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HARVARD BIOSCIENCE INC
Form 10-K405
April 02, 2001

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-K

(MARK ONE)

/X/ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2000 OR
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 000-31923

HARVARD BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE
(State or Other
Jurisdiction of
Incorporation or
Organization)

(508) 893-8999
(Registrant's telephone
number, including area code)

04-3306140
(IRS Employer
Identification No.)

84 OCTOBER HILL ROAD, HOLLISTON, MA
(Address of Principal Executive
Offices)

01746
(Zip Code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:
Common Stock, \$.01 par value per share
(TITLE OF CLASS)

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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 Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. /X/

The aggregate market value of 10,859,119 shares of voting stock held by non-affiliates of the registrant as of March 23, 2001 was approximately \$77,371,000 based on the last sale price of such stock on such date.

Common Stock Outstanding as of March 23, 2001: 25,720,581 shares.

DOCUMENTS INCORPORATED BY REFERENCE.

Portions of the Company's definitive Proxy Statement in connection with the 2001 Annual Meeting of Stockholders to be held on May 24, 2001 are incorporated by reference into Part III of this Form 10-K.

PART I

THIS ANNUAL REPORT ON FORM 10-K CONTAINS STATEMENTS THAT ARE NOT STATEMENTS OF HISTORICAL FACT AND ARE FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1933 AND SECTION 21E OF THE SECURITIES EXCHANGE ACT OF 1934. THE FORWARD-LOOKING STATEMENTS ARE PRINCIPALLY CONTAINED IN "ITEM 1: BUSINESS" AND "ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS." THESE STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE OUR ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY THE FORWARD-LOOKING STATEMENTS. FORWARD-LOOKING STATEMENTS INCLUDE, BUT ARE NOT LIMITED TO, STATEMENTS ABOUT OUR BUSINESS STRATEGY, THE MARKET OPPORTUNITY FOR OUR PRODUCTS, OUR ESTIMATES REGARDING OUR CAPITAL REQUIREMENTS, THE TIMING OF FUTURE PRODUCT INTRODUCTIONS, OUR EXPECTATIONS IN CONNECTION WITH CURRENT LITIGATION, AND OUR PLANS, OBJECTIVES, EXPECTATIONS AND INTENTIONS THAT ARE NOT HISTORICAL FACTS. IN SOME CASES, YOU CAN IDENTIFY FORWARD-LOOKING STATEMENTS BY TERMS SUCH AS "MAY," "WILL," "SHOULD," "COULD," "WOULD," "EXPECTS," "PLANS," "ANTICIPATES," "BELIEVES," "ESTIMATES," "PROJECTS," "PREDICTS," "INTENDS," "POTENTIAL" AND SIMILAR EXPRESSIONS INTENDED TO IDENTIFY FORWARD-LOOKING STATEMENTS. THESE STATEMENTS REFLECT OUR CURRENT VIEWS WITH RESPECT TO FUTURE EVENTS AND ARE BASED ON ASSUMPTIONS AND SUBJECT TO RISKS AND UNCERTAINTIES. GIVEN THESE UNCERTAINTIES, YOU SHOULD NOT PLACE UNDUE RELIANCE ON THESE FORWARD-LOOKING STATEMENTS. WE DISCUSS MANY OF THESE RISKS IN DETAIL UNDER THE HEADING "IMPORTANT FACTORS THAT MAY AFFECT FUTURE OPERATING RESULTS" BEGINNING ON PAGE 25. YOU SHOULD CAREFULLY REVIEW ALL OF THESE FACTORS, AND YOU SHOULD BE AWARE THAT THERE MAY BE OTHER FACTORS, INCLUDING FACTORS OF WHICH WE ARE NOT CURRENTLY AWARE, THAT COULD CAUSE THESE DIFFERENCES. ALSO, THESE FORWARD-LOOKING STATEMENTS REPRESENT OUR ESTIMATES AND ASSUMPTIONS ONLY AS OF THE DATE OF THIS REPORT. WE MAY NOT UPDATE THESE FORWARD-LOOKING STATEMENTS, EVEN THOUGH OUR SITUATION MAY CHANGE IN THE FUTURE, UNLESS WE HAVE OBLIGATIONS UNDER THE FEDERAL SECURITIES LAWS TO UPDATE AND DISCLOSE MATERIAL DEVELOPMENTS RELATED TO PREVIOUSLY DISCLOSED INFORMATION.

ITEM 1. BUSINESS.

