of our common stock, including multiple beneficial holders at depositories, banks and brokers included as a single holder in the single "street" name of each respective depository, bank, or broker. We estimate that there are more than 14,000 beneficial holders who hold our common stock in street name.

#### DIVIDENDS

We have never declared or paid any cash dividends on our capital stock and do not plan to pay any cash dividends in the foreseeable future. Our current policy is to retain all of our earnings to finance future growth.

#### SALES OF UNREGISTERED SECURITIES

No sales of unregistered securities occurred during the Company's fiscal year ended March 31, 2002.

#### TRANSFER AGENT AND RIGHTS AGENT

In May 2002, American Stock Transfer & Trust Company, 59 Maiden Lane, New York, NY 10038, became the Company's stock Transfer Agent and Rights Agent.

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### ITEM 6. SELECTED FINANCIAL DATA

Portions of the following selected consolidated financial data has been derived from the Company's audited Consolidated Financial Statements for the fiscal years ended March 31, 2000, March 31, 2001 and March 31, 2002, which are included elsewhere in this report. As discussed in Item 7 of this Annual Report and in Note 3 to our Consolidated Financial Statements, the Company has restated its previously audited consolidated statements for the fiscal years ended March 31, 2000 and 2001. Similar restatements were made by the Company for its previously audited financial statements for the fiscal years ended March 31, 1998 and 1999. The effect of these restatements are reflected in this selected consolidated financial data.

#### SELECTED CONSOLIDATED FINANCIAL DATA, AS RESTATED (In thousands, except per share data)

	FISCAL YEARS ENDED MARCH 31,				
	1998	1999	2000	2001	2002
	(unaudited)	(unaudited)			
<b>STATEMENT OF OPERATIONS DATA:</b>					
<b>Revenues:</b>					
Products .....	\$ 17,028	\$ 17,260	\$ 18,521	\$ 19,724	\$ 20,000
Funded research and development .....	4,088	4,472	4,572	3,142	3,142
	-----	-----	-----	-----	-----
Total revenues .....	21,116	21,732	23,093	22,866	23,142
	-----	-----	-----	-----	-----
<b>Costs and expenses:</b>					
Cost of product revenues .....	6,362	6,464	5,870	7,222	7,222
Research and development (1) .....	9,091	13,450	15,633	28,667	28,667
Selling general and administrative .....	9,054	9,570	12,562	12,469	12,469
	-----	-----	-----	-----	-----
Total costs and expenses .....	24,507	29,484	34,065	48,358	48,358
	-----	-----	-----	-----	-----
Loss from operations .....	(3,391)	(7,752)	(10,972)	(25,492)	(25,492)
Interest and other income, net .....	1,206	1,192	1,106	6,160	6,160
	-----	-----	-----	-----	-----
Loss from continuing operations .....	(2,185)	(6,560)	(9,866)	(19,332)	(19,332)
	-----	-----	-----	-----	-----
Loss from discontinued operations (2) .....	(1,513)	--	--	--	--
	-----	-----	-----	-----	-----
Net loss .....	\$ (3,698)	\$ (6,560)	\$ (9,866)	\$ (19,332)	\$ (19,332)
	=====	=====	=====	=====	=====
Loss from continuing operations per share .	\$ (0.14)	\$ (0.38)	\$ (0.56)	\$ (0.94)	\$ (0.94)

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Loss from discontinued operations per share	(0.09)	--	--	--	--
Net loss per share .....	\$ (0.23)	\$ (0.38)	\$ (0.56)	\$ (0.94)	\$
Weighted average shares outstanding .....	16,148	17,238	17,579	20,583	2

BALANCE SHEET DATA:

	MARCH 31,				
	1998	1999	2000	2001	2002
	(unaudited)		(unaudited)		
Cash, cash equivalents and marketable securities .....	\$ 26,398	\$ 18,181	\$106,384	\$ 92,498	\$ 7
Working capital .....	26,858	20,733	107,438	94,651	7
Total assets .....	38,401	30,808	120,132	110,961	8
Accrued expenses .....	4,572	4,887	6,355	4,656	
Deferred revenue .....	449	44	35	3,752	
Long-term liabilities .....	64	205	715	368	
Stockholders' equity .....	30,592	24,797	111,238	99,814	7

- (1) Research and development expenses include certain contract costs.
- (2) Discontinued operations reflect the results of our dental subsidiary which was discontinued in fiscal 1998 as we shifted all of our focus to our core cardiovascular business.

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The following table presents net increases and (decreases) in our previously reported operating results for each of the five years ended March 31, 1998 through March 31, 2002 as a result of the aforementioned restatements (in thousands):

INCREASES AND (DECREASES) IN  
SELECTED CONSOLIDATED FINANCIAL DATA  
AS A RESULT OF RESTATEMENTS  
(In thousands, except per share data)

	FISCAL YEARS ENDED MARCH 31,			
	1998	1999	2000	2001
	(unaudited)		(unaudited)	
STATEMENT OF OPERATIONS DATA:				
Revenues (1):				
Products .....	\$ (233)	\$ (819)	\$ 144	\$ (2,293)
Funded research and development .....	(1,097)	461	432	263
Total revenues .....	(1,330)	(358)	576	(2,030)

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Costs and expenses:				
Cost of product revenues (1) .....	(140)	(308)	(12)	(153)
Research and development:				
Internally incurred R&D costs (2) .....	--	--	--	695
Acquired technology costs, net (3) .....	--	--	--	5,301
Selling general and administrative(4) .....	--	(202)	--	58
	-----	-----	-----	-----
Total costs and expenses .....	(140)	(510)	(12)	5,901
	-----	-----	-----	-----
Income (loss) from operations .....	(1,190)	152	588	(7,931)
Interest and other income, net .....	--	--	--	--
	-----	-----	-----	-----
Income (loss) from continuing operations .....	(1,190)	152	588	(7,931)
Income (loss) from discontinued operations .....	--	--	--	--
	-----	-----	-----	-----
Net income (loss) .....	\$ (1,190)	\$ 152	\$ 588	\$ (7,931)
	=====	=====	=====	=====
Income (loss) from continuing operations per share	\$ (0.07)	\$ 0.01	\$ 0.03	\$ (0.39)
Income from discontinued operations per share ....	--	--	--	--
	-----	-----	-----	-----
Net income (loss) per share .....	\$ (0.07)	\$ 0.01	\$ 0.03	\$ (0.39)
Weighted average shares outstanding .....	--	--	--	--
	=====	=====	=====	=====

BALANCE SHEET DATA: (5)

	1998	1999	MARCH 31,	
	-----	-----	2000	2001
	(unaudited)	(unaudited)	-----	-----
Cash, cash equivalents and marketable securities .....	\$ --	\$ --	\$ --	\$ --
Working capital .....	(2,426)	(1,411)	(1,560)	(3,348)
Total assets (3) .....	(354)	(2,174)	(1,656)	(7,052)
Accrued expenses .....	1,869	491	204	(945)
Deferred revenue .....	203	(391)	(174)	2,757
Long-term liabilities .....	--	--	--	--
Stockholders' equity .....	(2,426)	(2,274)	(1,686)	(8,864)

(1) Changes in revenues and cost of products sold primarily reflect timing differences resulting from modification of the Company's revenue recognition policy.

(2) Changes in internal research and development expenses primarily reflect adjustment for stock-based compensation in fiscal 2001 and a reduction of incentive compensation paid for fiscal 2002.

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- (3) Changes in research and development expenses reflect fully writing-off the acquisition costs of the Penn State Heart in the year of acquisition, net of previously reported amortization. These costs were reported previously as Intellectual Property being amortized over the three-year period ending September 2003.
- (4) Decrease in selling, general and administration costs reflect a reduction of incentive compensation paid for fiscal 2002.
- (5) Because these modifications reflect timing of revenues and expenses and other non-cash related adjustments, certain of the Company's balance sheet data has changed including accounts receivable, intangible assets, deferred revenue and accrued expenses. The Company's overall capital resources, in particular cash and marketable securities, were not changed as a result of these restatements.

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

ALL STATEMENTS, TREND ANALYSIS AND OTHER INFORMATION CONTAINED IN THE FOLLOWING DISCUSSION RELATIVE TO MARKETS FOR OUR PRODUCTS AND TRENDS IN SALES, GROSS PROFIT AND ANTICIPATED EXPENSE LEVELS, AS WELL AS OTHER STATEMENTS, INCLUDING WORDS SUCH AS "MAY," "ANTICIPATE," "BELIEVE," "PLAN," "ESTIMATE," "EXPECT," AND "INTEND" AND OTHER SIMILAR EXPRESSIONS CONSTITUTE FORWARD-LOOKING STATEMENTS. THESE FORWARD-LOOKING STATEMENTS ARE SUBJECT TO BUSINESS AND ECONOMIC RISKS AND UNCERTAINTIES, AND OUR ACTUAL RESULTS OF OPERATIONS MAY DIFFER MATERIALLY FROM THOSE CONTAINED IN THE FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE, BUT ARE NOT LIMITED TO, THOSE DISCUSSED BELOW UNDER "RISK FACTORS" AS WELL AS OTHER RISKS AND UNCERTAINTIES REFERENCED IN THIS REPORT.

#### OVERVIEW

We are a leading developer, manufacturer and marketer of medical products designed to safely and effectively assist or replace the pumping function of the failing heart. In July 2001, in collaboration with leading medical centers, we commenced initial clinical trials for the world's first implantable, battery-powered replacement heart, the AbioCor. The AbioCor, which is intended for end-stage heart failure patients, is designed to replace the failing ventricles of a patient's diseased heart and take over their pumping function. The commencement of this initial clinical trial, approved by the FDA under an IDE, follows nearly three decades of research, development and testing related to this technology. We currently manufacture and sell the BVS, a temporary heart assist device which was the first device approved by the FDA as a bridge-to-recovery device for temporary treatment of all patients with failing but potentially recoverable hearts. And, we are working to develop other products to assist or replace the heart, including development of the Penn State Heart. Our operating results reflect the dual activities of commercial

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operations and investments in the research and development of new technologies.

The BVS is a temporary heart assist device designed to assume the full pumping function of a patient's failing heart while allowing the heart to rest, heal and recover its function. The BVS consists of single-use external blood pumps and cannulae and a reusable pneumatic drive and control console. All of our product revenues are currently derived from the BVS product line. BVS revenues consist of sales to new customers and reorders from existing customers. Following commercial introduction of the BVS in the U.S., our focus was on obtaining market share beginning with the largest medical centers. As of March 31, 2002, more than 500 medical centers in the U.S. had purchased the BVS, including 70% of all major medical centers that perform more than 500 heart surgeries annually. While we continue to seek additional new customers for the BVS, our primary focus is to increase usage and product reorders by existing customers. Product reorders currently represent approximately 76% of BVS product revenues. During fiscal 2002, no single customer represented more than 5% of product revenues.

Research and development is a significant portion of our operations. Our research and development efforts are focused on the development of new products, primarily related to heart assist and heart replacement, and the continued enhancement of the BVS and related technologies. In fiscal 2002, we incurred \$21.0 million in total research and development spending directed at the AbioCor and \$6.1 million in research and development spending directed at BVS improvements, the Penn State Heart and development of other potential products. These expenditures were partially offset by revenues from contracts and grants of \$2.2 million, of which the majority were from the NHLBI. We retain rights to commercialize all technological discoveries and products resulting from these contracts and grants.

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### RESTATEMENT OF PRIOR YEAR'S FINANCIAL STATEMENTS

We have modified our methods of revenue recognition for certain BVS sales contracts and funded research and development contracts. Such modifications result in the shifting of portions of revenues and related expenses between fiscal quarters and fiscal years. In addition, we have modified the timing of expenses recorded in connection with our acquisition in September 2000 of rights to the Penn State Heart and we have recorded expense for certain non-cash transactions involving stock option exercises made by employees with the assistance of the Company. Accordingly, we have restated our previously audited consolidated financial results and have restated our previously reported deficit at March 31, 1999 below for each of the two years ended on March 31, 2000 and 2001. Our financial results presented below for our year ending on March 31, 2002 have been revised from our previously announced fiscal 2002 results included in our press release on operating results dated May 16, 2002. Throughout this Management's Discussion and Analysis of Financial Condition and Operations (MD&A), the term "previously reported" will be used to refer to our previously filed financial statements for the two years ending on March 31, 2001 as well as our previously announced fiscal 2002 results.

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The following table presents increases and decreases to our previously reported operating results for each of the three years ending on March 31, 2002 that resulted in the aforementioned restatements:

### CHANGES IN PREVIOUSLY REPORTED AMOUNTS (THOUSANDS, EXCEPT PER SHARE DATA)

	YEAR ENDED MARCH 31,		
	2000	2001	2002
<b>Revenues:</b>			
Products .....	\$ 144	\$(2,293)	\$ 2,257
Funded research and development ...	432	263	1,119
	-----	-----	-----
Total revenues .....	576	(2,030)	3,376
	-----	-----	-----
<b>Costs and expenses:</b>			
Cost of product revenues .....	(12)	(153)	630
<b>Research and development:</b>			
Internally incurred R&D costs .	--	695	(260)
Acquired technology costs, net	--	5,301	(2,120)
Selling, general and administrative	--	58	(130)
	-----	-----	-----
Total costs and expenses .....	(12)	5,901	(1,880)
	-----	-----	-----
Income (loss) from operations .....	588	(7,931)	5,256
	-----	-----	-----
Interest and other income, net .....	--	--	--
	-----	-----	-----
Net income (loss) .....	\$ 588	\$(7,931)	\$ 5,256
	=====	=====	=====
Net income (loss) per share .....	\$ 0.03	\$ (0.39)	\$ 0.25
	=====	=====	=====

Our previously reported deferred revenues decreased by \$0.2 million as of March 31, 2000 and March 31, 2002 and increased by \$2.8 million as of March 31, 2001, as a result of the aforementioned restatements. The increase in deferred revenue on March 31, 2002 is scheduled for recognition as revenue in our fiscal year that ends March 31, 2003 upon the earlier of shipment of BVS blood pump product or the end of the terms of the relevant contracts. In addition to these changes in deferred revenues, these modifications also resulted in \$1.6 million, \$0.8 million and \$0.2 million under accepted extended-term contracts at March 31, 2000, 2001 and 2002, respectively, that were added to the Company's backlog on those dates but not recorded as deferred revenues because they were unbilled.

The majority of our product revenues are derived from our shipment of products to fulfill customer orders for specified numbers of BVS consoles and



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blood pumps at specified prices. We recognize revenues and record costs related to such sales upon product shipment. A portion of our product revenues are derived from contracts which provide for the Company to receive a fixed, non-refundable amount of money over a set period of time in return for our providing these customers with BVS product

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at the start of the contract and restocking the customer with BVS blood pumps during the term of the contract. The exact quantity of such additional BVS blood pumps, including related cannulae, to be supplied, if any, during the term of the contract depends upon the actual usage of the product by the customer. The terms of such contracts are typically one to three years. In many of these extended-term contracts, the fixed non-refundable amount is paid at the beginning of the contract while in other contracts payment of the fixed non-refundable amount is paid over the term of the contract. We must be satisfied that the contract is supported by a valid order from the customer and is collectible before any revenue will be recognized.

We group these extended-term contracts into two primary categories. The first category is comprised of contracts that include substantial up-front shipments of BVS console(s) and related blood pumps to customers with a commitment to provide additional blood pumps during the term of the contract if the customer uses more blood pumps than we originally supplied. The second category is comprised of contracts that include up-front shipment of blood pumps with additional blood pumps to be provided during the term of the contract if the customer uses more blood pumps than we originally supply. In this second category the primary element of the contract is the blood pumps.

Our timing of revenue recognition for the first category of contracts has historically been in accordance with sales-type leases. In this previously reported accounting, we sought to match revenues, costs and, where possible, cash flow in the same period by recognizing the full value of the contract, less deferral of the time value of money for multi-year contracts, as revenue upon the shipment of the BVS console and related initial shipment of BVS pumps. In the same period, we recorded cost of product revenue for both the cost of initial console and pump shipments and for an estimate of the cost of additional pumps that might be shipped during the term of such contract.

In our restated accounting for this first category of contracts, we prorate revenue between the value of the BVS console(s) and BVS pumps that are shipped initially and the value of the maximum contractual number of additional pumps that might be shipped during the contract. If a contractual maximum number of additional pumps is not specified, we estimate the number of additional pumps that might be shipped based upon historical experience and input from the customer. After such prorating of revenues, we recognize revenue for the initial shipment of each BVS console and pump at the time of shipment. Under this method, we defer the portion of revenue prorated to the contractual maximum or otherwise estimated number of additional pumps that might ship over the term of the contract. This deferred revenue is then recognized ratably over the remaining term of the contract as BVS pumps are shipped. To the extent that our deferral of revenues for this potential additional pump usage proves to be too high, any remaining deferred revenue at the end of the contract term is recognized at that time. Under this method, cost of product revenue is recorded upon shipment.

Our timing of revenue recognition for the second category of contracts, our "extended-term renewal contracts", has since our adoption of Staff Accounting Bulletin (SAB) No. 101, REVENUE RECOGNITION, for our fiscal year ended March 31, 2001, been ratably over the contract term. We have historically used one of two methods for the ratable recognition of such revenues. The first method is the

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recognition of such revenues on a blood pump units basis. Under this method, the total contract value was initially deferred. This deferred value was divided by our estimate of the number of blood pumps to be shipped over the term of a contract to determine an average price per blood pump under the contract. As each blood pump ships under the contract, the average price per blood pump under the contract was recognized as revenue up to, but not in excess of, the total order value. Costs of blood pumps were recorded upon shipment. To the extent that our original estimate of additional pump usage proved to be too high, any remaining deferred revenue at the end of the contract term was recognized at that time. The second method we used for ratable revenue recognition of certain of these contracts was based upon elapsed time. Under this method, a pro rata portion of the total contract value was recognized over the

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term of the contract based upon the relative elapsed term of the contract to the total term of the contract. Prior to the adoption of SAB No. 101, we recognized revenues under extended term renewal contracts in a manner that was consistent with our recognition for sales-type leases.

In our restated accounting for this second category of contracts, we do not recognize any revenue based on the time elapsed method but only on a units basis. Under this units basis we calculate the average price per blood pump using the maximum number of pumps allowed under the contract, provided that if no maximum number is provided in the contract, we estimate the anticipated usage based upon historical experience and input from the customer. We recognize revenue based upon this calculated average price per blood pump upon shipment of each pump. To the extent that our deferral of revenues for potential additional pump usage proves to be too high because the customer uses fewer blood pumps than the contractual maximum number of additional blood pumps, or, where applicable, fewer than our estimated number of additional blood pumps, the remaining deferred revenue at the end of the contract term is recognized at that time.

The following table presents the amounts of revenue recognized under extended-term contracts for each of the two categories described above during each of the three years ended March 31, 2002, as restated (in millions):

	YEAR ENDED MARCH 31,		
	2000	2001	2002
	----	----	----
Revenues by category of contract:			
First category .....	\$ 1.4	\$ 2.0	\$ 1.3
Second category .....	1.1	0.8	3.9
	-----	-----	-----
Total extended-term contracts .....	\$ 2.5	\$ 2.8	\$ 5.2
	-----	-----	-----
Percent of total extended-term contract revenue from contracts using:			
Contractual maximums to calculate average price per pump .....	0%	54%	53%
Estimated usage to calculate average price per pump .....	100%	46%	47%

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As of March 31, 2002, March 31, 2001 and March 31, 2000 deferred revenues from these contracts totaled \$2.6 million \$4.0 million and \$1.4 million, respectively. Of the Company's 29 contracts with customers at March 31, 2002, 4 were of the first category and 25 were of the second category. The terms of these contracts are all scheduled to expire during our fiscal year that ends March 31, 2003 accordingly all of the \$2.6 million in revenue that is deferred as of March 31, 2002 is anticipated to be recognized as revenue during Fiscal 2003.

We also modified our accounting for our AbioCor development contract. Phase II of that contract, which commenced in fiscal 1997 and continued into fiscal 2002, provided an aggregate of \$10.3 million in funding for the Company's research and development efforts related to the AbioCor on a cost-plus-fixed-fee basis. The full amount of the contract was funded through periodic appropriation by its government sponsors. From the early stages of Phase II of this contract, our research and development costs for this development project exceeded the contract amount. We have received payment of the full amount of this contract. We previously recorded revenue on this contract at the time of government appropriation provided that the Company had incurred qualified costs under the contract to support our recognizing that full amount under the contract on a cost-plus-fixed-fee basis. In periods in which the appropriated amount exceeded the calculated revenues on a cost-plus-fixed-fee basis, we recognized revenues based on the cost-plus-fixed fee calculation. Because government appropriations were made periodically, and generally only once per year, this resulted in relatively large amounts of revenues recognized in certain fiscal periods and no revenue recognized from this contract in other fiscal periods over the term of the contract. In our restated accounting, we have recognized the appropriated amount of

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the contract ratably based upon elapsed time resulting in revenue recognized at a relatively consistent level of revenue recognized over the term of the contract. Our restated revenues relating to this contract are included as part of Funded Research and Development in our consolidated statement of operations. This modification resulting in a changes in the timing of revenue recognized on this contract but did not change the aggregate amount of revenue recognized over the term of the contract.

We also restated our accounting for costs that we previously capitalized in connection with our acquisition in September 2000 of the Penn State Heart and the company that was incorporated to commercialize the Penn State Heart, BeneCor Heart Systems, Inc. In our previously reported results, we capitalized the purchase cost of \$6.4 million of this technology and we commenced amortizing this cost on a schedule ratably over three years from the date of acquisition, with \$2.1 million and \$1.1 million of this cost amortized in fiscal 2002 and 2001, respectively. In our restated results, as of the date of acquisition we fully expensed the \$6.4 million in acquisition costs as in-process research and development expense. The result of this adjustment was to increase our previously reported research and development expenses for our fiscal year ended March 31, 2001 by \$5.3 million and to decrease the amount of research and development expenses for our fiscal year ended March 31, 2002 by \$2.1 million. Prior to this adjustment, \$3.2 million in net unamortized acquisition costs were

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classified on our consolidated balance sheet at March 31, 2002 as Intellectual Property all of which was scheduled to be amortized ratably over the eighteen-month period ending September 2003. See Note 5 to our Consolidated Financial Statements for discussion of the nature of our costs incurred and rights obtained in our acquisition of the Penn State Heart.

During our fiscal year ended March 31, 2001, the Company's assistance in connection with the cashless exercises of incentive stock options for 29,500 shares of the Company's common stock by two of its employees triggered a remeasurement of the value of these incentive stock options in accordance with Financial Accounting Standards Board (FASB) Interpretation No. 44, ACCOUNTING FOR CERTAIN TRANSACTIONS INVOLVING STOCK COMPENSATION AN INTERPRETATION OF APB OPINION NO. 25. In our restated results, we recorded \$753,000 as additional expense for our fiscal year ended March 31, 2001 to reflect the value of the shares of common stock underlying these stock options upon the remeasurement date. The net result for the employees in terms of value received was identical to the result that could have been obtained had they sold the same portion of the shares in the market at fair value on those dates. The options had originally been granted to the employees with exercise prices equal to the fair market value of the stock on the date of grant. See Notes 2 and 9 to our Consolidated Financial Statements for further discussion of our accounting for employee stock options.

The Company also reduced certain accrued expenses based upon expectations that the amounts will not be paid out. The result of these modifications was to reduce operating expenses by \$443,000 for the year ended March 31 2002 with a corresponding reduction in accrued expenses due to a revision of the Company's incentive compensation accrual which amount, based upon subsequent information, will not be paid in conjunction with the year ended March 31, 2002. Costs associated with the abandonment of patents were increased by \$63,000 in the Company's restated results for its fiscal year ended March 31, 2002 and certain balance sheet modifications were made at March 31, 2000 and 2001 to reflect the timing of software purchases and leasehold improvements in the amounts of \$29,000 and \$148,000, respectively. These balance sheet modifications, which represented timing differences, did not have any effect on the Company's net operating results.

Because the above-described restatements reflect the timing of certain revenues and expenses and non-cash transactions, our balance sheet was correspondingly adjusted in various categories, including accounts receivable, intellectual property, accrued expenses and deferred revenues. In addition, the Company's accumulated deficit at April 1, 1999 was increased by \$2.5 million to reflect the cumulative effect of our modifications to our revenue recognition policies on prior years partially offset by a decrease of \$0.2 million to reflect a reduction in accrued expenses. Our capital resources were not impacted by any of these transactions. These increases and decreases in operating results and associated balance sheet accounts are included in the results discussed in our MD&A and presented in our audited financial statements as filed with this Annual Report on Form 10-K.

### RESULTS OF OPERATIONS

The following table sets forth certain consolidated statements of operations data for the periods indicated as a percentage of total revenues:

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	YEAR ENDED MARCH 31,		
	2000	2001	2002
	----	----	----
	(restated)	(restated)	
Revenues:			
Products .....	80.2%	86.3%	91.8%
Funded research and development ...	19.8	13.7	8.2
	-----	-----	-----
Total revenues .....	100.0	100.0	100.0
	-----	-----	-----
Costs and expenses:			
Cost of product revenues .....	25.4	31.6	29.4
Research and development .....	67.7	125.4	100.5
Selling, general and administrative	54.4	54.5	59.6
	-----	-----	-----
Total costs and expenses .....	147.5	211.5	189.5
	-----	-----	-----
Loss from operations .....	(47.5)	(111.5)	(89.5)
Interest and other income, net .....	4.8	26.9	10.9
	-----	-----	-----
Net loss .....	(42.7)%	(84.6)%	(78.6)%
	=====	=====	=====

FISCAL YEARS ENDED MARCH 31, 2002 AND MARCH 31, 2001 ("FISCAL 2002" AND "FISCAL 2001")

PRODUCT REVENUES. Product revenues increased by \$5.0 million, or 25%, to \$24.7 million in fiscal 2002 from \$19.7 million in fiscal 2001. The increase in product revenues was attributable to increased sales of BVS disposable blood pumps to existing and new customers and including international customers, increased sales of our BVS 5000t Transport/Backup console. These increases reflect increases in product shipments, including and the timing of previously deferred revenue under extended-term contracts. The portion of product revenues derived from sales of disposable blood pumps and related accessories and services increased by \$4.6 million, or 29%, to \$20.7 million in fiscal 2002 from \$16.1 million in fiscal 2001. The portion of product revenues derived from sales of BVS consoles increased by \$0.5 million, or 14%, to \$4.1 million in fiscal 2002 from \$3.6 million in fiscal 2001. Domestic product revenues included approximately \$5.2 million from extended-term contracts in fiscal 2002 and \$2.8 million in fiscal 2001. Domestic sales accounted for 92% of total product revenue during the fiscal 2002 and 96% of product revenue for fiscal 2001.

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FUNDED RESEARCH AND DEVELOPMENT REVENUES. Contract revenues decreased by \$0.9 million, or 29%, to \$2.2 million in fiscal 2002 from \$3.1 million in fiscal 2001. Approximately \$1.1 million of the contract revenues recognized in fiscal 2002 were derived from our AbioCor government contract compared to \$1.8 million in the prior year as the Company's funding under that contract ended in fiscal 2002. As is typical for research and development programs that have matured to the stage where they are ready to commence human clinical trials, we do not anticipate additional government research and development funding for AbioCor. Included in funded research and development for the year just ended was \$0.6 million in revenues recorded in connection with providing specialized training to medical centers involved with our U.S. and European AbioCor clinical trials.

As of March 31, 2002, our total backlog of research and development contracts and grants was \$0.7 million. All of these contracts and grants contain provisions that make them terminable at the convenience of the government.

COST OF PRODUCT REVENUES. Cost of product revenues as a percentage of product revenues decreased to 32% for fiscal 2002 from 37% in the prior fiscal year. The 5% decrease is primarily due to the

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expiration of an agreement on August 3, 2000, in which the Company paid royalties to third parties on certain BVS product revenues and to the proportionate increase in sales of BVS disposable blood pumps relatively to sales of lower margin BVS consoles.

RESEARCH AND DEVELOPMENT EXPENSES. Research and development expenses decreased by \$1.6 million, or 6%, to \$27.1 million in the fiscal 2002, from \$28.7 million in the prior fiscal year. Research and development expenses were 101% of total revenues for the fiscal 2002 and 125% of total revenues in the prior year. Included in research and development expenses for fiscal 2001 were \$6.4 million in cost incurred with our acquisition of rights to the Penn State Heart. Excluding these acquisition costs, research and development expenses increased by \$4.8 million, or 22%, in fiscal 2002 from \$22.3 million in fiscal 2001. Research and development expenses incurred for the AbioCor increased by \$4.4 million to \$21.0 million during the fiscal year ended March 31, 2002 from \$16.6 million for the fiscal year ended March 31, 2001. This increase in AbioCor expenditures during the fiscal year just ended is primarily attributable to our clinical trial that began in July 2001 and include costs associated with increased manufacturing, testing and documentation activities. Research and development expense for the fiscal year ended March 31, 2002 also included \$2.7 million in expenditures related to the development of the Penn State Heart and \$3.4 million in expenditures for other products under development and for enhancements for the BVS product line.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES. Selling, general and administrative expenses increased by \$3.6 million, or 29%, to \$16.1 million in

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fiscal year ended March 31, 2002 from \$12.5 million in the prior year. Expenditures increased to 60% of total revenues from 55% of total revenues in the same period a year earlier as a result of increased staffing, including creating of a direct sales and clinical support team in Europe, and public relations activities associated with the commencement of the AbioCor clinical trial.

INTEREST AND OTHER INCOME. Interest and other income consists primarily of interest earned on our investment balances, net of interest and other expenses. Interest and other income decreased by \$3.3 million to \$2.9 million in fiscal 2002 from \$6.2 million in fiscal 2001. This decrease was primarily due to reduced yields on investments resulting from lower average interest rates and to lower average fund balances available for investment.

NET LOSS. Net loss for the fiscal year ended March 31, 2002 was approximately \$21.2 million, or \$1.02 per share. This compares to a net loss of approximately \$19.3 million, or \$0.94 per share, for the prior fiscal year. The losses for both years are primarily attributable to development and clinical testing costs associated with the AbioCor and costs of acquiring and developing other technologies and products.

FISCAL YEARS ENDED MARCH 31, 2001 AND MARCH 31, 2000 ("FISCAL 2001" AND "FISCAL 2000")

PRODUCT REVENUES. Product revenues increased by \$1.2 million, or 6%, to \$19.7 million in fiscal 2001 from \$18.5 million in fiscal 2000. The increase in product revenues was primarily attributable to increased sales of BVS disposable blood pumps to new and existing customers, higher average selling prices for these blood pumps and sales of our new BVS 5000t Transport/Backup console. The increased sales of BVS disposable blood pumps reflects increases in product shipments, including the timing of previously deferred revenue under extended-term contracts. The portion of product revenues derived from sales of disposable blood pumps and related accessories and services increased by \$1.0 million, or 7%, to \$16.1 million in fiscal 2001 from \$15.1 million in fiscal 2000. The portion of product revenues derived from sales of BVS consoles increased by \$0.2 million, or 6%, to \$3.6 million in fiscal 2001 from \$3.4 million in fiscal 2000. Domestic product revenues included approximately \$2.8 million from extended-term contracts in fiscal 2001 and \$2.5 million in fiscal 2000. Domestic sales accounted for 96% of total product revenue during the fiscal year ended March 31, 2001 and 2000.

FUNDED RESEARCH AND DEVELOPMENT REVENUES. Contract revenues decreased by \$1.5 million, or 33%, to \$3.1 million in fiscal 2001 from \$4.6 million in fiscal 2000. Approximately \$1.8 million of the contract revenues recorded in the fiscal year ended March 31, 2001 and \$2.2 million recorded in the fiscal year ended March 31, 2000 were derived from our AbioCor government contract. The decline in funded research and development revenues is primarily due to

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the completion or winding down of research and development work performed under certain government-sponsored research contracts and grants. As is typical for research and development programs that have matured to the stage where they are ready to commence human clinical trials, we do not anticipate additional government research and development funding for AbioCor and, as a result, we anticipate that our funded research and development revenues will decline in our new fiscal year.

As of March 31, 2001, our total backlog of research and development contracts and grants was \$2.3 million, including \$1.1 million in revenues not recognized on the AbioCor contract. All of these contracts and grants contain provisions that make them terminable at the convenience of the government.

**COST OF PRODUCT REVENUES.** Cost of product revenues as a percentage of product revenues increased to 37% for the fiscal year ended March 31, 2001 from 32% in the prior fiscal year. The 5% increase was primarily due to production inefficiencies associated with the production startup of our new BVS 5000t Transport/Backup console and transitional costs related to our moving and qualifying our new BVS blood pump manufacturing facility. These increases to our cost of product revenues were partly offset by the discontinuation of a royalty obligation due to the Abiomed Limited Partnership. The royalty obligation, which on a net basis was approximately 2.1% of the majority of BVS product revenues, contractually expired for product sold after August 3, 2000.

**RESEARCH AND DEVELOPMENT EXPENSES.** Research and development expenses increased by \$13.0 million, or 83%, to \$28.7 million in the fiscal 2001, from \$15.6 million in the prior fiscal year. Research and development expenses were 125% of total revenues for the fiscal 2001 and 68% of total revenues in the prior year. Included in research and development expenses for fiscal 2001 were \$6.4 million in cost incurred in connection with our acquisition of rights to the Penn State Heart. Excluding these acquisition costs, research and development expenses in fiscal 2001 were \$22.3 million, an increase of \$6.7 million, or 43%, over the prior year. Excluding Penn State Heart acquisition costs, the increase in expenditures during the fiscal year ended March 31, 2001 was due primarily to increased spending for the AbioCor, including preparations for initial clinical trials and increased cost for further development of the Penn State Heart and development of other new products and enhancements for the BVS product line. Research and development expenses during the fiscal year ended March 31, 2001 included \$16.6 million of expenses incurred in connection with our development activities for the AbioCor, compared to \$11.5 million in the prior year.

**SELLING, GENERAL AND ADMINISTRATIVE EXPENSES.** Selling, general and administrative expenses decreased by \$0.1 million, or 1%, to \$12.5 million in fiscal 2001 from \$12.6 million in the prior year. These expenditures were approximately 54% of total revenues in fiscal 2001 and fiscal 2000. Reduced legal expenses in fiscal 2001 compared with fiscal 2000 were partially offset by increased costs associated with increased sales and administrative staffing and related activities.



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INTEREST AND OTHER INCOME. Interest and other income consists primarily of interest earned on our investment balances, net of interest and other expenses. Interest and other income increased by \$5.1 million to \$6.2 million in fiscal 2001 from \$1.1 million in fiscal 2000. This increase was primarily due to higher average funds available for investment as a result of the Company's stock offering in March 2000.

NET LOSS. Net loss for the fiscal year ended March 31, 2001 was approximately \$19.3 million, or \$0.94 per share. This compares to a net loss of approximately \$9.9 million, or \$0.56 per share, for the prior

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fiscal year. The losses for both years are primarily attributable to development and pre-clinical testing costs associated with the AbioCor.

### LIQUIDITY AND CAPITAL RESOURCES

We have supported our operations primarily with net revenues from sales of our BVS product line, government contracts and proceeds from our equity financings. As of March 31, 2002, our cash, cash equivalents and marketable securities totaled \$71.3 million.

During fiscal 2002, operating activities used \$19.6 million of cash. Net cash used by operating activities in fiscal 2002 reflected a net loss of \$21.2 million, including non-cash depreciation and amortization expense of \$1.8 million and stock-based compensation of \$0.2 million, and increases in inventory and prepaid expenses and other assets of \$0.7 million and \$0.1 million, respectively. Cash was also used to reduce accounts payable, deferred revenues and long-term liabilities by \$0.2 million, \$1.4 million and \$0.1 million, respectively. These uses of cash were partially offset by a decrease in accounts receivable and an increase in accrued expenses of \$1.6 million and \$0.3 million, respectively. The decrease in accounts receivable is attributable to more extensive efforts to reduce BVS trade receivables during the fiscal year ended March 31, 2002. The increase in inventory is the result of the Company's effort to maintain greater stocks of BVS disposable blood pump materials and finished goods in connection with planned shipments. The decrease in deferred revenues is the result of shipment of BVS blood pumps under extended-term contracts.

During fiscal 2002, investing activities used \$25.7 million of cash. Approximately \$23.6 million in cash was used for the acquisition of short-term marketable securities, net of sales of similar securities. We also expended cash for patent additions and capital equipment and leasehold improvements of \$0.4 million and \$1.6 million, respectively.

Financing activities generated \$0.5 million of cash during fiscal 2002. Cash used to pay off equipment loans of \$0.5 million was offset by \$1.0 million of cash received as a result of stock options exercised during the fiscal year and the purchase of shares by employees under the Employee Stock Purchase Plan.

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Income taxes incurred during fiscal 2002 were not material, and we continue to have significant net tax operating loss and tax credit carryforwards.

The following table (in thousands) summarizes the Company's contractual obligations at March 31, 2002 and the effects such obligations are expected to have on its liquidity and cash flows in future periods.

CONTRACTUAL OBLIGATIONS -----	TOTAL -----	PAYMENTS DUE BY PERIOD			AFTER YEAR -----
		LESS THAN 1 YEAR -----	1 - 3 YEARS -----	4 - 5 YEARS -----	
Capital Lease Obligations	\$ 55	\$ 55	\$ -	\$ -	\$ -
Operating Lease Obligations	6,301	947	2,333	1,541	1,4
Total Contractual Cash Obligations	\$6,356	\$1,002	\$2,333	\$1,541	\$1,4
	=====	=====	=====	=====	=====

At the Company's election the lease for its primary operating facility may be terminated in 2005. The lump sum buyout cost for early termination is \$1.1 million.

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We believe that our revenue from product sales and government contracts, together with existing resources will be sufficient to fund our planned operations, including the planned expenditures for our internally funded AbioCor, Penn State Heart and new BVS development and product extension efforts, for the next twelve months. However, we may require significant additional funds in order to complete the development, conduct clinical trials, and achieve regulatory approvals of the AbioCor, Penn State Heart and other products under development over the next several years. We may also need additional funds for possible future strategic acquisitions of businesses, products or technologies complementary to our business. If additional funds are required, we may raise such funds from time to time through public or private sales of equity or from borrowings.

### CRITICAL ACCOUNTING POLICIES

The Company's discussion and analysis of its financial condition and results of operations are based on its consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, bad debts, warranty obligations, inventory valuations, intellectual property and income taxes. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

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REVENUE RECOGNITION. We derive our revenues from two principal sources: (1) product sales, including maintenance service agreements, and (2) funded research and development contracts and grants from government and other third party sources. We follow very specific and detailed guidelines in measuring revenue, including SEC Staff Accounting Bulletin (SAB) No. 101, REVENUE RECOGNITION. The majority of our product revenues are derived from our shipment of products to fulfill customer orders for a specified number of BVS consoles and blood pumps for a specified price. We recognize revenues and record costs related to such sales upon product shipment. See Item 7 - Management's Discussions and Analysis of Financial Condition and Results of Operations, Restatement of Prior Year's Financial Statements.