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OVERVIEW

We are a global provider of innovative, research enabling tools for drug discovery. We provide a broad array of tools designed to accelerate the speed and to reduce the cost at which our customers can introduce new drugs. Since our 1996 reorganization, we have focused on alleviating the protein purification and ADMET (absorption, distribution, metabolism, elimination and toxicology) screening bottlenecks in drug discovery.

To address these two critical bottlenecks in protein purification and ADMET screening, we have introduced several new proprietary tools. For protein purification, these tools include specially treated pipette tips, spin columns and micro-dialyzers. For ADMET screening, these tools include NaviCyte diffusion chambers for drug absorption testing, 96 well equilibrium dialysis plates for drug distribution testing, ScanTox in vitro toxicology screening instruments and MitoScan high throughput toxicology assays.

We also have an established product base in proteomics, which is the study of gene function through the analysis of protein interactions. This product base consists of DNA/RNA/protein calculators, life science spectrophotometers and amino acid analysis systems. We also have an established product base in ADMET screening which includes precision infusion pumps, organ testing systems and ventilators.

The names Harvard Bioscience and Harvard Apparatus and our logo are names and trademarks that we believe belong to us. We have the rights to numerous trademarks and trade names including AmiKa, Biochrom, CPK, GeneQuant, GeneQuantPro, MitoScan, NaviCyte, NovaSpec, PrepTip, PureTip, ScanTox, Stronghold and UltroSpec. This Annual Report on Form 10-K also contains the trademarks and trade names of other entities that are the property of their respective owners.

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OUR HISTORY

Our business began in 1901 and has grown over the intervening years with the development and evolution of modern drug discovery tools. Our past inventions include the mechanical syringe pump in the 1950s for drug infusion and the microprocessor controlled syringe pump in the 1980s.

In March 1996, a group of investors led by our current management team acquired a majority of the then existing business of our predecessor, Harvard Apparatus. Following this acquisition, we redirected our strategy to focus on high growth areas within drug discovery by acquiring innovative technologies through strategic acquisitions and licensing while continuing to grow our existing business through internal product development and marketing. Through December 31, 2000, we have completed six business acquisitions, including Biochrom, the licensing of key new technology for in vitro toxicology assays and drug absorption measurement chambers, the internal development of new product lines, including new generation syringe pumps and DNA/RNA/protein calculators and the mailing of expanded new catalogs.

OUR STRATEGY

Our goal is to become the leading provider of innovative, enabling technologies and products for proteomics and ADMET research in the drug discovery process. Key elements of our strategy are to:

ESTABLISH OUR PROTEOMICS AND ADMET SCREENING PRODUCTS AS INDUSTRY STANDARDS

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In order to establish our products as industry standards, we intend to provide a broad selection of products focused on the target validation and ADMET screening stages of the drug discovery process. We have introduced several new innovative products designed to reduce the cost and time associated with protein purification and ADMET screening in drug discovery. Our strategy is to increase the market acceptance of our proteomics and ADMET screening products through the development of new uses for these products, focused, direct marketing campaigns to our extensive customer base and promotions at scientific exhibitions.

LAUNCH A BROAD RANGE OF INNOVATIVE NEW TOOLS FOR DRUG DISCOVERY

Since our reorganization in 1996, we have focused on becoming a leading provider of tools for proteomics and ADMET screening. We believe that there is a demand for new and innovative tools that reduce drug discovery time and expense. Since 1996, we have introduced several new tools for proteomics and ADMET screening such as our protein and DNA purification pipette tips, protein purification dialyzers, ScanTox in vitro toxicology assay and NaviCyte diffusion chambers. We intend to continue our efforts to identify, develop and introduce new tools to alleviate bottlenecks in all stages of the drug discovery process.

LEVERAGE OUR EXISTING DISTRIBUTION AND MARKETING CHANNELS

We intend to leverage the strength of our existing distribution channels to launch new products. Our 1,000 page catalog is currently distributed worldwide to approximately 100,000 researchers engaged in drug discovery and is also accessible on our website. Our customer list consists primarily of research personnel, who are the end-users of our products and largely responsible for initiating the purchase of our products. We also have wholly-owned subsidiaries in the United Kingdom, Germany, France and Canada providing us with an international market presence. In addition, some of our products are sold through a distribution arrangement with Amersham Pharmacia Biotech, or APBiotech, providing us with access to APBiotech's extensive customer base, reputation and support infrastructure. We believe that our extensive existing distribution channels, when combined with our strong reputation for high quality, reliable and durable tools, provide us with a competitive advantage in bringing new products to market quickly and cost effectively.