Other of our product revenues are derived from extended-term contracts with certain of our customers. These contracts, which typically have terms of one to three years, provide for the Company to receive a fixed, non-refundable amount of money over a set period of time in return for our providing these customers with BVS product at the start of the contract and restocking the customer with BVS blood pumps during the term of the contract. The exact quantity of such additional pumps to be supplied, if any, depends upon the actual usage of the product by the customer to support their patients. Under these contracts, we recognize revenue, and record related cost of product revenues, ratably over the term of the contract using an estimated per unit selling price based upon actual shipments of pumps to customers compared to the maximum number of additional pumps allowable under the contract, or when a maximum number is not specified, compared to our estimate of additional pumps that might be required by the customer. In the majority of contracts that contain contractual limits on the number of pumps, customers do not use the maximum number of allowable pumps resulting in our recognition of the remaining deferred revenue at the end of the contract term, with no associated incremental cost. When we do not have a contractual maximum number of pumps upon which to rely, we estimate customer blood

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pump usage and resulting per unit selling price based upon historical experience and based on information from our customers. We update these estimates over the term of a contract based upon significant and quantifiable changes in customer information and adjust the per unit selling price, as appropriate. Our estimates of customer blood pump usage and resulting per unit selling price that we use to determine the timing of revenue recognition involve risks. For example, when our estimate of customer usage proves to be higher than our customer's actual usage during the term of a contract, we recognize as revenue the remaining deferred balance of the contract at the end of the contract term resulting in revenue recognition in that period despite no or minimal blood pump usage by our customer during that period. While such changes in estimated per unit selling prices based on changes in estimated customer usage have historically not had a material effect on the aggregate amounts of revenue recognition, no guarantee can be made that the Company will experience the same level of accuracy in estimating future customer usage.

Cash received in advance of revenue in connection with the sale of blood pumps under extended-term contracts is recorded as deferred revenue and is classified as a current or long-term liability depending on the expected shipment dates of the blood pumps.

Maintenance service revenues are recognized ratably over the term of the service contracts based upon the elapsed term of the service contract.

Government-sponsored research and development contracts and grants generally provide for payment on a cost-plus-fixed-fee basis. Revenues from

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these contracts and grants are recognized as work is performed, provided the government has appropriated sufficient funds for the work. Under contracts in which the Company elects to spend significantly more on the development project during the term of the contract than the total contract amount, the Company prospectively recognizes revenue on such contracts ratably over the term of the contract as it incurs related research and development costs, provided the government has appropriated sufficient funds for the work.

**ALLOWANCE FOR DOUBTFUL ACCOUNTS.** We continuously monitor collections and payments from our customers and maintain a provision for estimated losses based upon our historical experience and any specific customer collection issues that we have identified. While such credit losses have historically been within our expectations and the provisions established, we cannot guarantee that we will continue to experience the same credit loss rates that we have in the past. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

**WARRANTIES.** Our BVS product line is subject to rigorous regulation and quality standards. While our Company engages in extensive product quality programs and processes, including monitoring and evaluating the quality of component suppliers, our warranty obligation is affected by product failure rates and product recalls. Our operating results could be adversely effected if the actual cost of product failures, including product recalls, exceeds our estimated warranty provision.

**INVENTORIES.** We value our inventory of products held for sale at the lower of cost or current estimated market value. We regularly review inventory quantities on hand and record a provision for excess and obsolete inventory based primarily on our estimated forecast of product demand and production requirements for the next twelve months. If actual demand or market conditions are less favorable than our projections, additional inventory write-downs may be required adversely impacting our financial results for the period in which the additional excess or obsolete inventory is identified. All of our inventories related to our BVS product line. We do not currently capitalize any costs related to AbioCor inventory as such product is part of a clinical trial and not available for sale.

**INCOME TAXES.** As part of the process of preparing our consolidated financial statements we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. These differences result in

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deferred tax assets and liabilities. In addition, as of March 31, 2002, the Company had federal tax net operating loss carryforwards of approximately \$75.5 million which begin to expire in 2005. The Company also has research and development credit carryforwards of approximately \$2.9 million which begin to expire in 2004. We have recorded a valuation allowance of \$40.5 million as an offset against these otherwise recognizable net deferred tax assets due to the uncertainty surrounding the timing of the realization of the tax benefit. In the event that we determine in the future that the Company will be able to realize all or a portion of its net deferred tax benefit, an adjustment to deferred tax valuation allowance would increase net income in the period such a determination was made.

Risk Factors

An investment in our common stock involves a high degree of risk. Current and prospective investors should carefully consider each of the risks and uncertainties described in this section and all of the other information in this Report. Our business, financial condition and results of operations could be severely harmed by any of the following risks. The trading price of our common stock could decline if any of these risks and uncertainties develop into actual events.

OUR FUTURE SUCCESS IS STRONGLY DEPENDENT ON DEVELOPMENT OF THE ABIOCOR. OUR DEVELOPMENT EFFORTS MAY NOT BE SUCCESSFUL.

We are currently devoting our principal research and development and regulatory efforts, and significant financial resources, to the development of the AbioCor and of the Penn State Heart. Implantable replacement heart systems, like the AbioCor and the Penn State Heart are complex medical devices and have never been successfully developed or marketed by any company. The development of implantable replacement heart devices such as the AbioCor and Penn State Heart, and other new products, presents enormous challenges in a variety of areas, many or all of which we may have difficulty in overcoming, including blood compatible surfaces, blood compatible flow, manufacturing techniques, pumping mechanisms, physiological control, energy transfer, anatomical fit and surgical techniques. For many years, we and other parties have been attempting to develop a heart replacement device, but to date, none of these efforts has been proven successful. We cannot be sure that we will be successful in our development efforts, and in the event that we are unable to commercialize the AbioCor, our business and financial condition would be adversely affected. The markets for the AbioCor and our other products under development are unproven. Even if the AbioCor or any other of our products are successfully developed and approved by the FDA and corresponding foreign regulatory authorities, they may not enjoy commercial acceptance or success, which would adversely affect our business and results of operations. Several factors could limit our success, including:

- our need to create a market for an implantable replacement heart, and possible limited market acceptance among physicians, medical centers, patients and third party payers;
- the need for surgeons to develop or be trained in new surgical techniques to use our product effectively;
- limitations on the number of patients who may have access to physicians and medical centers with adequate training, equipment and personnel to make use of our products;
- limitations inherent in first generation devices, and the potential failure to develop successive improvements, including increases in service life, which would reduce the addressable market for the AbioCor;

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- the lifestyle limitations that patients will have to accept, including traveling with external batteries at all times and potentially avoiding activities such as air travel or diving that involve significant pressure changes;
- the timing and amount of reimbursement for these products, if any, by third party payers;

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- the introduction by other companies of new treatments, products and technologies which compete with our products, and may reduce their market acceptance, or make them obsolete;
- the reluctance, due to ethical considerations, of physicians, patients and society as a whole to accept medical devices that replace the heart; and
- the reluctance of physicians, patients and society as a whole to accept the finite life and risk of mechanical failure of devices that replace the heart.

The commercial success of the AbioCor and other heart assist products will require acceptance by cardiovascular surgeons and interventional and heart failure cardiologists, a limited number of whom significantly influence medical device selection and purchasing decisions. We may achieve our business objectives only if the AbioCor and our other products are accepted and recommended by leading physicians, which is likely to be based on a determination by these physicians that our products are safe, cost-effective and represent acceptable methods of treatment. Although we have developed relationships with leading cardiac surgeons and cardiologists, we cannot assure that these existing relationships and arrangements can be maintained or that new relationships will be established in support of the AbioCor and our other products. If cardiovascular surgeons and cardiologists do not consider our products to be adequate for the treatment of our target cardiac patient population or if a sufficient number of physicians recommend and use competing products, it would seriously harm our business.

TESTING OF OUR NEW PRODUCTS WILL INVOLVE UNCERTAINTIES AND RISKS WHICH COULD DELAY OR PREVENT NEW PRODUCT INTRODUCTIONS, REQUIRE US TO INCUR SUBSTANTIAL ADDITIONAL COSTS OR RESULT IN OUR FAILURE TO BRING OUR PRODUCTS TO MARKET.

If we cannot demonstrate through clinical testing on humans that the AbioCor or other new products are safe and effective, we will not be able to obtain regulatory approvals in the U.S. or other countries for the commercial sale of these products. Our clinical testing of the AbioCor is in its early stages. Delays, budget overruns, and project terminations are not uncommon even after promising pre-clinical and clinical trials of medical products. We intend to conduct clinical testing for the AbioCor and other heart assist and heart replacement products with critically ill patients, and these patients may die or suffer other adverse medical results for reasons which may or may not be related to the product being tested. Those outcomes could seriously delay the completion of clinical testing, as could the unavailability of suitable patients for clinical trials, both of which are outside our control. We cannot assure that the rate of patient enrollment in our clinical trials will be consistent with our expectations or be sufficient to allow us to complete our clinical trials for the AbioCor or our other products under development in a timely manner, if at all. Delays could defer the marketing and commercial sale of our products, require further funding, and possibly result in failure to bring the products to market.

Development and testing of design changes to the AbioCor and other products under development is often extensive, expensive and time consuming. Some of the tests for our products may require months or years to perform, and we could be required to begin these tests again if we modify one of our products to correct a problem identified in testing. Even modest changes to certain components of

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our products can take months or years to complete and test. If results of pre-clinical or clinical testing of the AbioCor or other products under development indicate that design changes are required, such changes could cause serious delays that would adversely affect our results of operations. A number of companies in the medical industry have suffered delays, cost overruns and project terminations despite achieving promising results in pre-clinical testing or early clinical testing. In the event that we suffer setbacks in the pre-clinical or clinical testing of the AbioCor or other heart assist products, these products may be delayed, require further funding, and possibly may not be brought to market.

IF WE FAIL TO OBTAIN APPROVAL FROM THE FDA AND FROM FOREIGN REGULATORY AUTHORITIES, WE CANNOT MARKET AND SELL THE ABIOCOR OR OTHER NEW HEART ASSIST PRODUCTS IN THE U.S. AND IN OTHER COUNTRIES.

Obtaining required regulatory approvals may take several years to complete and consume substantial capital resources. We cannot assure that the FDA or any other regulatory authority will act quickly or favorably on our requests for product approval, or that the FDA or any other regulatory authority will not require us to provide additional data that we do not currently anticipate in order to obtain product approvals. We cannot apply for FDA approval to market the AbioCor and our other products under development until the product successfully completes its clinical trials. Several factors could prevent successful completion or cause significant delays of these trials, including an inability to enroll the required number of patients or failure to demonstrate adequately that the product is safe and effective for use in humans. If safety problems develop, the FDA could stop our trials before completion. In addition, we are planning to conduct phased clinical trials for the AbioCor tailored to specific patient populations with different life expectancies. If we are successful in obtaining FDA approvals for the AbioCor based on this phased approach, the initial approvals are likely to include conditions or limitations to particular indications that would limit the available market for these products. If we are not able to obtain regulatory approvals for use of the AbioCor or our other products under development, or if the patient populations for which they are approved are not sufficiently broad, the commercial success of these products could be limited.

We intend to market the AbioCor and our other new products in international markets, including the European Union and Japan. We must obtain separate regulatory approvals in order to market our products in other jurisdictions. The approval process may differ among those jurisdictions and approval in the U.S. or in any other jurisdiction does not ensure approval in other jurisdictions. Obtaining foreign approvals could result in significant delays, difficulties and costs for us, and require additional trials and additional expense.

IF WE OBTAIN REGULATORY APPROVAL OF OUR NEW PRODUCTS, THE PRODUCTS WILL BE SUBJECT TO CONTINUING REVIEW AND EXTENSIVE REGULATORY REQUIREMENTS, WHICH COULD AFFECT THE MANUFACTURING AND MARKETING OF OUR PRODUCTS.

The FDA continues to review products even after they have received initial approval. If and when the FDA approves the AbioCor or our other products under development, the manufacture and marketing of these products will be subject to continuing regulation, including compliance with current Quality Systems Regulations and Good Manufacturing Practices, known as QSR/GMP, adverse event reporting requirements and prohibitions on promoting a product for unapproved uses.

We will also be required to obtain additional approvals in the event we significantly modify the design of an approved product or the product's labeling or manufacturing process. Modifications of this type are common with new products, and we anticipate that the current first generation of the AbioCor will undergo a number of changes, refinements and improvements over time. For

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example, the current configuration of the AbioCor's thoracic unit, or "replacement heart," is sized for patients with relatively

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large chest cavities, and we anticipate that we will need to obtain regulatory approval of thoracic units of other sizes. If we are not able to obtain regulatory approval of modifications to our current and future products, the commercial success of these products would be limited.

We and our third-party suppliers of product components are also subject to inspection and market surveillance by the FDA for QSR/GMP and other requirements. Enforcement actions resulting from failure to comply with government requirements could result in fines, suspensions of approvals, recalls of products, operating restrictions and criminal prosecutions, and affect the manufacture and marketing of our products. The FDA could withdraw a previously approved product from the market upon receipt of newly discovered information, including a failure to comply with regulatory requirements, the occurrence of unanticipated problems with products following approval, or other reasons, which could adversely affect our operating results.

THE COST OF DEVELOPING AND MANUFACTURING THE ABIOCOR AND OUR OTHER PLANNED NEW PRODUCTS IS SUBSTANTIAL FOR A COMPANY OF OUR SIZE AND WILL EXERT A STRAIN ON OUR AVAILABLE RESOURCES.

In recent years we have significantly increased our research and development expenditures for the AbioCor, and we expect that this trend will continue in the future. We will also need to make significant expenditures to begin to manufacture and market the AbioCor and our other planned new products in commercial quantities for sale in the U.S. and other countries, if and when we obtain regulatory approval to do so. We cannot be sure that our estimates of capital expenditures for the AbioCor and the development of our other new products will be accurate. We could have significant cost overruns, which could reduce our ability to commercialize our products. Any delay or inability to commercialize our products under development could adversely affect our business prospects and results of operations. We do not operate at a profit and do not expect to be profitable for some time. We had a net loss of \$21.2 million in fiscal 2002 and a net loss of \$19.3 million in fiscal 2001. We are committed to making large expenditures for the AbioCor and, to a lesser extent, other new products, in fiscal 2003 and subsequent fiscal years, which may result in losses in future periods. These expenditures include costs associated with performing clinical trials for the AbioCor, continuing our research and development relating to the AbioCor and other new products, seeking regulatory approvals for the AbioCor and, if we receive these approvals, commencing commercial manufacturing and marketing of the AbioCor. The amount of these expenditures is difficult to forecast accurately, and cost overruns may occur. We plan to fund a portion of these expenditures from our limited existing financial resources and revenues from BVS sales, which are variable and uncertain. We cannot be sure that we will have the necessary funds to develop and commercialize our new products, or that additional funds will be available on commercially acceptable terms, if at all. In the event that we are unable to obtain the necessary funding to develop and commercialize our products, our business may be adversely affected.



OUR OPERATING RESULTS MAY FLUCTUATE UNPREDICTABLY.

Our annual and quarterly operating results have fluctuated historically and we expect these fluctuations to continue. Among the factors that may cause our operating results to fluctuate are:

- costs we incur in developing and testing the AbioCor and other new products or product enhancements;
- the timing of regulatory actions, such as product approvals or recalls;
- costs we incur in anticipation of future sales, such as inventory purchases, expansion of manufacturing facilities, or establishment of international sales offices;
- the timing of customer orders and deliveries for BVS blood pumps and consoles to current and new customers and the timing of revenue deferred and recognized under extended-term contracts;
- competitive changes, such as price changes or new product introductions that we or our competitors may make;
- economic conditions in the health care industry and the state of cost containment efforts, including reimbursement policies.

We believe that period-to-period comparisons of our historical and future results will not necessarily be meaningful, and that investors should not rely on them as an indication of future performance. To the extent we experience the factors described above, our future operating results may not meet the expectations of securities analysts or investors from time to time, which may cause the market price of our common stock to decline.

THE BVS PRODUCT LINE, OUR PRINCIPAL PRODUCT AND CURRENT PRIMARY SOURCE OF REVENUES, IS VULNERABLE TO COMPETITIVE PRESSURES, DISRUPTIONS IN SALES, CONTINUING REVIEW AND EXTENSIVE REGULATORY REQUIREMENTS.

All of our product revenues to date have come from sales of the BVS line of products. We believe that we will continue to be dependent on our BVS product line for at least the next several years, unless and until we are able to successfully develop or acquire, obtain regulatory approval for, and sell new products. In the event that a competitor were to introduce new treatments, products and technologies which compete with our products, add new features to their existing products or reduce their prices to make their products more financially attractive to customers, our revenue from our BVS products could decline. For example, in the event of the expansion of technologies, which allow heart surgical procedures to be performed without stopping the heart, a reduction in the market for the BVS could potentially result. Further, the BVS is subject to stringent and continuing FDA and other regulatory requirements, including compliance with QSR/GMP, adverse event reporting, prohibitions on promoting the BVS for unapproved uses, and continued inspection and market surveillance by the FDA. If BVS products are recalled or otherwise withdrawn from the market, our revenues would likely decline, which would hurt our business. In addition, variations in the quantity and timing of sales of BVS consoles have a disproportionate effect on our revenues, because the price of the console is substantially greater than the price of our disposable blood pumps. If we cannot maintain and increase our revenues from our BVS product

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line, our overall business and financial condition could be adversely affected.

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Revenues from our BVS product line in fiscal 2002 increased by 25% from revenues in fiscal 2001, and in fiscal 2001 our BVS revenues increased by 6% from revenues in fiscal 2000. A significant portion, \$5.2 million in fiscal 2002 compared to \$2.8 million in fiscal 2001 and \$2.5 million in fiscal 2000, were derived from extended-term contracts. All of the Company's existing extended-term contracts at March 31, 2002, the terms of which were one to three years, are scheduled to expire in fiscal 2003. To maintain or increase revenues from sales of our BVS products, we may be required to adopt new sales and marketing strategies, some of which may require expending additional capital resources, or execute on existing strategies. The new strategies we may adopt or execute on include:

- promoting increased use of the BVS by existing customers in order to increase disposable blood pump sales to those customers;
- selling the BVS to smaller hospitals and medical centers in the U.S.;
- regularly introducing enhancements to the BVS;
- expanding sales of our BVS product line in international markets, some of which require separate regulatory approvals;
- seeking new categories of patients to support with the device; and
- renew extended-term contracts, or alternative arrangements at customers for which these contracts are scheduled to expire.

In the event that we are unsuccessful in carrying out these new strategies, our revenues may decline.

WE MAY NOT BE SUCCESSFUL IN EXPANDING OUR SALES ACTIVITIES INTO INTERNATIONAL MARKETS.

We are seeking to expand our international sales of the BVS and prepare for commercialization of the AbioCor by recruiting direct sales and support teams for selected countries in Europe and pursuing regulatory approval of the BVS in Japan. To date we have limited experience in selling the BVS internationally. In fiscal 2002, approximately 8%, and in fiscal 2001, approximately 4%, of our revenues from the BVS product line were derived from international sales. Our international operations will be subject to a number of risks, which may vary from the risks we experience in the U.S., including:

- the need to obtain regulatory approvals in foreign countries before our products may be sold or used;

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- longer sales cycles;
- dependence on local distributors;
- limited protection of intellectual property rights;
- difficulty in collecting accounts receivable;
- fluctuations in the values of foreign currencies; and
- political and economic instability.

If we are unable to effectively expand our sales activities in international markets, our results of operations could be negatively impacted.

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WE DEPEND ON THIRD PARTY REIMBURSEMENT TO OUR CUSTOMERS FOR MARKET ACCEPTANCE OF OUR PRODUCTS. IF THIRD PARTY PAYERS FAIL TO PROVIDE APPROPRIATE LEVELS OF REIMBURSEMENT FOR PURCHASE AND USE OF OUR PRODUCTS, OUR PROFITABILITY WOULD BE ADVERSELY AFFECTED.

Sales of medical products largely depend on the reimbursement of patients' medical expenses by government health care programs and private health insurers. The cost of our BVS system is substantial, and we anticipate that the cost of implanting the AbioCor in a patient will also be substantial. Without the financial support of the government or third party insurers, the market for our products will be limited. Medical products and devices incorporating new technologies are closely examined by governments and private insurers to determine whether the products and devices will be covered by reimbursement, and if so, the level of reimbursement which may apply. We cannot be sure that third party payers will reimburse sales of our products now under development, or enable us to sell them at profitable prices. We also cannot be sure that third party payers will continue the current level of reimbursement to physicians and medical centers for use of the BVS. Any reduction in the amount of this reimbursement could harm our business.

The federal government and private insurers have considered ways to change, and have changed, the manner in which health care services are provided and paid for in the U.S. In the future, it is possible that the government may institute price controls and further limits on Medicare and Medicaid spending. These controls and limits could affect the payments we collect from sales of our products. Internationally, medical reimbursement systems vary significantly, with some medical centers having fixed budgets, regardless of levels of patient treatment, and other countries requiring application for, and approval of, government or third party reimbursement. Even if we succeed in bringing our new products to market, uncertainties regarding future health care policy, legislation and regulation, as well as private market practices, could affect our ability to sell our products in commercially acceptable quantities at profitable prices.

Prior to approving coverage for new medical devices, most third party payers require evidence that the product has received FDA approval, is not experimental, and is medically necessary for the specific patient. Increasingly, third party payers require evidence that the devices being used are cost-effective. The AbioCor and our other products under development may not meet these or future criteria, which could hurt our ability to market and sell these products.

IF WE FAIL TO ACHIEVE AND MAINTAIN THE HIGH MANUFACTURING STANDARDS THAT OUR PRODUCTS REQUIRE OR IF WE ARE UNABLE TO DEVELOP ADDITIONAL MANUFACTURING

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CAPACITY, WE WILL NOT BE SUCCESSFUL.

Our products require precise, high quality manufacturing. Our failure to achieve and maintain these high manufacturing standards, including the incidence of manufacturing errors, design defects or component failures, could result in patient injury or death, product recalls or withdrawals, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt our business. We have from time to time voluntarily recalled certain products. Despite our very high manufacturing standards, we cannot completely eliminate the risk of errors, defects or failures. If we are not able to manufacture the BVS in accordance with necessary quality standards, our business and results of operations may be negatively affected.

The AbioCor involves even greater manufacturing complexities than the BVS. The AbioCor must be significantly more durable and meet different standards, which may be more difficult to achieve, than those that apply to our current BVS product line. If we are unable to manufacture the AbioCor or other future products on a timely basis at acceptable quality and cost and in commercial quantities, or if we experience unanticipated technological problems or delays in production, our business will suffer.

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The manufacture of our products is and will continue to be complex and costly, requiring a number of separate processes and components. Achieving precision and quality control requires skill and diligence by our personnel. Further, to be successful, we believe we will need to increase our manufacturing capacity. We may experience difficulties in scaling up manufacturing of our new products, including problems related to product yields, quality control and assurance, component and service availability, adequacy of control policies and procedures, and lack of skilled personnel. If we cannot hire, train and retain enough experienced and capable scientific and technical workers, we may not be able to manufacture sufficient quantities of our current or future products at an acceptable cost and on time, which could limit market acceptance of our products or otherwise damage our business.

IF OUR SUPPLIERS CANNOT PROVIDE THE COMPONENTS WE REQUIRE, OUR ABILITY TO MANUFACTURE OUR PRODUCTS COULD BE HARMED.

We rely on third party suppliers to provide us with certain components used in the AbioCor, Penn State Heart, BVS and our other products under development. Relying on third party suppliers makes us vulnerable to component part failures and to interruptions in supply, either of which could impair our ability to conduct clinical tests or to ship our products to our customers on a timely basis. Using third party vendors makes it difficult and sometimes impossible for us to test fully certain components, such as components on circuit boards, maintain quality control, manage inventory and production schedules and control production costs. Vendor lead times to supply us with ordered components vary significantly and can exceed six months or more. Both now and as we expand our manufacturing capacity, we cannot be sure that our suppliers will furnish us with required components when we need them. These factors could make it more difficult for us to effectively and efficiently manufacture our products, and could adversely impact our results of operations.

Some suppliers may be the only source for a particular component, which makes us vulnerable to cost increases and supply interruptions. Vendors may decide to limit or eliminate sales of certain products to the medical industry due to product liability or other concerns, and we might not be able to find a suitable replacement for those products. Manufacturers of our product components may be required to comply with FDA or other regulatory manufacturing regulations and to satisfy regulatory inspections in connection with the manufacture of the

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components. If we cannot obtain a necessary component, we may need to find, test and obtain regulatory approval for a replacement component, produce the component ourselves or redesign the related product, which would cause significant delay and could increase our manufacturing costs. Any of these events could adversely impact our results of operations.

### INTENSE COMPETITION COULD HARM OUR FINANCIAL PERFORMANCE.

Intense competition, rapid technological change and evolving industry requirements and standards in the heart assist markets could decrease demand for our products or make them obsolete. Some of the companies, universities and research organizations developing competing products have greater resources and experience than we have. Our competitors could commence and complete clinical testing of their products, obtain regulatory approvals and begin commercial-scale manufacturing of their products faster than we are able to for our products. They could develop superior products or products of similar quality at the same or lower prices. In addition, our customers often have limited budgets. Consequently, our products compete against a broad range of medical devices and therapies for these limited funds. If we do not use reasonable efforts to further develop the Penn State Heart, certain rights to that technology could revert back to The Pennsylvania State University and be used to compete against us. We cannot be sure that we will be able to compete effectively and successfully in the markets in which we participate.

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WE OWN PATENTS, TRADEMARKS, TRADE SECRETS, COPYRIGHTS AND OTHER INTELLECTUAL PROPERTY AND KNOW-HOW THAT WE BELIEVE GIVES US A COMPETITIVE ADVANTAGE. IF WE CANNOT PROTECT OUR INTELLECTUAL PROPERTY, COMPETITION COULD FORCE US TO LOWER OUR PRICES, WHICH COULD HURT OUR PROFITABILITY.

Our intellectual property rights are and will continue to be a critical component of our success. A substantial portion of our intellectual property rights relating to the AbioCor, BVS, Penn State Heart and other products under development is in the form of trade secrets, rather than patents. In order to preserve certain proprietary information as trade secrets, we are required to restrict disclosure of information intended to constitute trade secrets to third parties. We protect our trade secrets and proprietary knowledge in part through confidentiality agreements with employees, consultants and other parties. Certain of our consultants and third parties with whom we have business relationships may also provide services to other parties in the medical device industry, including companies, universities and research organizations that are developing competing products. In addition, some of our former employees may seek employment with, and become employed by, our competitors. We cannot assure that confidentiality agreements with our employees, consultants and third parties will not be breached, that we will have adequate remedies for any such breach, or that our trade secrets will not become known to or be independently developed by our competitors. The loss of trade secret protection for technologies or know-how relating to the AbioCor, BVS or Penn State Heart could adversely affect our business prospects.

Our business position will also depend in part on our ability to defend our existing and future patents and rights and conduct our business activities free of infringement claims by third parties. We intend to seek additional patents, but our pending and future patent applications may not be approved, may not give us a competitive advantage, and could be challenged by others. Patent proceedings in the U.S. and in other countries may be expensive and time consuming. In addition, patents issued by foreign countries may afford less protection than is available under U.S. patent law, and may not adequately protect our proprietary information. Our competitors may independently develop proprietary technologies and processes that are the same as or substantially

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equivalent to ours, or design around our patents.

Companies in the medical device industry typically obtain patents and frequently engage in substantial intellectual property litigation. Our products and technologies could infringe on the rights of others. If a third party successfully asserts a claim for infringement against us, we may be liable for substantial damages, be unable to sell products using that technology, or have to seek a license or redesign the related product. These alternatives may be uneconomical or impossible. Patent litigation could be costly, result in product development delays, and divert the efforts and attention of management from our business.

IF WE CANNOT ATTRACT AND RETAIN THE MANAGEMENT, SALES AND OTHER PERSONNEL WE NEED, WE WILL NOT BE SUCCESSFUL.

We depend heavily on the contributions of the principal members of our technical, sales and support, regulatory and clinical, operating and administrative management and staff, many of whom would be difficult to replace. Competition for skilled and experienced management, scientific personnel and sales personnel in the medical devices industry is intense. If we lose the services of any of the principal members of our management and staff, or if we are unable to attract and retain qualified personnel in the future, especially scientific and sales personnel, our business could be adversely affected.

We expect to grow rapidly if the AbioCor and our other products under development advance through the approval process. The expansion of personnel and facilities will strain our management and our financial and other resources. If we cannot manage this growth successfully, our business will likely suffer.

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PRODUCT LIABILITY CLAIMS COULD DAMAGE OUR REPUTATION AND HURT OUR FINANCIAL RESULTS.

The clinical use of medical products, even after regulatory approval, poses an inherent risk of product liability claims. We maintain limited product liability insurance coverage, subject to deductibles and exclusions. We cannot be sure that product liability insurance will be available in the future or will be available on acceptable terms or at reasonable costs, or that such insurance will provide us with adequate coverage against potential liabilities. Claims against us, regardless of their merit or potential outcome, may also hurt our ability to obtain physician endorsement of our products or expand our business.

Many patients using the BVS do not survive. There are many factors beyond our control that could result in patient death, including the condition of the patient prior to use of the product, the skill and reliability of physicians and hospital personnel using and monitoring the product, and product maintenance by customers. However, the failure of the BVS or other life support products we distribute for clinical test or sale could give rise to product liability claims and negative publicity.

The risk of product liability claims could increase as we introduce new products like the AbioCor that are intended to support a patient until the end of life. The AbioCor will have a finite life and could cause unintended complications to other organs and may not be able to successfully support all patients. Its malfunction could give rise to product liability claims whether or not it has extended or improved the quality of the patient's life. We cannot be sure that we can obtain liability insurance to cover the BVS, the AbioCor or other new products at a reasonable cost, if at all. If we have to pay product liability claims in excess of our insurance coverage, our financial condition will be adversely affected.

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OUR RIGHTS DISTRIBUTION, CERTIFICATE OF INCORPORATION AND DELAWARE LAW COULD MAKE IT MORE DIFFICULT FOR A THIRD PARTY TO ACQUIRE US AND MAY PREVENT OUR STOCKHOLDERS FROM REALIZING A PREMIUM ON OUR STOCK.

Our rights distribution and provisions of our certificate of incorporation and of the Delaware General Corporation Law may make it more difficult for a third party to acquire us, even if doing so would allow our stockholders to receive a premium over the prevailing market price of our stock. Our rights distribution and those provisions of our certificate of incorporation and Delaware law are intended to encourage potential acquirers to negotiate with us and allow our Board of Directors the opportunity to consider alternative proposals in the interest of maximizing stockholder value. However, such provisions may also discourage acquisition proposals or delay or prevent a change in control, which could negatively affect our stock price.

THE MARKET VALUE OF OUR COMMON STOCK COULD VARY SIGNIFICANTLY, BASED ON MARKET PERCEPTIONS OF THE STATUS OF OUR DEVELOPMENT EFFORTS.

The perception of securities analysts regarding our product development efforts could significantly affect our stock price. As a result, the market price of our common stock could change substantially when we or our competitors make product announcements, particularly announcements relating to the AbioCor or competing products. Many factors affecting our stock price are industry related and beyond our control.

IF WE MAKE ACQUISITIONS, WE COULD ENCOUNTER DIFFICULTIES THAT HARM OUR BUSINESS.

We may acquire companies, products or technologies that we believe to be complementary to our business. If we do so, we may have difficulty integrating the acquired personnel, operations, products or

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technologies. These difficulties may disrupt our ongoing business, distract our management and employees and increase our expenses, which could hurt our business.

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### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

We do not use derivative financial instruments for speculative or trading purposes. However, we are exposed to market risk related to changes in interest rates. We maintain an investment portfolio consisting mainly of federal agency obligations, state and municipal bonds, and U.S. Treasury notes with maturities of one year or less. These held-to-maturity securities are subject to interest rate risk and will fall in value if market interest rates increase. If market interest rates were to increase immediately and uniformly by 10 percent from levels at March 31, 2002 the fair market value of the portfolio would decline by an immaterial amount. We have the ability to hold our fixed income investments until maturity, and therefore we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our securities portfolio.

### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Our Consolidated Financial Statements and Supplementary Data are listed under Part IV, Item 14, in this Report.

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

Our audit committee recommended and our board of directors unanimously voted (i) to dismiss Arthur Andersen LLP, and (ii) to engage PricewaterhouseCoopers LLP as its independent accountants, effective on June 6, 2002.

During our fiscal years ended March 31, 2002 and March 31, 2001, and the subsequent interim period prior to June 6, 2002, Arthur Andersen LLP did not have any disagreement with us on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreement, if not resolved to the satisfaction of Arthur Andersen LLP, would have caused it to make reference to the subject matter of the disagreement in connection with its reports on our financial statements.

The reports of Arthur Andersen LLP on our financial statements for the period from April 1, 2000 through March 31, 2001 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. During the period from April 1, 2000 through June 6, 2002, there were no "reportable events" within the meaning of Item 304(a)(1)(v) of Regulation S-K promulgated under the Securities Act of 1933, as amended.

Pursuant to Item 304(a)(3) of Regulation S-K, we requested that Arthur Andersen LLP furnish us with a letter addressed to the SEC stating whether or not Arthur Andersen LLP agrees with the above statements. A copy of such letter, dated June 6, 2002, is attached as Exhibit 16(a) to this Annual Report on Form 10-K.

During the period from April 1, 2000 through June 6, 2002, we did not consult with PricewaterhouseCoopers LLP regarding either the application of accounting principles to a specified transaction, the type of audit opinion that might be rendered on our financial statements, or any matter that was the subject of a disagreement or reportable event with Arthur Andersen LLP.

The report of PricewaterhouseCoopers LLP on our consolidated financial statements for the Company's past three fiscal years is presented in Item 14 of this Annual Report on Form 10-K.

### PART III

### ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

#### IDENTIFICATION OF DIRECTORS

Set forth below is certain biographical information with respect to the Company's directors.



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NAME	AGE	POSITION	DIRECTOR SINCE
David M. Lederman, Ph.D.....	58	Chairman of the Board of Directors, President and Chief Executive Officer	1981
Desmond H. O'Connell, Jr.....	66	Director	1995
John F. O'Brien.....	59	Director	1989
Henri A. Termeer.....	56	Director	1987
W. Gerald Austen, M.D.....	72	Director	1985
Paul B. Fireman.....	58	Director	1987

DR. DAVID M. LEDERMAN founded ABIOMED in 1981, and has served as Chairman of the Board and Chief Executive Officer since that time. He has also served as President of ABIOMED for the majority of time. He was Chairman of the Medical Research Group at the Everett Subsidiary of Avco Corporation, which he joined in 1972. Dr. Lederman conceived and originated the BVS development program and the design and development of the ventricles and valves that are integral to the AbioCor implantable replacement heart. He holds various degrees in Physics and Engineering, including a Ph.D. degree in Aerospace Engineering from Cornell University.

MR. DESMOND H. O'CONNELL, JR. has served as Director of the Company since 1995. He is currently the Chairman and a Director of Serologicals Corporation and is also an independent management consultant. From December 1992 until December 1993, he served as the Chairman, Management Committee, of Pharmakon Research International, Inc. During 1991, he briefly served as Chairman of the Board and Chief Executive Officer of Osteotech, Inc. Mr. O'Connell was with the BOC Group, PLC in senior management positions from 1983 to 1990. From April 1990 until September 1990, Mr. O'Connell was President and Chief Executive Officer of BOC Health Care. From 1986 to April 1990, he was Group Managing Director of BOC Group, PLC. Prior to joining BOC, Mr. O'Connell held various positions at Baxter Laboratories, Inc., including Chief Executive of the Therapeutic and Diagnostic Division and Vice President, Corporate Development. Mr. O'Connell had been a Director of Chryslais International Corporation from 1991 through May 1999.

MR. JOHN F. O'BRIEN has served as a Director of the Company since 1989. Since August 1989 he has been the President and Chief Executive Officer and a Director of First Allmerica Financial Life Insurance Company (formerly State Mutual Life Assurance Company of America). Since January 1995 he has been President, Chief Executive Officer and a Director of Allmerica Financial Corporation. Mr. O'Brien is also Chairman of the Board and a Director of Allmerica Property & Casualty Companies, Inc. and a Trustee and Chairman of the Board of Allmerica Securities Trust and Allmerica Investment Trust. From 1972 until 1989, Mr. O'Brien was employed by Fidelity Investments in various capacities, including as Group Managing Director of FMR Corp. Mr. O'Brien is also a Director of Cabot Corporation and TJX Companies, Inc.

MR. HENRI A. TERMEER has served as a Director of the Company since 1987. Mr. Termeer has served as President and a Director of Genzyme Corporation since 1983, as its Chief Executive Officer since 1985, and as its Chairman of the Board since 1988. Mr. Termeer is also a past Chairman and a current Director of the Board of Genzyme

Transgenics Corporation. He is also a Director of AutoImmune, Inc., GelTex Pharmaceuticals, Inc. and Diacrin, Inc. and serves as a Trustee of Hambrecht & Quist Healthcare Investors and Hambrecht & Quist Life Sciences Investors.

DR. W. GERALD AUSTEN, M.D., has served as a Director of the Company since 1985. Since 1974 he has been the Edward D. Churchill Professor of Surgery at Harvard Medical School and at Massachusetts General Hospital. From 1969 to 1997, Dr. Austen was Chief of the Surgical Services at Massachusetts General Hospital. Dr. Austen is the former President of the American College of Surgeons, the American Association for Thoracic Surgery, the American Surgical Association and the Massachusetts and American Heart Associations. Dr. Austen is a member of the Institute of Medicine of the National Academy of Sciences, a Fellow of the American Academy of Arts and Sciences, a life member of the corporation of the Massachusetts Institute of Technology and Chairman of the Board of Trustees of the John S. and James L. Knight Foundation.

MR. PAUL B. FIREMAN has served as a Director of the Company since 1987. Mr. Fireman has served as Chief Executive Officer and as a Director of Reebok International Ltd., which he founded, from 1979 to the present. He has served as Reebok's Chairman of the Board of Directors from 1985 to the present. He has also served as Reebok's President from 1989 to the present, after initially serving as President from 1979 to 1987. Mr. Fireman has served as the Chairman of the Entrepreneurial Advisory Board of Babson College since 1995.

#### IDENTIFICATION OF EXECUTIVE OFFICERS

The information required by this Item 10 (b) is hereby incorporated by reference to the information under Part I, Item 1--Business under the caption "Executive Officers of the Registrant" in this Report.