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PROVIDE A SINGLE SOURCE OF TOOLS FOR OUR CUSTOMERS' RESEARCH NEEDS IN PROTEOMICS AND ADMET SCREENING

We seek to provide our customers with all of the tools necessary to conduct a wide variety of proteomic and ADMET experiments that are crucial to the drug discovery process. We believe that being a single source sets us apart from our competitors by increasing the likelihood that our customers will turn to our catalog or website first when looking for help with a particular experiment. Currently, our catalog and website include approximately 10,000 products. In addition, our extensive product selection allows us to leverage the sales of our proprietary products through the simultaneous sale of complementary products.

ACQUIRE COMPLEMENTARY TECHNOLOGIES

We intend to selectively acquire companies and technologies that we believe will strengthen our portfolio of tools for drug discovery, particularly in the areas of proteomics and ADMET screening. Since 1996, we have completed the acquisition of Biochrom, four other acquisitions involving the integration of acquired products and technology into our existing manufacturing base and distribution channel, and four technology acquisition or licensing transactions. In the future, we may pursue acquisitions of new products and technologies through business acquisitions, partnerships or licensing arrangements.

OUR PRODUCTS

Our products consist of both proprietary and non-proprietary products. Our broad array of proprietary products consist of the products set forth in the table below and the products described in the "Other Proprietary Products" section below the table:

PRODUCT CATEGORY	REPRESENTATIVE PRODUCT AREAS	DESCRIPTION	NUMBER OF PRODUCTS	
PROTEOMICS				
Protein Purification	Purification Pipette Tips	Disposable pipette tips - coated with purification media - loaded with purification media	50	19 2
	Macro Spin Columns	Disposable tubes containing purification media	20	
	Ultra Micro Spin Columns	Disposable tubes containing purification media	20	
	Dialyzers	Membrane capped plastic chambers - reusable - disposable - plates with 96 wells	45	19 2
	Equilibrium Dialyzers	Membrane separating two plastic chambers - disposable - plates with 96 wells	9	
Protein Analysis	Molecular Biology Spectrophotometers*	Range of spectrophotometers	6	19 2
	DNA/RNA/Protein Calculators*	Spectrophotometers with application software	2	19 2
	Multi-Well Plate Readers	Range of automated readers - absorbance - luminescence - fluorescence	3	((
	Amino Acid Analysis Systems*	Ninhydrin-based amino acid detection systems	2	19 2
ADMET SCREENING				
Absorption (in vitro)	NaviCyte Diffusion Chambers	Simulated digestive tract/ blood stream interfaces	6	

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Distribution	Equilibrium Dialysis Plate	Membrane separating two chambers	9	
Metabolism/ Elimination	Organ Testing Systems	Chambers with stimulators, perfusion and recording devices	8	
Toxicology	ScanTox Assay	In vitro toxicology assay	1	
	MitoScan Assay	High throughput toxicology assay	1	
	Precision Infusion Pumps	Syringe pumps	80	

* We acquired all of these products in March 1999 through our acquisition of Biochrom.

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The "Year of Introduction for Product Areas Introduced by Us or One of Our Predecessors" column set forth in the table above represents the year in which we or one of our predecessor companies introduced the first generation product in this area.

PROTEOMICS PRODUCTS-PROTEIN PURIFICATION

PROTEIN PURIFICATION PIPETTE TIPS

Our proprietary PrepTip pipette tips consist of a standard disposable pipette tip coated on the inside with the same chromatography media used in packed bed columns. This coating selectively binds proteins, but not the salts, detergents, electrophoresis gels, buffers and cellular debris that are often mixed in with the proteins. Our PrepTip pipette tip enables customers to rapidly purify proteins by avoiding the time-consuming usage of a centrifuge required when using spin columns. In addition, it is easy to use because the protein solution is handled entirely within the pipette tip and does not have to be moved through a separate device like a packed bed column or dialyzer. Because our PrepTip pipette tips use the same chromatography media as packed bed columns, they can take advantage of the wide range of existing purification protocols using these media. Our PureTip pipette tip uses a pipette tip that is similar to the PrepTip but is loaded with a gel rather than coated and is well suited for performing DNA purification.

SPIN COLUMNS

Spin columns are short plastic tubes that contain purification media. Once a sample is placed in the tube, it is typically spun in a centrifuge to move the sample through the media and separate the proteins from the other cellular debris. Our Ultra Micro spin columns, which we provide in both single and 96 well plate versions, contain chromatography media for use in purifying sample volumes as small as five microliters. This is significantly smaller than the sample volume required by columns produced by our largest competitors.

PROTEIN PURIFICATION DIALYZERS

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Dialyzers are small chambers with an open end covered with a membrane. The membrane allows small molecules to pass through but not large molecules. Because proteins are large molecules and most contaminants are small molecules, this is an effective way to purify proteins. We make single- and double-sided reusable and disposable dialyzers.