#### REPORTING UNDER SECTION 16(A) OF THE SECURITIES AND EXCHANGE ACT OF 1934

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's executive officers and directors, and persons who own more than 10% of the Company's Common Stock, to file reports of ownership and changes of ownership on Forms 3, 4 and 5 with the Securities and Exchange Commission, and furnish the Company with copies of such Forms.

Based solely upon review of Forms 3, 4 and 5 and amendments thereto furnished to the Company with respect to the fiscal year ended March 31, 2002 and on written representations from certain reporting persons that were not required to file Forms 5 with respect to the Company's most recent fiscal year, the Company believes that all Section 16(a) filing requirements applicable to its officers, directors and greater-than-10% stockholders were fulfilled in a timely manner.

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### ITEM 11. EXECUTIVE COMPENSATION

The following table sets forth the compensation during the last three fiscal years of (i) the Chief Executive Officer of the Company and (ii) the four most highly compensated executive officers other than the Chief Executive Officer who were serving as executive officers at the end of the last fiscal year, whose annual salary and bonus exceeded \$100,000 for services in all capacities to the Company during the last fiscal year (the "named executive officers").

SUMMARY COMPENSATION TABLE

NAME AND PRINCIPAL POSITION	FISCAL YEAR ENDED 3/31	ANNUAL COMPENSATION			LONG
		SALARY (\$)	BONUS (\$)	OTHER ANNUAL COMPENSATION (\$)	COMPEN AWA
Dr. David M. Lederman.....	2002	\$300,000	\$137,500 (2)	---	50
Chairman of the Board,	2001	300,000	100,000	---	100
President and Chief	2000	281,250	200,000	---	130
Executive Officer					
Dr. Robert T.V. Kung.....	2002	\$195,000	\$ 50,000	---	20
Senior Vice President -	2001	186,250	200,000	---	40
Research and Chief Scientific	2000	172,500	87,500	---	20
Officer					
Eugene D. Rabe.....	2002	\$177,500	\$ 20,000	---	20
Senior Vice President -	2001	167,500	100,000	---	40
Chief Sales Officer	2000	155,000	90,000	---	30
John F. Thero.....	2002	\$195,000	\$ 20,000	---	20
Senior Vice President -	2001	182,500	100,000	---	50
Chief Financial Officer and	2000	155,000	100,000	---	40
Treasurer					
William J. Bolt.....	2002	\$167,500	\$ 30,000	---	25
Senior Vice President -	2001	155,000	100,000	---	40
Product Engineering	2000	137,500	65,000	---	20

(1) Includes for the fiscal year ended March 31, 2002 (a) the following matching contributions to the ABIOMED Retirement Savings Plan for fiscal 2002: Dr. Lederman - \$1,500; Dr. Kung - \$1,500; Mr. Rabe - \$1,500; Mr. Thero - \$1,500; and Mr. Bolt - \$1,500; (b) the following profit sharing allocations under the ABIOMED Retirement Savings Plan contributions paid in fiscal 2002, subject to applicable vesting based on years of service: Dr. Lederman - \$3,640; Dr. Kung - \$3,640; Mr. Rabe - \$3,640; Mr. Thero - \$3,640; and Mr. Bolt - \$3,640; (c) the following life insurance premiums paid for term life insurance in excess of \$50,000 in fiscal 2002: Dr. Lederman - \$30,239; Dr. Kung - \$1,812; Mr. Rabe - \$564; Mr. Thero - \$421; and Mr. Bolt - \$526; (d) the following long-term disability insurance premiums for fiscal 2002: Dr. Lederman - \$1,140; Dr. Kung - \$735; Mr. Rabe - \$665; Mr. Thero - \$735; and Mr. Bolt - \$627; and (e) the following awards paid in fiscal 2002 in

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connection with newly issued patents: Dr. Lederman - \$1,100 and Dr. Kung - \$3,650.

- (2) \$100,000 of the bonus paid to Dr. Lederman during fiscal 2002 represents an amount deferred at his request from the amount that would have been paid, and was provided for, in fiscal 2001. At the request of Dr. Lederman, the compensation committee had deferred Dr. Lederman's receipt of a portion of his bonus until the first patient participating in the AbioCor clinical trials had survived for more than sixty days after receipt of the AbioCor. The bonus granted to Dr. Lederman for fiscal 2002 also includes \$37,500 granted to Dr. Lederman for his performance during the past year.

The following tables set forth certain information with respect to option grants and exercises to the named executive officers.

OPTION GRANTS IN LAST FISCAL YEAR

NAME	INDIVIDUAL GRANTS			
	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED (#) (1)	% OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE (\$/SH)	EXPIRATION DATE
Dr. David M. Lederman.....	50,000	13.3%	\$24.120	06/22/11
Dr. Robert T.V. Kung.....	20,000	5.3%	\$24.120	06/22/11
Eugene D. Rabe.....	20,000	5.3%	\$24.120	06/22/11
John F. Thero.....	20,000	5.3%	\$24.120	06/22/11
William J. Bolt.....	25,000	6.6%	\$24.120	06/22/11

- (1) The options granted to Dr. Lederman, Dr. Kung, Mr. Rabe, Mr. Thero and Mr. Bolt were granted under the 2000 Stock Incentive Plan and become exercisable in three annual installments of 30%, 30% and 40% commencing two years from the date of grant such that they will be fully exercisable four years after the date of grant.
- (2) The assumed rates are compounded annually for the full term of the options.

AGGREGATED OPTION EXERCISES IN LAST

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### FISCAL YEAR AND FISCAL YEAR END OPTION VALUES

NAME	SHARES ACQUIRED ON EXERCISE (#)	VALUE REALIZED (\$)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT 3/31/02 EXERCISABLE/UNEXERCISABLE (#)
	-----	-----	-----
Dr. David M. Lederman.....	---	---	32,500/247,500
Dr. Robert T.V. Kung.....	30,000	\$205,500	246,500/96,500
Eugene D. Rabe.....	---	---	152,750/102,250
John F. Thero.....	3,600	\$ 42,966	152,372/120,500
William Bolt.....	5,000	\$ 34,000	133,000/79,000

-----

- (1) Based upon the \$11.100 closing price of the Company's Common Stock on March 28, 2002 on the Nasdaq National Market minus the respective option exercise price.

#### COMPENSATION OF DIRECTORS

Directors who are not employees of the Company receive an annual retainer of \$15,000 or an equivalent value of the Company's Common Stock, at the individual's option, and \$1,000 for attendance at each meeting of the Board of Directors or a committee thereof or consultation at the offices of the Company.

The Company has a 1989 Non-Qualified Stock Option Plan for Non-Employee Directors (the "Directors Plan"). Under the Directors Plan, options to purchase Common Stock are granted to directors of the Company who are not employees of the Company and who do not own or are not affiliated with any person who owns, directly or indirectly, more than fifteen percent (15%) of the Company's outstanding voting stock (the "Eligible Directors"). The Current Eligible Directors, are Dr. Austen and Messrs. Fireman, O'Brien, Termeer and O'Connell. Each of these Eligible Directors was granted 5,000 options under the Directors Plan on August 8, 2001. These granted options have an exercise price of \$18.40 per share and vest fully on August 8, 2002.

#### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION IN COMPENSATION DECISIONS

The Compensation Committee consists of Paul B. Fireman, John F. O'Brien and Henri A. Termeer. No member of the Compensation Committee is a former or current officer or employee of the Company. Dr. Lederman, while not a member of the

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Compensation Committee, makes recommendations to the Compensation Committee regarding executive officer compensation, including the awards of stock options, and often participates in the Committee's deliberations but does not vote on such matters. None of the Company's executive officers serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as members of the Company's Board of Directors or Compensation Committee.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of July 1, 2002 with respect to the beneficial ownership of the Company's Common Stock of each director, each named executive officer in the Summary Compensation Table under "Executive Compensation," below, all directors and current executive officers of the Company as a group, and each person known by the Company to be the beneficial owner of five percent or more of the Company's common stock. This information is based upon information received from or on behalf of the individuals named therein.

NAME -----	SHARES OF STOCK BENEFICIALLY OWNED (1) -----
Dr. David M. Lederman (2) (3)..... c/o ABIOMED, Inc. 22 Cherry Hill Drive Danvers, MA 01923	2,327,250
Genzyme Corporation..... One Kendall Square Cambridge, MA 02139	2,307,692
Dr. W. Gerald Austen (3).....	78,200
Paul B. Fireman (3).....	430,155
John F. O'Brien (3).....	194,887
Desmond H. O'Connell, Jr. (3).....	87,887
Henri A. Termeer (3) (4).....	2,397,243
William J. Bolt (3).....	151,000
Dr. Robert T.V. Kung (3) (5).....	489,228
Eugene D. Rabe (3).....	186,250
John F. Thero (3).....	195,562
All Current Executive Officers and Directors..... As a group (10 persons) (2) (3) (4) (5)	6,537,662

\* Less than 1%.

- (1) Unless otherwise noted, each person identified possesses sole voting and investment power over the shares listed.
- (2) Includes 1,141,196 shares held by the wife of Dr. Lederman, as to which Dr. Lederman disclaims beneficial ownership.
- (3) Includes the following shares subject to currently exercisable options (includes options that will become exercisable within 60 days of July 1, 2002): Dr. Lederman--95,000; Dr. Austen--55,000; Mr. Fireman--60,000; Mr. O'Brien--60,000; Mr. O'Connell--45,000; Mr. Termeer--60,000; Mr. Bolt--151,000; Dr. Kung--277,000; Mr. Rabe--186,250; and Mr. Thero--191,872.

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- (4) Includes 2,307,692 shares held by Genzyme Corporation, as to which Mr. Termeer disclaims beneficial ownership. Mr. Termeer is the Chief Executive Officer of Genzyme.
- (5) Includes 108,200 shares held by the wife of Dr. Kung and 104,028 shares held in trust for the benefit of certain relatives of Dr. Kung, as to which Dr. Kung disclaims beneficial ownership.

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### EQUITY COMPENSATION PLANS

The following table provides information as of March 31, 2002 regarding securities authorized for issuance under the Company's equity compensation plans, including individual compensation arrangements. The equity compensation plans of the Company include the 1989 Non-Qualified Stock Option Plan for Non-Employee Directors, the 1992 Combination Stock Option Plan, the 1998 Equity Incentive Plan, the 2000 Stock Incentive Plan and the Employee Stock Purchase Plan. All of these equity compensation plans have been approved by the Company's stockholders.

### EQUITY COMPENSATION PLAN INFORMATION

PLAN CATEGORY	NUMBER OF SHARES TO BE ISSUED UPON EXERCISE OF OUTSTANDING OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE OF OUTSTANDING OPTIONS	NUMBER REMA FUTUR UND COMPEN
Equity compensation plans approved by stockholders:			
Stock option plans	2,810,637	\$10.09	
Employee Stock Purchase Plan	-	-	
Equity compensation plans not approved by stockholders	-	-	
	-----		
Total	2,810,637	\$10.09	
	=====		

-----

(1) Our 1992 Combination Stock Option Plan authorizes the issuance of incentive stock options, nonqualified stock options, stock appreciation rights, performance share awards, restricted stock awards and stock unit awards. On March 31, 2002, there were 355,996 shares of common stock available for future grants under the 1992 Combination Stock Option Plan all of which expired on May

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1, 2002. Our 1989 Non-Qualified Stock Option Plan for Non-Employee Directors authorizes the issuance of nonqualified stock options to non-employee Directors. On March 31, 2002, there were 55,000 shares of common stock available for future grants under the 1989 Non-Qualified Stock Option Plan for Non-Employee Directors. Our 1998 Equity Incentive Plan authorizes the issuance of incentive stock options, nonqualified stock options, stock appreciation rights, performance share awards, restricted stock awards and stock unit awards. On March 31, 2002, there were 138,100 shares of common stock available for future grants under the 1998 Equity Incentive Plan. Our 2000 Stock Incentive Plan authorizes the issuance of incentive stock options, nonqualified stock options, restricted stock awards, unrestricted stock awards, stock appreciation rights and performance share awards. On March 31, 2002, there were 1,100,300 shares of common stock available for future grants under the 2000 Stock Incentive Plan.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

None.

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PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

Our Chief Executive Officer and Chief Financial Officer have furnished to the SEC the certification with respect to this Report that is required by Section 906 of the Sarbanes-Oxley Act of 2002.

(A) (1) FINANCIAL STATEMENTS

Report of Independent Accountants.....  
Consolidated Balance Sheets as of March 31, 2001 and 2002.....  
Consolidated Statements of Operations for the Fiscal Years Ended March 31, 2000, 2001 and 2002.....  
Consolidated Statements of Stockholders' Equity for the Fiscal Years Ended March 31, 2000, 2001 and 2002.....  
Consolidated Statements of Cash Flows for the Fiscal Years Ended March 31, 2000, 2001 and 2002.....  
Notes to Consolidated Financial Statements.....

(A) (2) FINANCIAL STATEMENT SCHEDULES

(a) Unaudited Quarterly Results of Operations, as previously reported and as restated, for each of the fiscal quarters in the fiscal years ending



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March 31, 2000, 2001 and 2002.

(b) Except for the schedules of unaudited Quarterly Results of Operations, supplemental schedules are not provided because of the absence of conditions under which they are required or because the required information is given in the financial statements or notes thereto.

### (A) (3) EXHIBITS

#### (3) Articles of Incorporation and By-Laws.

- (a) Restated Certificate of Incorporation - filed as Exhibit 3.1 to our Registration Statement on Form S-3 (Registration No. 333-36657) (the "1997 Registration Statement").\*
- (b) Restated By-Laws - filed as Exhibit 3.02 to our Quarterly Report on Form 10-Q for the quarter ended September 30, 1996.\*
- (c) Certificate of Designations of Series A Junior Participating Preferred Stock - filed as Exhibit 3.3 to the 1997 Registration Statement.\*
- (d) Amendment to the Company's Restated Certificate of Incorporation to increase the authorized shares of Common Stock from 25,000,000 to 100,000,000 - filed in conjunction with the Company's 2000 definitive proxy statement.\*

#### (4) Instruments defining the rights of security holders, including indentures.

- (a) Specimen Certificate of Common Stock - filed as Exhibit 4.1 to our Registration Statement on Form S-1 (Registration No. 33-14861) (the "1987 Registration Statement").\*

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- (b) Description of Capital Stock (contained in the Restated Certificate of Incorporation filed as Exhibit 3.1 to the 1997 Registration Statement and in the Certificate of Designations of Series A Junior Participating Preferred Stock filed as Exhibit 3.3 to the 1997 Registration Statement).\*
- (c) Rights Agreement between ABIOMED and its transfer agent, as Rights Agent dated as of August 13, 1997 (including Form of Rights Certificate attached thereto as Exhibit A) - filed as Exhibit 4 to our Current Report on Form 8-K, dated August 13, 1997.\*

#### (10) Material Contracts.

- (a) Form of Indemnification Agreement for Directors and Officers - filed as Exhibit 10.13 to the 1987 Registration Statement.\*
- (b) 1992 Combination Stock Option Plan, as amended - filed as Exhibit 10.2 to our Form 10-Q for the fiscal quarter ended September 30, 1997 (the "September 1997 10-Q").\*
- (c) 1988 Employee Stock Purchase Plan, as amended - filed as Exhibit 10.1 to our September 1997 10-Q.\*
- (d) 1989 Non-Qualified Stock Option Plan for Non-Employee

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Directors - filed as Exhibit 10.1 to our Form 10-Q for the fiscal quarter ended September 30, 1995.\*

- (e) Facility Lease dated January 8, 1999 for the premises at 22 Cherry Hill Drive - filed as Exhibit 10 to our Form 10-Q for the fiscal quarter ended December 31, 1998.\*
  - (f) 1998 Equity Incentive Plan - filed as Exhibit 10 to our Form 10-Q/A for the fiscal quarter ended September 30, 1998.\*
  - (g) Form of Change of Control Agreement - filed as Exhibit 10 to our Form 10-Q for the fiscal quarter ended September 30, 1999.\*
  - (h) Schedule related to Change of Control Agreement - filed as Exhibit 10 to our Form 10-Q for the fiscal quarter ended September 30, 1999.\*
- (11) Statement re computation of Per Share Earnings - see Note 1(j), Notes to Consolidated Financial Statements.
- (16)
- (a) Arthur Andersen LLP letter dated June 6, 2002 regarding the change in the registrant's certifying accountants filed as Exhibit 16.1 to our current report on Form 8-K dated June 6, 2002 (previously filed).
- (21) Subsidiaries of the Registrant.
- (23) Consent of Independent Accountants.

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### (B) REPORTS ON FORM 8-K

On December 6, 2001, the Company filed a report on Form 8-K under Item 5. No financial statements were included with this filing.

On June 6, 2002, the Company filed a report on Form 8-K under Item 4. No financial statements were included with this filing.

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\* In accordance with Rule 12b-32 under the Securities Exchange Act of 1934 reference is made to the documents previously filed with the Securities and Exchange Commission, which documents are hereby incorporated by reference.

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SIGNATURES

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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.

ABIOMED, Inc.

Dated: August 28, 2002

By: /s/ John F. Thero

-----  
 JOHN F. THERO  
 SENIOR VICE PRESIDENT  
 CHIEF FINANCIAL OFFICER  
 AND TREASURER

KNOW ALL BY THESE PRESENTS that each individual whose signature appears below hereby constitutes and appoints John F. Thero and Charles B. Haaser, and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to execute in the name of each such person, and to file with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, any and all amendments to this Annual Report on Form 10-K necessary and advisable to enable ABIOMED, Inc. to comply with the rules, regulations and requirements of the Securities Exchange Act of 1934, as amended, in respect thereof, which amendments may make such changes in the Annual Report on Form 10-K as the aforesaid attorneys-in-fact executing the same deem appropriate.

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

SIGNATURE

TITLE

-----

-----

\*  
 -----  
 DAVID M. LEDERMAN

Chairman of the Board,  
 Chief Executive Officer  
 President and Director  
 (Principal Executive Officer)

/s/ John F. Thero  
 -----  
 JOHN F. THERO

Senior Vice President-Finance,  
 Chief Financial Officer and  
 Treasurer (Principal Financial  
 Officer)

\*  
 -----  
 W. GERALD AUSTEN

Director

\*  
 -----  
 PAUL B. FIREMAN

Director

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\* Director  
-----  
JOHN F. O'BRIEN

\* Director  
-----  
DESMOND O'CONNELL

\* Director  
-----  
HENRI A. TERMEER

\*By /s/ John F. Thero  
-----  
JOHN F. THERO  
As attorney-in-fact

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ABIOMED, INC. AND SUBSIDIARIES  
CONSOLIDATED FINANCIAL STATEMENTS  
AS OF MARCH 31, 2001 AND 2002

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REPORT OF INDEPENDENT ACCOUNTANTS

To Board of Directors and  
Shareholders of ABIOMED, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, statements of stockholders' equity and statements of cash flows present fairly, in all material respects, the financial position of ABIOMED, Inc. and its subsidiaries at March 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2002 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 3, the Company has restated its consolidated financial statements for the years ended March 31, 2001 and 2000, previously audited by other independent accountants.

/s/ PricewaterhouseCoopers LLP  
Boston, Massachusetts  
August 27, 2002

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ABIOMED, INC. AND SUBSIDIARIES  
CONSOLIDATED BALANCE SHEETS  
(IN THOUSANDS, EXCEPT SHARE DATA)

MARCH 31,  
-----  
2001      2002  
RESTATED

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ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 90,462	\$ 45,667
Short-term marketable securities	2,036	25,654
Accounts receivable, net of allowance for doubtful accounts of approximately \$184 and \$139 at March 31, 2001 and 2002, respectively	8,622	7,056
Inventories	3,544	4,233
Prepaid expenses and other current assets	766	825
	-----	-----
Total current assets	105,430	83,435
PROPERTY AND EQUIPMENT, AT COST:		
Machinery and equipment	7,546	8,749
Furniture and fixtures	807	963
Leasehold improvements	3,528	2,041
	-----	-----
	11,881	11,753
Less--Accumulated depreciation and amortization	7,129	7,046
	-----	-----
	4,752	4,707
	-----	-----
INTELLECTUAL PROPERTY AND OTHER ASSETS, NET	779	1,034
	-----	-----
	\$110,961	\$ 89,176
	=====	=====
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 2,129	\$ 1,975
Accrued expenses	4,656	4,906
Deferred revenue	3,752	2,373
Current portion of long-term liabilities	242	54
	-----	-----
Total current liabilities	10,779	9,308
LONG-TERM LIABILITIES	368	-
COMMITMENTS AND CONTINGENCIES (NOTE 8)		
STOCKHOLDERS' EQUITY:		
Class B Preferred Stock, \$.01 par value-		
Authorized--1,000,000 shares; Issued and outstanding--No shares	-	-
Common Stock, \$.01 par value-		
Authorized--100,000,000 shares; Issued and outstanding-- 20,770,714 shares and 20,950,933 shares at March 31, 2001 and 2002, respectively	208	210
Additional paid-in capital	162,313	163,558
Accumulated deficit	(62,707)	(83,900)
	-----	-----
Total stockholders' equity	99,814	79,868
	-----	-----
	\$110,961	\$ 89,176
	=====	=====

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THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

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ABIOMED, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS  
(IN THOUSANDS, EXCEPT PER SHARE AND SHARE DATA)

	YEARS ENDED M	
	2000 RESTATED	2001 RESTATED
REVENUES:		
Products	\$ 18,521	\$ 19,72
Funded research and development	4,572	3,14
	-----	-----
	23,093	22,86
	-----	-----
COSTS AND EXPENSES:		
Cost of product revenues	5,870	7,22
Research and development	15,633	28,66
Selling, general and administrative	12,562	12,46
	-----	-----
	34,065	48,35
	-----	-----
LOSS FROM OPERATIONS	(10,972)	(25,49)
Other income, net (Note 14)	1,106	6,16
	-----	-----
NET LOSS	\$ (9,866)	\$ (19,33)
	=====	=====
BASIC AND DILUTED NET LOSS PER SHARE	\$ (0.56)	\$ (0.9)
	=====	=====
WEIGHTED AVERAGE SHARES OUTSTANDING	17,578,522	20,583,36
	=====	=====

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

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ABIOMED, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY  
(IN THOUSANDS, EXCEPT SHARE DATA)

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	COMMON STOCK NUMBER OF SHARES	\$.01 PAR VALUE	ADDITIONAL PAID-IN CAPITAL	ACCUM DEF
Balance, March 31, 1999, as reported	17,301,604	\$ 173	\$ 58,133	\$ (
Effect of restatement (Note 3)	-	-	-	-
Balance, March 31, 1999, as restated	17,301,604	\$ 173	\$ 58,133	\$ (
Sales of common stock, net of offering costs of \$6,569	3,000,000	30	95,401	
Stock options exercised	132,998	1	701	
Stock issued under employee stock purchase plan	17,092	1	100	
Stock issued to directors	4,000	-	73	
Net loss	-	-	-	
Balance, March 31, 2000, as restated	20,455,694	205	154,408	(
Issuance of common stock and warrants to acquire in-process research and development	110,000	1	6,290	
Stock options exercised	192,344	2	670	
Stock-based compensation	-	-	753	
Stock issued under employee stock purchase plan	10,772	-	162	
Stock issued to directors	1,904	-	30	
Net loss	-	-	-	(
Balance, March 31, 2001, as restated	20,770,714	208	162,313	(
Stock options exercised	158,752	2	768	
Stock-based compensation	-	-	240	
Stock issued under employee stock purchase plan	20,516	-	222	
Stock issued to directors	951	-	15	
Net loss	-	-	--	(
Balance, March 31, 2002	20,950,933	\$ 210	\$ 163,558	\$ (

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS.

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ABIOMED, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(IN THOUSANDS)



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	----- 2000 RESTATED
CASH FLOWS FROM OPERATING ACTIVITIES:	
Net loss	\$ (9,866)
Adjustments to reconcile net loss to net cash used in operating activities:	
Depreciation and amortization	1,686
Bad debt expense	20
Net loss on disposition of fixed assets	-
Loss on abandonment of patents	-
Stock-based compensation	-
Write-off of acquired in-process research and development	-
Changes in assets and liabilities:	
Accounts receivable, net	(153)
Inventories	(552)
Prepaid expenses and other current assets	(192)
Accounts payable	678
Accrued expenses	1,468
Deferred revenue	(9)
Long-term liabilities	(36)
	-----
Net cash used in operating activities	(6,956)
	-----
CASH FLOWS FROM INVESTING ACTIVITIES:	
Proceeds from the maturity of short-term marketable securities	12,748
Purchases of short-term marketable securities	(7,513)
Additions to patents	(232)
Purchases of property and equipment	(1,477)
	-----
Net cash provided by (used in) investing activities	3,526
	-----
CASH FLOWS FROM FINANCING ACTIVITIES:	
Proceeds from sale of common stock, net	95,431
Proceeds from exercise of stock options and stock issued under employee stock purchase plan	876
Proceeds from issuance of long-term debt	615
Repayments of long-term debt and capital lease obligations	(54)
	-----
Net cash provided by financing activities	96,868
	-----
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	93,438
CASH AND CASH EQUIVALENTS, EXCLUDING MARKETABLE SECURITIES, AT BEGINNING OF YEAR	9,279
	-----
CASH AND CASH EQUIVALENTS, EXCLUDING MARKETABLE SECURITIES, AT END OF YEAR	\$ 102,717
	=====
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:	

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Capital lease obligation incurred for property and equipment

\$ 221  
=====

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE CONSOLIDATED FINANCIAL STATEMENTS

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
MARCH 31, 2002

(1) SUMMARY OF OPERATIONS

ABIOMED, Inc. and subsidiaries (the Company) is engaged primarily in the development, manufacture and marketing of medical products designed to safely and effectively assist or replace the pumping function of the failing heart. The Company is currently undergoing clinical trials for its battery-powered totally implantable replacement heart systems for patients who would otherwise die from heart failure. The Company currently markets and sells a ventricular assist device called the BVS(R) for the temporary support of patients with reversible heart failure.

(2) SIGNIFICANT ACCOUNTING POLICIES

The accompanying consolidated financial statements reflect the application of certain significant accounting policies described below.

(a) PRINCIPLES OF CONSOLIDATION

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

(b) USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 revenue and expenses during the reporting period. Actual results could differ from those estimated or assumed. The more significant estimates reflected in these financial statements include unit pricing of our BVS blood pumps sold under extended-term contracts, collectibility of accounts receivable, inventory valuation and judgmental accrued expenses.

(c) REVENUE RECOGNITION FROM PRODUCT SALES

In fiscal 2000, 2001 and 2002, all product revenues were derived from sales of the Company's BVS and related products. No revenue is recognized unless we have a customer purchase order and collection is reasonably assured.

We derive our revenues from two principal sources (1) product sales,

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including maintenance service agreements, and (2) funded research and development contracts and grants from government and other third party sources. We follow established guidelines in measuring revenue, including SEC Staff Accounting Bulletin (SAB) No. 101, "REVENUE RECOGNITION." The majority of our product revenues are derived from our shipment of products to fulfill customer orders for a specified number of BVS consoles and/or for a specified number of blood pumps for a specified price. We recognize revenues and record costs related to such sales upon product shipment.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(Continued)

#### (2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

##### (c) REVENUE RECOGNITION FROM PRODUCT SALES (CONTINUED)

Other of our product revenues is derived from extended-term contracts with certain of our customers, which contracts provide the customers with units of our BVS product under extended-term contracts. These contracts, which typically have terms of one to three years, provide for the Company to receive a fixed, non-refundable amount of money over a set period of time in return for our providing these customers with BVS product at the start of the contract and restocking the customer with BVS blood pumps during the term of the contract. The exact quantity of such additional pumps to be supplied, if any, is limited to the actual usage of the product by the customer to support their patients. Under these contracts, we recognize revenue, and record related cost of product revenues, ratably over the term of the contract using an estimated per unit selling price based upon actual shipments of pumps to customers compared to the maximum number of additional pumps allowable under the contract, or when a maximum number is not specified, compared to our estimate of additional pumps that might be required by the customer. In the majority of contracts that contain contractual limits on the number of pumps, customers do not use the maximum number of allowable pumps and, as a result, recognize the remaining deferred revenue at the end of the contract term with no associated incremental cost at that time. When we do not have a contractual maximum number of pumps upon which to rely, we estimate customer blood pump usage and resulting per unit selling price based upon historical experience and based on information from our customers. We update these estimates over the term of a contract based upon significant and quantifiable changes in customer information.

Cash received in advance of revenue in connection with the sale of blood pumps under extended-term contracts is recorded as deferred revenue and is classified as a current or long-term liability depending on the expected shipment dates of the blood pumps.

Maintenance service revenues, which are not material, are recognized ratably over the term of the service contracts based upon the elapsed term of the service contract.

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International sales represented 4%, 4% and 8% of product revenues for the fiscal years ended March 31, 2000, 2001 and 2002, respectively. No single customer accounted for greater than 5% of product revenues or accounts receivable during fiscal 2000, 2001 or 2002.

### (d) ALLOWANCE FOR DOUBTFUL ACCOUNTS

The Company continuously monitors collections and payments from its customers and maintains a provision for estimated losses based upon historical experience and any specific customer collection issues that are identified. While such credit losses have historically been within expectations and the provisions established, no guarantee can be made that the Company will experience the same credit loss rates that it has in the past. If the financial condition of customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

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## ABIOMED, INC. AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(Continued)

### (2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### (e) FUNDED RESEARCH AND DEVELOPMENT REVENUES

A portion of the Company's research and development expenses has been supported by contracts and grants with various government agencies and other third party sources. The government-sponsored research and development contracts and grants generally provide for payment on a cost-plus-fixed-fee basis. The Company recognizes revenues under its government contracts and grants as work is performed, provided that the government has appropriated sufficient funds for the work. Under contracts in which the Company elects to spend significantly more on the development project during the term of the contract than the total contract amount, the Company prospectively recognizes revenue on such contracts ratably over the term of the contract as it incurs related research and development costs, provided the government has appropriated sufficient funds for the work. The Company retains rights to all technological discoveries and products resulting from these efforts.

#### (f) WARRANTIES

The Company routinely accrues for estimated future warranty costs on its product sales at the time of sale. The BVS product line is subject to rigorous regulation and quality standards. While the Company engages in extensive product quality programs and processes, including monitoring and evaluating the quality of component suppliers, the cost of its warranty obligation is affected by product failure rates and product recalls. Operating results could be adversely effected if the actual cost of product failures, including product recalls, exceeds the estimated warranty provision. Warranty costs are included in cost of product revenues on the consolidated statements of operations.

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(g) INVENTORIES

Inventories are stated at the lower of cost (first-in, first-out) or market and consist of the following (in thousands):

	MARCH 31,	
	2001	2002
	-----	-----
Raw materials.....	\$ 1,418	\$ 2,170
Work-in-process.....	737	709
Finished goods.....	1,389	1,354
	-----	-----
	\$ 3,544	\$ 4,233
	=====	=====

All of the Company's inventories on the balance sheet relate to the BVS product line. Because the AbioCor is still in a development and testing stage and is not yet available for commercial sale, inventories do not currently include any costs associated with AbioCor manufactured systems or component parts. Finished goods and work-in-process inventories consist of direct material, labor and overhead.

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
MARCH 31, 2002  
(CONTINUED)

(2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(g) INVENTORY (CONTINUED)

The Company regularly reviews inventory quantities on hand and records a provision for excess and obsolete inventory based primarily on an estimated forecast of product demand and production requirements for the next twelve months. If actual demand or market conditions are less favorable than projections, additional inventory write-downs may be required that could adversely impact financial results for the period in which the additional excess or obsolete inventory is identified.

(h) PROPERTY AND EQUIPMENT

The Company provides for depreciation and amortization on property and equipment by charges to operations in amounts that allocate the cost of depreciable assets over their estimated useful lives on a straight-line basis as follows:

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CLASSIFICATION	ESTIMATED USEFUL LIFE
Machinery and equipment	3- 5 Years
Furniture and fixtures	5-10 Years
Leasehold improvements	Life of lease

Machinery and equipment includes \$221,000 related to assets held under capital leases at March 31, 2002 and 2001. Accumulated amortization related to these assets is \$166,000 and \$92,000 at March 31, 2002 and 2001, respectively. Depreciation and amortization expense related to property and equipment was \$1,491,000, \$1,754,000 and \$1,636,000 for the fiscal years ended March 31, 2000, 2001 and 2002, respectively.

(i) INTELLECTUAL PROPERTY

The Company capitalizes as intellectual property costs incurred, excluding costs associated with Company personnel, relating to patenting its technology. Capitalized costs, the majority of which represent legal costs, reflect the cost of both awarded patents and patents pending. The Company amortizes the cost of these patents on a straight-line basis over a period from seven to twenty years. If the Company elects to stop pursuing a particular patent application or determines that a patent application is not likely to be awarded for a particular patent or elects to discontinue payment of required maintenance fees for a particular patent, the Company at that time records as expense the net capitalized amount of such patent application or patent. The Company does not capitalize maintenance fees for patents.

(j) NET LOSS PER SHARE

Basic net loss per share is computed by dividing net loss by the weighted-average number of common shares outstanding during the fiscal year. Diluted net loss per share is computed by dividing net loss by the weighted-average number of dilutive common shares outstanding during the fiscal year. Diluted weighted-average shares reflect the dilutive effect, if any, of potential common stock such as options and warrants based on the treasury stock method. No potential common stock is considered dilutive in periods in which a loss is reported, such as the fiscal years ended March 31, 2000, 2001 and 2002, because all such common equivalent shares would be antidilutive. The calculation of diluted weighted-average shares outstanding for the years ended March 31, 2000, 2001 and 2002 excludes the options to purchase common stock as shown below.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (Continued)

(2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) NET LOSS PER SHARE (CONTINUED)

YEAR ENDED MARCH 31, -----	POTENTIAL DILUTIVE SHARES FROM EXERCISE OF COMMON STOCK OPTIONS -----
2000	1,502,658
2001	1,808,322
2002	1,420,831

The calculation of diluted weighted average shares outstanding for the years ended March 31, 2001 and 2002 also excludes warrants to purchase 400,000 share of common stock issued in connection with the acquisition of intellectual property (see Note 5).

(k) CASH AND CASH EQUIVALENTS

The Company classifies any marketable security with a maturity date of 90 days or less at the time of purchase as a cash equivalent.

(l) MARKETABLE SECURITIES

The Company classifies any security with a maturity date of greater than 90 days at the time of purchase as marketable securities and classifies marketable securities with a maturity date of greater than one year from the balance sheet date as long-term investments. Under Statement of Financial Accounting Standards (SFAS) No. 115, ACCOUNTING FOR CERTAIN INVESTMENTS IN DEBT AND EQUITY SECURITIES, securities that the Company has the positive intent and ability to hold to maturity are reported at amortized cost and classified as held-to-maturity securities.

The amortized cost and market value of marketable securities were approximately \$2,036,000 and \$2,073,000 at March 31, 2001, and \$25,654,000 and \$25,661,000 at March 31, 2002, respectively. At March 31, 2002 and 2001, these short-term investments consisted primarily of government securities.

(m) DISCLOSURES ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS

As of March 31, 2001 and 2002, the Company's financial instruments

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were comprised of cash and cash equivalents, marketable securities, accounts receivable and accounts payable, the carrying amounts of which approximated fair market value.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(Continued)

#### (2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

##### (n) COMPREHENSIVE INCOME

SFAS No. 130, REPORTING COMPREHENSIVE INCOME, requires disclosure of all components of comprehensive income and loss on an annual and interim basis. Comprehensive income and 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 reported net loss, there were no components of comprehensive income or loss which require disclosure for the years ended March 31, 2000, 2001 and 2002.

##### (o) SEGMENT INFORMATION

SFAS No. 131, DISCLOSURES ABOUT SEGMENTS OF AN ENTERPRISE AND RELATED INFORMATION, requires certain financial and supplementary information to be disclosed on an annual and interim basis for each reportable segment of an enterprise. The Company believes that it operates in one business segment--the research, development and sale of medical devices to assist or replace the pumping function of the failing heart.

##### (p) IMPAIRMENT OF LONG-LIVED ASSETS

The Company assesses the realizability of long-lived assets in accordance with SFAS No. 121, ACCOUNTING FOR THE IMPAIRMENT OF LONG-LIVED ASSETS AND LONG-LIVED ASSETS TO BE DISPOSED OF. The Company reviews its long-lived assets for impairment as events and circumstances indicate the carrying amount of an asset may not be recoverable. The Company evaluates the realizability of its long-lived assets based on profitability and cash flow expectations for the related asset. As a result of its review, the Company does not believe that any impairment currently exists related to its long-lived assets.

##### (q) ACCOUNTING FOR STOCK-BASED COMPENSATION

The Company accounts for stock-based awards to employees using the intrinsic value method as prescribed by APB No. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES, and related interpretations. Accordingly, no compensation expense is recorded for options issued to employees in fixed amounts and with fixed exercise prices at



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least equal to the fair market value of Common Stock at the date of grant. The Company applies the provisions of Statement of Financial Accounting Standards (SFAS) No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION, through disclosure only (Note 9). The Company records compensation expense for certain stock option related events requiring remeasurement in accordance with Financial Accounting Standards Board (FASB) Interpretation No. 44, ACCOUNTING FOR CERTAIN TRANSACTIONS INVOLVING STOCK COMPENSATION AND INTERPRETATION OF APB NO. 25. Stock-based awards to non-employees are accounted for at their fair value in accordance with SFAS No. 123.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (Continued)

#### (2) SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

##### (r) RECENT ACCOUNTING PRONOUNCEMENTS

In July 2001, the Financial Accounting Standards Board (FASB) issued SFAS No. 141, BUSINESS COMBINATIONS. SFAS No. 141 requires all business combinations initiated after June 30, 2001 to be accounted for using the purchase method. The adoption of SFAS No. 141 did not have an impact on the Company's consolidated financial statements.

In July 2001, the FASB also issued SFAS No. 142, GOODWILL AND OTHER INTANGIBLE ASSETS. Under SFAS No. 142, goodwill is no longer subject to amortization over its estimated useful life. Rather, goodwill is subject to at least an annual assessment for impairment by applying a fair-value-based test. Also under SFAS No. 142, intangible assets acquired in conjunction with a business combination should be separately recognized if the benefit of the intangible asset is obtained through contractual or other legal rights, or if the intangible asset can be sold, transferred, licensed, rented or exchanged, regardless of the acquirer's intent to do so. Intangible assets will continue to be amortized over their respective lives under SFAS No. 142. The adoption of SFAS No. 142 did not have an impact on the Company's consolidated financial statements.