DISPOSABLE EQUILIBRIUM DIALYZERS

Our proprietary disposable equilibrium dialyzers are effective cost-efficient products for protein binding studies and can handle sample sizes as small as 75 microliters. These disposable products are particularly useful for binding studies involving radioactively labeled compounds because the dialyzer does not require cleaning after use.

PROTEOMICS PRODUCTS-PROTEIN ANALYSIS

MOLECULAR BIOLOGY SPECTROPHOTOMETERS

A spectrophotometer is an instrument widely used in molecular biology and cell biology to quantify the amount of a compound in a sample by shining a beam of white light through a prism or grating to divide it into component wavelengths. Each wavelength in turn is shone through a liquid sample and the spectrophotometer measures the amount of light absorbed at each wavelength. This enables the quantification of the amount of a compound in a sample. We sell a wide range of spectrophotometers under the names UltroSpec and NovaSpec. These products are manufactured by our Biochrom subsidiary and sold primarily through our distribution arrangement with Amersham Pharmacia Biotech.

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DNA/RNA/PROTEIN CALCULATORS

A DNA/RNA/protein calculator is a bench top instrument dedicated to quantifying the amount of DNA, RNA or protein in a sample. It uses a process similar to that of a molecular biology spectrophotometer. These are sold under the names GeneQuant and GeneQuantPro. Launched in 1993, we believe that we were the first company to sell such an instrument. These products are manufactured by our Biochrom subsidiary and sold primarily through Amersham Pharmacia Biotech.

MULTI-WELL PLATE READERS

Multi-well plate readers are widely used for high throughput screening assays in the drug discovery process. The most common format is 96 wells. Plate readers use light to detect chemical interactions. We plan to introduce a range of these products in 2001 beginning with absorbance readers and followed by luminescence and fluorescence readers primarily for distribution through Amersham Pharmacia Biotech.

AMINO ACID ANALYSIS SYSTEMS

An amino acid analysis system uses chromatography to separate the amino acids in a sample and then uses a chemical reaction to detect each one in turn as they flow out of the chromatography column. Amino acids are the building blocks of proteins. In June 2000, we acquired substantially all of the amino acid analysis systems business of the Biotronik subsidiary of Eppendorf-Netheler-Hinz GmbH and integrated it with the existing amino acid analysis systems business in our Biochrom subsidiary.

ADMET SCREENING PRODUCTS

The goal of ADMET screening is to identify compounds that have toxic side effects or undesirable pharmacological properties. These pharmacological

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properties consist of absorption, distribution, metabolism, elimination which, together with toxicology, form the acronym ADMET. We have traditionally sold products for ADMET testing that are based upon animal models. However, as a result of a series of acquisitions and licensing transactions, we have begun to develop and manufacture organ testing systems, tissue testing systems and serum protein binding assays for early toxicology testing.

NAVICYTE DIFFUSION CHAMBERS

A diffusion chamber is a small plastic chamber with a membrane separating the two halves of the chamber used to measure the absorption of a drug into the bloodstream. The membrane can either be tissue such as intestinal tissue or a cultured layer of cells such as human colon cells. This creates a miniaturized model of intestinal absorption. We entered this market with our 1999 acquisition of the assets of NaviCyte Inc., a wholly owned subsidiary of Trega Biosciences.

96 WELL EQUILIBRIUM DIALYSIS PLATE FOR SERUM PROTEIN BINDING ASSAYS

Our 96 well equilibrium dialysis plate operates in a similar way to the equilibrium dialyzers for target validation described above. The difference is that both chambers on either side of the membrane are capped. The protein target is placed on one side of the membrane and the drug on the other. The small molecule drug diffuses through the membrane. If it binds to the target, it cannot diffuse back again. If it does not bind, it will diffuse back and forth until an equilibrium is established. Thus, measuring the drug concentration determines the strength of binding. This product is principally used for ADMET screening to determine if a drug binds to blood proteins. A certain level of reversible binding is advantageous in order to promote good distribution of a drug through the human body. However, if the binding is too strong, it may impair normal protein function and cause toxic effects.

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ORGAN TESTING SYSTEMS

Organ testing systems use glass or plastic chambers together with stimulators and recording electrodes to study organ function. Organ testing systems enable either whole organs or strips of tissue from organs such as hearts, livers and lungs to be kept functioning outside the body while researchers perform experiments with them. They are typically used in place of live animals. We have sold basic versions of these systems for many years, but significantly expanded our product offerings through our November 1999 acquisition of Hugo Sachs Elektronik. Studies on isolated livers are useful in determining metabolism and studies on kidneys are useful in determining elimination.