In August 2001, the FASB issued SFAS No. 143, ACCOUNTING FOR ASSET RETIREMENT OBLIGATIONS. This statement amends FASB Statement No. 19, FINANCIAL ACCOUNTING AND REPORTING BY OIL AND GAS PRODUCING COMPANIES. SFAS No. 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. The provisions of this statement are effective for financial statements issued for fiscal years beginning after June 15, 2002. The Company does not believe the adoption of this statement will have a material impact on the

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Company's consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, ACCOUNTING FOR IMPAIRMENT OR DISPOSAL OF LONG-LIVED ASSETS. This statement supersedes SFAS No. 121, ACCOUNTING FOR THE IMPAIRMENT OF LONG-LIVED ASSETS AND FOR LONG-LIVED ASSETS TO BE DISPOSED OF, and the accounting and reporting provisions of Accounting Principles Board (APB) Opinion No. 30, REPORTING THE RESULTS OF OPERATIONS - REPORT THE EFFECTS OF DISPOSAL OF A SEGMENT OF A BUSINESS, AND EXTRAORDINARY, UNUSUAL AND INFREQUENTLY OCCURRING EVENTS AND TRANSACTIONS. Under this statement it is required that one accounting model be used for long-lived assets to be disposed of by sale, whether previously held and used or newly acquired, and it broadens the presentation of discontinued operation to include more disposal transactions. The provisions of this statement are effective for financial statements issued for fiscal years beginning after December 15, 2001, and interim period within those fiscal years, with early adoption permitted. The Company does not believe the adoption of this statement will have a material impact on the Company's consolidated financial statements.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (Continued)

#### (3) RESTATEMENT

We have modified our methods of revenue recognition for certain BVS sales contracts and funded research and development contracts. Such modifications result in the shifting of portions of revenues and related expenses between fiscal quarters and fiscal years. In addition, we have modified the timing of expenses recorded in connection with our acquisition in September 2000 of rights to the Penn State Heart and we have recorded expense for certain non-cash transactions involving stock option exercises made by employees with the assistance of the Company. Accordingly, we have restated our previously audited consolidated financial statements for each of the two years ended March 31, 2001 and have restated our previously reported accumulated deficit at March 31, 1999. These modifications, which are reflected in these consolidated financial statements, were made to comply with our revised policies. Our policies with respect to revenue recognition and stock option related expenses are described in Note 2. In-process research and development costs that we incurred and expensed in connection with our acquisition of the Penn State Heart are described in Note 5.

The following table presents increases and decreases to our previously reported operating results for each of the three years ended March 31, 2002 that result of the aforementioned restatements:

#### CHANGES IN PREVIOUSLY REPORTED AMOUNTS (In thousands, except per share data)

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	YEAR ENDED MARCH 31,		
	2000	2001	2002
Revenues:			
Products .....	\$ 144	\$ (2,293)	\$ 2,257
Funded research and development ...	432	263	1,119
	-----	-----	-----
Total revenues .....	576	(2,030)	3,376
	-----	-----	-----
Costs and expenses:			
Cost of product revenues .....	(12)	(153)	630
Research and development:			
Internally incurred R&D costs .	--	695	(260)
Acquired technology costs, net	--	5,301	(2,120)
Selling, general and administrative	--	58	(130)
	-----	-----	-----
Total costs and expenses .....	(12)	5,901	(1,880)
	-----	-----	-----
Income (loss) from operations .....	588	(7,931)	5,256
	-----	-----	-----
Interest and other income, net .....	--	--	--
	-----	-----	-----
Net income (loss) .....	\$ 588	\$ (7,931)	\$ 5,256
	=====	=====	=====
Net income (loss) per share .....	\$ 0.03	\$ (0.39)	\$ 0.25
	=====	=====	=====

Our previously reported deferred revenues decreased \$0.2 as of March 31, 2000 and March 31, 2002 and increased \$2.8 million as of March 31, 2001 as a result of the aforementioned restatements. All of this increment in deferred revenue at March 31, 2002 is scheduled for recognition as revenue in our fiscal year that ends March 31, 2003 upon the earlier of shipment of BVS blood pump product or the end of the terms of the respective contracts. These modifications also resulted in adjustments to other balance sheet categories, including accounts receivable, intellectual property, accrued expenses and accumulated deficit. In addition, the Company's accumulated deficit at March 31, 1999 was increased by \$2.5 million to reflect the cumulative effect of our modified revenue recognition policies on prior years partially offset by \$0.2 million to reflect a reduction in accrued expenses. The Company's capital resources, in particular cash and marketable securities, were not changed as a result of these restatements.

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(Continued)

(3) RESTATEMENT (CONTINUED)

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Our principal restatements are summarized below. Throughout these consolidated financial statements the term "previously reported" is used to refer to our previously filed financial statements for the two years ended March 31, 2001 as well as our previously announced fiscal 2002 results. Fiscal 2002 results were announced in our press release dated May 16, 2002.

Timing of product revenues and related cost of product sales: A portion of our product revenues are derived from contracts that provide for the Company to receive a fixed, non-refundable amount of money over a set period of time in return for our providing these customers with BVS product at the start of the contract and restocking the customer with BVS blood pumps during the term of the contract. The quantity of such additional BVS blood pumps, including related cannulae, to be supplied, if any, during the term of the contract depends upon the actual usage of the product by the customer. The terms of such contracts are typically one to three years. In our previous accounting, for certain contracts we recognized revenue for the full value of the contract, less a discount for cost of money on long-term contracts and we accrued costs for potential pump shipments at or near the beginning of the contract provided that the customer had adequate supplies of the products for their needs. In our restated accounting we defer revenue for the maximum number of pumps that may be shipped under the contract, based on a relative per pump value calculated on the maximum number of pumps that are allowed and that could be required to ship under the contract, and recognize this revenue as blood pumps are shipped to the customer or at the end of the contract term if the customer uses fewer pumps than the maximum allowed. On other such contracts we estimate per pump revenue based upon our estimates of potential customer pump usage over the term of the contract and recognize this revenue as blood pumps are shipped to the customer; we review such estimates throughout the term of the contract and make appropriate adjustments to revenue. In our restated accounting, when a contractual maximum number of pumps is specified in a contract we use the contractual maximum to calculate per pump revenue. The result of this change in policy was to shift the timing of product revenues and related costs between periods.

Timing of funded research and development revenue: A portion of our funding for development of the AbioCor has come from government funding. In particular, between fiscal 1997 and fiscal 2002 we received \$10.3 million in funding from the National Heart, Lung and Blood Institute to develop the AbioCor. The contract amount was funded through periodic governmental appropriations. We have received payment for the full amount of this contract. From the early stages of this contract, our research and development costs for AbioCor development exceeded the contract amount. We previously recorded revenue on this contract at the time of government appropriation provided that the Company had incurred qualified costs under the contract to support such revenue recognition on a cost-plus-fixed-fee basis, based on the formula defined in the contract. In periods in which the appropriated amount exceeded the calculated revenues on a cost-plus-fixed-fee basis, we recognized revenues based on the cost-plus-fixed fee formula. Because government appropriations were made periodically, generally only once per year,

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this resulted in relatively large amounts of revenues recognized in certain fiscal periods and no revenue recognized from this contract in other fiscal periods over the term of the contract. In our restated accounting, we have recognized the appropriated amount of the contract ratably based upon elapsed time over the term of the contract resulting in a relatively consistent level of revenue recognized between periods. The result of this change in policy was to shift the timing of funded research and development revenues between periods.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (Continued)

#### (3) RESTATEMENT (CONTINUED)

Write-off of in-process development costs in connection with acquisition of Penn State Heart: In September 2000, we acquired the exclusive rights to The Pennsylvania State University implantable replacement heart (referred to herein as the Penn State Heart) together with ownership of a company incorporated to commercialize the Penn State Heart, BeneCor Heart Systems, Inc. In connection with this acquisition, the Company previously capitalized the purchase cost totaling \$6,361,000. See Note 5 to our Consolidated Financial Statements for discussion of the nature of our costs incurred and rights obtained in our acquisition of the Penn State Heart. This previously capitalized purchase cost was being amortized over the three-year period that began October 2000. In our restated results, we fully expensed the \$6,361,000 acquisition costs on the date of acquisition in as much as it represented the purchase of an asset to be used in a single project addressing the development of a future product with no known use outside of heart replacement. The result of this adjustment was to increase our previously reported research and development expenses for our fiscal year ended March 31, 2001 and eliminate amortization costs which had been scheduled to be incurred through September 2003.

Remeasurement in connection with stock option exercises: During our fiscal year ended March 31, 2001, the Company's assistance in connection with the cashless exercises of incentive stock options for 29,500 shares of the Company's common stock by two of its employees triggered a remeasurement of the value of these incentive stock options in accordance with Financial Accounting Standards Board (FASB) Interpretation No. 44, ACCOUNTING FOR CERTAIN TRANSACTIONS INVOLVING STOCK COMPENSATION AN INTERPRETATION OF APB OPINION NO. 25. In our restated results, we recorded \$753,000 as additional expense for our fiscal year ended March 31, 2001 to reflect the value of the shares of common stock underlying these stock options upon the remeasurement date. The net result for the employees in terms of value received was identical to the result that could have been obtained had they sold the same portion of the shares in the market at fair value on those dates. The stock options had originally been granted to the employees with exercise prices equal to the fair market value of the stock on the date of grant.

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The Company also reduced certain accrued expenses based upon expectations that the amounts will not be paid out. The result of these modifications was to reduce operating expenses by \$443,000 for the year ended March 31, 2002 with a corresponding reduction in accrued expenses due to a revision of the Company's incentive compensation accrual which amount, based upon subsequent information, will not be paid in conjunction with the year ended March 31, 2002. Costs associated with the abandonment of patents were increased by \$63,000 in the Company's restated results for its fiscal year ended March 31, 2002 and certain balance sheet modifications were made at March 31, 2000 and 2001 to reflect the timing of software purchases and leaseholder improvements in the amounts of \$29,000 and \$148,000, respectively. These balance sheet modifications, which represented timing differences, did not have any effect on the Company's net operating results.

These restatements also effected the Company's quarterly results. The Company's restated quarterly results are reported as supplemental schedules in Item 14 of the Company's Annual Report on Form 10-K.

#### (4) INTELLECTUAL PROPERTY AND OTHER ASSETS

Intellectual property and other assets includes costs related to the Company's awarded and pending patents. The unamortized cost of these patents approximated \$772,000 and \$1,015,000 as of March 31, 2001 and 2002, respectively. Amortization expense for patents totaled \$52,000, \$95,000 and \$135,000 for the years ending March 31, 2000, 2001 and 2002 respectively.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(Continued)

#### (5) CAPITAL STOCK

Each share of common stock has a voting right of one vote per share and generally has the right to elect, as a class, at least 25% of the Company's directors.

In March 2000, the Company completed a public offering of 3,000,000 shares of its common stock. Proceeds to the Company from the stock offering, net of direct expenses of approximately \$6,569,000, totaled approximately \$95,431,000.

In August 2000, the Company's Board of Directors approved a two-for-one split of the Company's outstanding shares to be effected in the form of a stock dividend. Each shareholder of record at the close of business on August 25, 2000 received one additional share of common stock for each share of common stock held on that date. Shares held for issuance in

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connection with all stock option plans and rights plans of the Company were also split on a two-for-one basis in accordance with the provisions of each such plan. All share and per share information in these financial statements have been restated for all years to reflect the effect of this two-for-one stock split.

The Company has authorized 1,000,000 shares of Class B Preferred Stock, \$0.01 par value, of which the Board of Directors can set the designation, rights and privileges. No shares of Class B Preferred Stock have been issued or are outstanding.

In August 1997, the Company declared a dividend of one Preferred Share Purchase Right (the Right) for each outstanding share of common stock to its stockholders of record at August 28, 1997. Each right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Junior Participating Preferred Stock with a par value of \$0.01 per share, at a price of \$45.00 per one one-thousandth of a share, subject to amendment. In accordance with the terms set forth in the Rights Agreement, the Rights are not exercisable until the occurrence of certain events, as defined. In addition, the registered holders of the Rights will have no rights as a common stockholder of the Company until the Rights are exercised. The Company's Board of Directors may amend the terms of the Rights. The Rights expire on August 13, 2007.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2001

(Continued)

#### (5) CAPITAL STOCK (CONTINUED)

In September 2000, the Company issued common stock and warrants to acquire the exclusive rights to the Penn State Heart together with complete ownership of a company incorporated to commercialize the Penn State Heart called BeneCor Heart Systems, Inc. The terms of this transaction consisted of payment of 110,000 shares of the Company's common stock, plus the issuance of warrants to purchase up to 400,000 additional shares of the Company's common stock at an exercise price of \$0.01 per share. Exercise of the warrants is contingent on the achievement of certain clinical and regulatory milestones with the Penn State Heart by specified dates, the last of which is September 30, 2007. Warrants not vested and exercised by September 30, 2007 expire. The value of the common stock and warrants issued in connection with the transaction are included in stockholders' equity at values of \$3,145,000 and \$3,145,000, respectively, representing the fair value of the stock and warrants based on the closing market price for the Company's stock on the closing date for this transaction. Also included in the value of the warrants is approximately \$70,000 of costs incurred in connection with this acquisition. These amounts have been fully expensed as in-process research and development on the date of acquisition. As of March 31, 2002, 400,000 warrants were issued and none were exercisable.

#### (6) FINANCING ARRANGEMENTS

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In October 1999, the Company entered into equipment term loans with a bank whereby the Company borrowed \$615,000 for the acquisition of manufacturing equipment and leasehold improvements. As of March 31, 2001, approximately \$417,000 was outstanding under these loans, which was included within current and long-term liabilities in the accompanying consolidated balance sheets. No amounts remained outstanding on these loans as of March 31, 2002 as a result of the Company's decision to repay the loans prior to their scheduled maturity.

### (7) INCOME TAXES

The Company accounts for income taxes in accordance with the provisions of SFAS No. 109, ACCOUNTING FOR INCOME TAXES. The asset and liability approach used under SFAS No. 109 requires recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of other assets and liabilities.

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to tax benefit carryforwards and to differences between the financial statement amounts of assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted tax rates. A valuation reserve is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized. Accordingly, a valuation reserve has been established for the full amount of the deferred tax asset.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (CONTINUED)

### (7) INCOME TAXES (CONTINUED)

At March 31, 2002, the Company had federal Net Operating Loss carryforwards of approximately \$75.5 million which begin to expire in 2005. Additionally, at March 31, 2002, the Company had research and development credit carryforwards of approximately \$2.9 million which begin to expire in 2004. Based upon the Internal Revenue Code, certain changes in Company ownership may subject these carryforwards to an annual limitation.

The components of the Company's net deferred taxes were as follows at March 31 (in thousands):



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(in thousands)	2001	2002
	----	----
<b>Assets</b>		
NOL carryforwards and tax credit carryforwards	\$ 22,629	\$ 34,469
Purchased Technology .....	2,430	1,329
Nondeductible Reserves .....	369	410
Nondeductible Accruals .....	1,632	1,846
Deferred Revenue .....	1,784	758
Depreciation .....	381	740
Other, net .....	261	899
	-----	-----
	29,486	40,451
Valuation Allowance .....	(29,486)	(40,451)
	-----	-----
Net deferred taxes .....	--	--
	=====	=====

The effective tax rate of zero differs from the statutory rate of 34% primarily due to the inability of the Company to recognize deferred tax assets for its operating losses and tax credits. Of the total valuation allowance, approximately \$1.6 million relates to stock option compensation deductions. The tax benefit associated with the stock option compensation deductions will be credited to equity when realized.

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(CONTINUED)

(8) COMMITMENTS AND CONTINGENCIES

As of March 31, 2002, the Company had entered into leases for its facilities under various operating lease agreements with terms through fiscal 2010. At the Company's election, the lease for its primary operating facility in Danvers, Massachusetts may be terminated in 2005 at a lump sum buyout cost of \$1.1 million. Total rent expense under these leases, included in the accompanying consolidated statements of operations, was approximately \$613,000, \$893,000 and \$856,000 for the fiscal years ended March 31, 2000, 2001 and 2002, respectively.

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During the fiscal year ended March 31, 2000, the Company entered into 36-month operating leases totaling approximately \$644,000 for the lease of office furniture. The initial terms of these leases end in fiscal year 2003. At the end of the initial terms, the Company can either 1) renew the leases for additional 12-month option periods at the then fair market rental value 2) purchase the furniture at its then fair market value, but no greater than 25% of its original purchase cost or 3) return the furniture to the lessor. Rental expense recorded for these leases during the fiscal years ended March 31, 2000, 2001 and 2002 was approximately \$89,000, \$215,000 and \$215,000 respectively.

During fiscal 2000, the Company entered into a 36-month capital lease for computer equipment and software for approximately \$221,000. The initial term of this lease ends in fiscal year 2003. These assets are being used in research and development activities and general operations. At the end of the initial term, the Company can either 1) renew the lease for an additional 6-month option period at a reduced rental rate 2) purchase the equipment at its then fair market value, but no greater than 12.5% of its original purchase cost or 3) return the equipment to the lessor. The remaining future minimum lease payments are included in current liabilities in the accompanying consolidated balance sheets.

Future minimum lease payments under all non-cancelable operating and capital leases as of March 31, 2002 are approximately as follows (in thousands):

YEAR ENDING MARCH 31, -----	OPERATING LEASES -----	CAPITAL LEASE -----
2003.....	\$ 947	\$ 55
2004.....	781	-
2005.....	776	-
2006.....	776	-
2007.....	769	-
Thereafter.....	2,252	-
	-----	-----
Total future minimum lease payments	\$ 6,301	\$ 55
	=====	=====
Less - amount representing interest		(1)
		-----
Present value of future minimum lease payments		\$ 54
		-----

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(CONTINUED)

(8) COMMITMENTS AND CONTINGENCIES (CONTINUED)

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From time to time, the Company is involved in legal and administrative proceedings and claims of various types. While any litigation contains an element of uncertainty, management, in consultation with the Company's general counsel, presently believes that the outcome of each such other proceedings or claims which are pending or known to be threatened, or all of them combined, will not have a material adverse effect on the Company.

### (9) STOCK OPTION AND PURCHASE PLANS

All stock options granted by the Company under the below-described plans were granted at the fair value of the underlying common stock at the date of grant. Outstanding stock options, if not exercised, expire 10 years from the date of grant.

The 1992 Combination Stock Option Plan (the Combination Plan), as amended, was adopted in September 1992 as a combination and restatement of the Company's then outstanding Incentive Stock Option Plan and Nonqualified Plan. A maximum of 3,100,000 shares of common stock may be awarded under this plan. Options outstanding under the Combination Plan are held by Company employees and generally become exercisable ratably over five years.

The 1998 Equity Incentive Plan, (the Equity Incentive Plan), was adopted by the Company in August 1998. The Equity Incentive Plan provides for grants of options to key employees, directors, advisors and consultants as either incentive stock options or nonqualified stock options as determined by the Company's Board of Directors. A maximum of 1,000,000 shares of common stock may be awarded under this plan. Options granted under the Equity Incentive Plan are exercisable at such times and subject to such terms as the Board of Directors may specify at the time of each stock option grant. Options outstanding under the Equity Incentive Plan have vesting periods of 3 to 5 years from the date of grant.

The 2000 Stock Incentive Plan, (the 2000 Plan), was adopted by the Company in August 2000. The 2000 Plan provides for grants of options to key employees, directors, advisors and consultants to the Company or its subsidiaries as either incentive or nonqualified stock options as determined by the Company's Board of Directors. Up to 1,400,000 shares of common stock may be awarded under the 2000 Plan and are exercisable at such times and subject to such terms as the Board of Directors may specify at the time of each stock option grant. Options outstanding under the 2000 Plan generally vested 4 years from the date of grant.

The Company has a nonqualified stock option plan for non-employee directors (the Directors' Plan). The Directors' Plan, as amended, was adopted in July 1989 and provides for grants of options to purchase shares of the Company's common stock to non-employee Directors of the Company. Up to 400,000 shares of common stock may be awarded under the Directors' Plan. Options outstanding under the Director's Plan have vesting periods of 1 to 5 years from the date of grant.

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
MARCH 31, 2002  
(CONTINUED)

### (9) STOCK OPTION AND PURCHASE PLANS (CONTINUED)

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The following table summarizes stock option activity under all of the Company's stock option plans:

	NUMBER OF OPTIONS	EXERCISE PRICE	WEIGHTED AVG. EXERCISE PRICE PER SHARE
Outstanding, March 31, 1999	2,194,770	\$ 2.82 - \$ 9.00	\$ 5.6
Granted	642,100	\$ 4.44 - \$ 33.63	8.0
Exercised	(132,998)	\$ 2.82 - \$ 9.00	5.2
Canceled	(90,176)	\$ 4.00 - \$ 8.50	6.0
	-----		
Outstanding, March 31, 2000	2,613,696	\$ 2.82 - \$ 33.63	6.2
Granted	713,000	\$ 15.56 - \$ 36.53	18.4
Exercised	(203,046)	\$ 2.88 - \$ 9.00	4.8
Canceled	(235,352)	\$ 3.75 - \$ 33.63	10.0
	-----		
Outstanding, March 31, 2001	2,888,298	\$ 2.81 - \$ 36.53	9.0
Granted	376,700	\$ 11.56 - \$ 24.12	20.1
Exercised	(179,961)	\$ 3.13 - \$ 15.34	5.8
Canceled	(274,400)	\$ 5.63 - \$ 33.63	15.6
	-----		
Outstanding, March 31, 2002	2,810,637	\$ 2.81 - \$ 36.53	\$ 10.0
	=====		
Exercisable, March 31, 2002	1,360,076	\$ 2.81 - \$ 19.69	\$ 6.0
	=====		
Exercisable, March 31, 2001	1,092,381	\$ 2.81 - \$ 7.47	\$ 5.4
	=====		
Exercisable, March 31, 2000	898,416	\$ 2.81 - \$ 7.47	\$ 5.1
	=====		
Shares available for future issuance, March 31, 2002	1,649,396		
	=====		

During the fiscal years ended March 31, 2001 and 2002, certain optionholders exercised options in cashless exercises. The total number of options exercised during these years in this manner was 29,500 and 35,000, respectively, of which 10,702 and 20,940 vested options, respectively, were exchanged by the optionholders in lieu of a direct cash purchase. These cashless transactions triggered remeasurement on the date of exercise for the difference between the fair market value of the common stock underlying the stock options and exercise price of the stock options. The Company has recorded expense of \$753,000 and \$240,000 in the years ended March 31, 2001 and 2002, respectively, to reflect these remeasurements. The options had originally been granted to the optionholders with exercise prices equal to the fair market value of the stock on the date of grant.

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
MARCH 31, 2002  
(CONTINUED)

(9) STOCK OPTION AND PURCHASE PLANS (CONTINUED)

The following table summarizes certain data for options outstanding and exercisable under all plans at March 31, 2002.

RANGE OF EXERCISE PRICES	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
	OUTSTANDING AS OF MARCH 31, 2002	WEIGHTED AVG. REMAINING CONTRACTUAL LIFE	WEIGHTED AVG. EXERCISE PRICE	EXERCISABLE AS OF MARCH 31, 2002	WEIGHTED AVG. EXERCISE PRICE
\$ 2.81 - \$ 10.96	1,889,437	4.9	\$ 5.98	1,325,576	\$ 5.98
10.97 - 18.27	482,500	8.2	15.49	9,500	16.25
18.28 - 29.22	422,200	9.1	21.45	25,000	19.25
29.23 - 36.53	16,500	8.5	32.62	-	-
<u>\$ 2.81 - \$ 36.53</u>	<u>2,810,637</u>	<u>6.1</u>	<u>\$ 10.09</u>	<u>1,360,076</u>	<u>\$ 6.10</u>

The Company has an Employee Stock Purchase Plan (the Purchase Plan), as amended. Under the Purchase Plan, eligible employees (including officers and directors) who have completed six months of employment with the Company or its subsidiaries who elect to participate in the Purchase Plan instruct the Company to withhold a specified amount from each paycheck received during a six-month payment period (the periods April 1 - September 30 and October 1 - March 31). On the last business day of each payment period, the amount withheld is used to purchase common stock at an exercise price equal to 85% of the lower of its market price on the first business day or the last business day of the payment period. The Company has reserved 200,000 shares of common stock for issuance under the Purchase Plan, of which 100,518 shares are available for future issuance as of March 31, 2002. During the fiscal years ended March 31, 2000, 2001 and 2002, 17,092, 10,772 and 20,516 shares of common stock, respectively, were sold pursuant to the Purchase Plan.

SFAS No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION, requires the measurement of the fair value of stock options, stock purchase plans and warrants granted to employees to be included in the statement of operations or disclosed in the notes to financial statements. The Company has determined that it will continue to account for stock-based compensation for employees under APB Opinion No. 25 and elect the disclosure-only alternative under SFAS No 123. The Company has computed the pro forma disclosures required under SFAS No. 123 for options granted in fiscal 2000, 2001 and 2002 using the Black-Scholes option pricing model prescribed by

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SFAS No. 123. The weighted average information and assumptions are as follows:

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS MARCH 31, 2002 (CONTINUED)

(9) STOCK OPTION AND PURCHASE PLANS (CONTINUED)

	YEAR ENDED MARCH 31,		
	2000	2001	2002
	----	----	----
Risk-free interest rate	6.50%	5.20%	5.00%
Expected dividend yield	-	-	-
Assumed life	5 years	5 years	5 years
Assumed volatility	48%	64%	69%

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.

The total fair value of the options granted during fiscal 2000, 2001 and 2002 was computed as approximately \$1,036,000, \$2,561,000 and \$1,407,000, respectively. Of these amounts, approximately \$655,000, \$1,145,000 and \$1,480,000 would be charged to operations for the years ended March 31, 2000, 2001 and 2002, respectively. The remaining amounts would be amortized over the remaining vesting periods of the underlying options. Additionally, the amounts that would be charged to operations related to stock issued under the Purchase Plan was computed as approximately \$129,000, \$29,000 and \$39,000 for fiscal 2000, 2001 and 2002, respectively. The resulting pro forma compensation expense may not be representative of the amount to be expected in future years as pro forma compensation expense may vary based upon the number of options granted and shares purchased.

The pro forma net loss and pro forma net loss per common share presented below have been computed assuming no tax benefit. The effect of a tax benefit has not been considered since a substantial portion of the stock options granted are incentive stock options and the Company does not anticipate a future deduction associated with the exercise of these stock options.

The pro forma effect of applying SFAS No. 123 for the years ended March 31, 2000, 2001 and 2002 is as follows:

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YEAR ENDED MARCH 31, -----	NET LOSS		NET LOSS PER SHARE	
	AS REPORTED	PRO FORMA	AS REPORTED	PRO FORMA
	-----			
	(IN THOUSANDS)			
2000, as restated.....	\$ (9,866)	\$ (10,650)	\$ (0.56)	\$ (0.61)
2001, as restated.....	\$ (19,332)	\$ (20,506)	\$ (0.94)	\$ (1.00)
2002.....	\$ (21,193)	\$ (22,712)	\$ (1.02)	\$ (1.09)

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ABIOMED, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(CONTINUED)

(10) RESEARCH AND DEVELOPMENT

Research and development is a significant portion of the Company's operations. The Company's research and development efforts are focused on the development of new products, primarily related to cardiac assist and heart replacement, including the continued enhancement of the BVS and related technologies. Research and development costs are expensed when incurred and include direct materials and labor, depreciation, contracted services and other costs associated with developing new products and improving existing products, including amortized costs of purchased technology. Costs associated with government-funded contracts and grants are recorded in the accompanying consolidated statements of operations as part of research and development expenses as shown in the table below.

The Company, at its sole discretion, may elect to further develop government-funded technologies or products by spending resources outside or above the contract limits. In fiscal 2000, 2001 and 2002, the majority of the Company's research and development expenditures were directed towards the development and preparation of the AbioCor(TM) Implantable Replacement Heart, which is in initial human clinical trials. Future costs for such development cannot be definitively estimated at this time and are likely to be highly variable based upon a number of factors, including clinical results and regulatory requirements.

Research and development costs consist of the following amounts (in thousands):

	YEAR ENDED MARCH -----
	2000
	-----
	2001
	-----

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Internally funded.....	\$ 12,652	\$ 20,044
Incurred under government contracts and grants.....	2,981	2,262
Acquisition of in-process development costs represented by the Penn State Heart.....	-	6,361
	-----	-----
Total research and development	\$ 15,633	\$ 28,667
	=====	=====

In connection with the Company's acquisition of exclusive rights to the Penn State Heart, the Company committed to The Pennsylvania State University that it would use reasonable efforts to further develop the underlying patent rights and technology. If the Company does not make such an effort for at least three years from the date of acquisition, the technology rights can revert back to the University, excluding all improvements made thereto by the Company.

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### ABIOMED, INC. AND SUBSIDIARIES

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

MARCH 31, 2002

(CONTINUED)

(11) ROYALTY OBLIGATION

Through August 3, 2000, the Company incurred a royalty to certain third parties equal on a net basis to approximately 2.1% of certain revenues derived from the BVS. For the years ended March 31, 2000 and 2001, the amount of this royalty, net of certain reimbursed expenses, was approximately \$353,000 and \$138,000, respectively. These amounts were reflected as part of the cost of product revenues in the accompanying consolidated statements of operation and were paid to the third parties through Abiomed Limited Partnership. The partnership ceased activity after August 3, 2000 and was subsequently dissolved. Prior to being dissolved, Abiomed Limited Partnership was majority owned by the Company and was consolidated in the Company's financial statements.

(12) EMPLOYEE DEFERRED COMPENSATION PROFIT-SHARING PLAN AND TRUST

The Company has an employee deferred compensation profit-sharing plan (the 401(k) Plan) that covers all employees who are at least 20 years of age. Amounts paid by the Company to match a portion of employees' contributions and discretionary amounts determined by the Company's Board of Directors totaled approximately \$353,000, \$508,000 and \$635,000 for the fiscal years ended March 31, 2000, 2001 and 2002 respectively.

(13) ACCRUED EXPENSES

Accrued expenses consist of the following (in thousands):

	MARCH 31,	
	2001	2002
	----	----
RESTATED		



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Salaries and benefits.....	\$ 3,057	\$ 3,204
Contract services.....	356	575
Warranty.....	406	380
Professional fees.....	338	233
Other.....	499	514
	-----	-----
	\$ 4,656	\$ 4,906
	=====	=====

Other accrued expenses as of March 31, 2001 has been reduced by \$945,000 as a result of restatement, primarily as a result of reducing accrued blood pump costs under extended-term contracts to reflect the Company's change in policy for revenue recognition for product sales and related cost of product sales. See Note 3 for discussion of these policy changes.

(14) OTHER INCOME, NET

Other income, net consists of the following (in thousands):

	YEARS ENDED		
	March 31, 2000	March 31, 2001	March 31, 2002
	-----	-----	-----
Investment Income .....	\$ 1,088	\$ 6,078	\$ 2,938
Foreign Currency Transaction Gain or (Loss)	4	2	(70)
Other, net .....	14	80	77
	-----	-----	-----
Total other income, net .....	\$ 1,106	\$ 6,160	\$ 2,945
	=====	=====	=====

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SUPPLEMENTAL FINANCIAL STATEMENT SCHEDULES

QUARTERLY RESULTS OF OPERATIONS (Unaudited) In thousands, except per share data

The following tables presents the Company's results of operations for each quarter of our fiscal years ended March 31, 2000, 2001 and 2002.

Restated (Note 1):

FISCAL YEAR ENDED MARCH 31, 2000 (RESTATED)			
-----	-----	-----	-----
FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER

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	-----	-----	-----	-----	
Revenues:					
Products.....	\$ 3,875	\$ 3,906	\$ 5,119	\$ 5,621	\$
Funded research and development.....	1,089	1,131	1,306	1,046	
	-----	-----	-----	-----	
Total revenues.....	4,964	5,037	6,425	6,667	
	-----	-----	-----	-----	
Costs and expenses:					
Cost of product revenues.....	1,343	1,226	1,618	1,683	
Research and development.....	3,392	3,450	4,596	4,195	
Selling, general and administrative..	2,498	2,912	3,524	3,628	
	-----	-----	-----	-----	
Total costs and expenses.....	7,233	7,588	9,738	9,506	
	-----	-----	-----	-----	
Loss from operations.....	(2,269)	(2,551)	(3,313)	(2,839)	
	-----	-----	-----	-----	
Interest and other income, net.....	157	240	209	500	
	-----	-----	-----	-----	
Net loss .....	\$ (2,112)	\$ (2,311)	\$ (3,104)	\$ (2,339)	\$
	=====	=====	=====	=====	=====
Net loss per share .....	\$ (0.12)	\$ (0.13)	\$ (0.18)	\$ (0.13)	\$
	=====	=====	=====	=====	=====

FISCAL YEAR ENDED MARCH 31, 2001 (RESTATED)

	-----	-----	-----	-----	
	FIRST	SECOND	THIRD	FOURTH	
	QUARTER	QUARTER	QUARTER	QUARTER	
	-----	-----	-----	-----	
Revenues:					
Products.....	\$ 5,172	\$ 4,253	\$ 4,576	\$ 5,723	\$
Funded research and development.....	973	829	684	656	
	-----	-----	-----	-----	
Total revenues.....	6,145	5,082	5,260	6,379	
	-----	-----	-----	-----	
Costs and expenses:					
Cost of product revenues.....	1,855	1,408	1,883	2,076	
Research and development.....	4,491	11,966	6,604	5,606	
Selling, general and administrative..	2,977	2,959	2,919	3,614	
	-----	-----	-----	-----	
Total costs and expenses.....	9,323	16,333	11,406	11,296	
	-----	-----	-----	-----	
Loss from operations.....	(3,178)	(11,251)	(6,146)	(4,917)	
	-----	-----	-----	-----	
Interest and other income, net.....	1,559	1,584	1,568	1,449	
	-----	-----	-----	-----	
Net loss .....	\$ (1,619)	\$ (9,667)	\$ (4,578)	\$ (3,468)	\$
	=====	=====	=====	=====	=====
Net loss per share .....	\$ (0.08)	\$ (0.47)	\$ (0.22)	\$ (0.17)	\$
	=====	=====	=====	=====	=====

SUPPLEMENTAL FINANCIAL STATEMENT SCHEDULES (Continued)

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QUARTERLY RESULTS OF OPERATIONS (Unaudited) In thousands, except per share data

Restated (Continued) (Note 1):

	FISCAL YEAR ENDED MARCH 31, 2002			
	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
Revenues:				
Products.....	\$ 6,064	\$ 5,114	\$ 5,898	\$ 7,671
Funded research and development.....	618	480	691	425
Total revenues.....	6,682	5,594	6,589	8,096
Costs and expenses:				
Cost of product revenues.....	2,035	1,478	1,615	2,797
Research and development.....	6,614	6,641	7,027	6,826
Selling, general and administrative..	4,144	3,900	3,883	4,139
Total costs and expenses.....	12,793	12,019	12,525	13,762
Loss from operations.....	(6,111)	(6,425)	(5,936)	(5,666)
Interest and other income, net.....	986	809	616	534
Net loss .....	\$ (5,125)	\$ (5,616)	\$ (5,320)	\$ (5,132)
Net loss per share .....	\$ (0.25)	\$ (0.27)	\$ (0.25)	\$ (0.25)

Previously Reported (Note 2):

	FISCAL YEAR ENDED MARCH 31, 2000			
	(AS PREVIOUSLY REPORTED)			
	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
Revenues:				
Products.....	\$ 4,021	\$ 3,595	\$ 5,196	\$ 5,565
Funded research and development.....	2,331	573	748	488
Total revenues.....	6,352	4,168	5,944	6,053
Costs and expenses:				
Cost of product revenues.....	1,357	1,115	1,610	1,800
Research and development.....	3,392	3,450	4,596	4,195
Selling, general and administrative..	2,498	2,912	3,524	3,628

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Total costs and expenses.....	7,247	7,477	9,730	9,623	
Loss from operations.....	(895)	(3,309)	(3,786)	(3,570)	
Interest and other income, net.....	157	240	209	500	
Net loss.....	\$ (738)	\$ (3,069)	\$ (3,577)	\$ (3,070)	\$
Net loss per share.....	\$ (0.04)	\$ (0.18)	\$ (0.21)	\$ (0.17)	\$

SUPPLEMENTAL FINANCIAL STATEMENT SCHEDULES (Continued)

QUARTERLY RESULTS OF OPERATIONS (Unaudited) In thousands, except per share data

Previously Reported (Continued) (Note 2):

	FISCAL YEAR ENDED MARCH 31, 2001				
	(AS PREVIOUSLY REPORTED)				
	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	
Revenues:					
Products.....	\$ 5,504	\$ 4,953	\$ 5,689	\$ 5,871	\$
Funded research and development.....	355	2,032	260	232	
Total revenues.....	5,859	6,985	5,949	6,103	
Costs and expenses:					
Cost of product revenues.....	1,935	1,485	1,913	2,042	
Research and development.....	4,491	5,605	6,439	6,136	
Selling, general and administrative..	2,977	2,959	2,919	3,556	
Total costs and expenses.....	9,403	10,049	11,271	11,734	
Loss from operations.....	(3,544)	(3,064)	(5,322)	(5,631)	
Interest and other income, net.....	1,559	1,584	1,568	1,449	
Net loss.....	\$ (1,985)	\$ (1,480)	\$ (3,754)	\$ (4,182)	\$
Net loss per share.....	\$ (0.10)	\$ (0.07)	\$ (0.18)	\$ (0.20)	\$

FISCAL YEAR ENDED MARCH 31, 2002

(AS PREVIOUSLY REPORTED)

FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
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Revenues:					
Products.....	\$ 5,747	\$ 4,237	\$ 5,591	\$ 6,915	\$
Funded research and development.....	245	107	318	425	
	-----	-----	-----	-----	-----
Total revenues.....	5,992	4,344	5,909	7,340	
	-----	-----	-----	-----	-----
Costs and expenses:					
Cost of product revenues.....	1,991	1,183	1,530	2,581	
Research and development.....	7,144	7,171	7,557	7,616	
Selling, general and administrative..	4,144	3,900	3,883	4,269	
	-----	-----	-----	-----	-----
Total costs and expenses.....	13,279	12,254	12,970	14,466	
	-----	-----	-----	-----	-----
Loss from operations.....	(7,287)	(7,910)	(7,061)	(7,126)	
	-----	-----	-----	-----	-----
Interest and other income, net.....	986	809	616	534	
	-----	-----	-----	-----	-----
Net loss.....	\$ (6,301)	\$ (7,101)	\$ (6,445)	\$ (6,592)	\$
	=====	=====	=====	=====	=====
Net loss per share.....	\$ (0.30)	\$ (0.34)	\$ (0.31)	\$ (0.32)	\$
	=====	=====	=====	=====	=====

Notes to Quarterly Results of Operations:

- (1) See MD&A for description of the restatement.
- (2) Fourth quarter results for the year ended March 31, 2002 were announced in a press release dated May 16, 2002. Prior quarters were included in Form 10-Q's filed with the SEC.