SCANTOX IN VITRO TOXICOLOGY SCREENING

Our proprietary ScanTox in vitro toxicology screening system uses a living organ system, a bovine eye lens, to detect the toxic effect of compounds by measuring the refraction of laser light passing through the eye lens. A healthy lens focuses light to a point, but when a toxic compound is added to the lens environment, the lens reacts by defocusing. The extent of defocusing is measured and analyzed by the instrument.

MITOSCAN HIGH THROUGHPUT TOXICOLOGY SCREENING

Our proprietary MitoScan high throughput in vitro toxicology assay uses submitochondrial particles, or SMP, which are part of the inner membrane of mitochondria. Mitochondria are evolutionarily conserved across the entire animal kingdom and are extremely vulnerable to toxic insult. The SMP, processed from mitochondria, retain this sensitivity and when used in toxicity assays provide a

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highly relevant toxicologic endpoint indicative of mitochondrial and whole organism responses.

PRECISION INFUSION PUMPS

Infusion pumps, typically syringe pumps, are used to accurately infuse very small quantities of liquid, commonly drugs. Infusion pumps are typically used for long-term toxicology testing of drugs by infusion into animals, typically laboratory rats. We sell 80 types of syringe pumps.

OTHER PROPRIETARY PRODUCTS

CELL INJECTION SYSTEMS

Cell injection systems use extremely fine bore glass capillaries to penetrate and inject drugs into or around individual cells. Cell injection systems are used to study the effects of drugs on single cells. Injection is accomplished either with air pressure or, if the drug molecule is electrically charged, by applying an electric current. We entered this market with our 1998 acquisition of the research products of Medical Systems Corporation.

VENTILATORS

Ventilators use a piston driven air pump to inflate the lungs of an anesthetized animal. Ventilators are typically used in surgical procedures common in drug discovery. Our advanced Inspira ventilators have significant safety and ease of use features, such as default safety settings, not found on other ventilators.

CPK ATOMIC MODELS

CPK atomic models use colored plastic parts to accurately model molecular structures, such as DNA. We offer a wide range of components and assembled models.

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STRONGHOLD LABORATORY CLAMPS

Stronghold laboratory clamps are made from glass reinforced nylon. Our clamps resist rusting which is a common problem with steel clamps. We provide a wide variety of clamps, stands and lattices.

OEM PRODUCTS

Our reputation for quality, durability and reliability has led to the formation of a number of original equipment manufacturer, or OEM, relationships with major life science instrument companies. These relationships are conducted through purchase orders and are not contractual. A good example of these relationships is with respect to our syringe pumps. Our syringe pumps are capable of delivering flow rates as low as 0.001 microliters per hour while maintaining high accuracy. We have adapted, in conjunction with our OEMs, the core technology embodied in our syringe pumps to make specialized sample injectors for many of the major mass spectrometry manufacturers.

DISTRIBUTED PRODUCTS

In addition to the proprietary, manufactured products described above, we buy and resell through our catalog products made by other manufacturers. We have negotiated supply agreements with the majority of the companies that provide our distributed products. These supply agreements specify pricing only and contain no minimum purchase commitments. None of these agreements represented more than

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two percent of our revenues for the year ended December 31, 2000. Distributed products accounted for approximately 18% of our revenues for the year ended December 31, 2000. These distributed products enable us to provide our customers with a single source for their experimental needs. These complementary products consist of a large variety of devices, instruments and consumable items used in experiments involving animals and biological tissue in the fields of proteomics, physiology, pharmacology, neuroscience, cell biology, molecular biology and toxicology. Our manufactured products are often leaders in their fields but researchers often need complementary products in order to conduct their particular experiments. Most of these complementary products come from small companies that do not have our extensive distribution and marketing capabilities.

OUR CUSTOMERS

Our customers are primarily end user research scientists at pharmaceutical and biotechnology companies, universities and government laboratories, such as the U.S. National Institutes of Health, or NIH. Our largest customers in the United States include Baylor College of Medicine, Bristol-Myers Squibb Company, Eli Lilly and Company, Johns Hopkins University, Merck & Co., Inc., NIH, Parke-Davis, Pfizer Inc., Schering-Plough Corporation, SmithKline Beecham plc and the University of California.

We conduct direct sales in the United States, the United Kingdom, Germany, France and Canada. We also maintain distributors in other countries. Aggregate sales to our largest customer, Amersham Pharmacia Biotech, as a distributor with end users similar to ours, accounted for approximately 39% of our revenues for the fiscal year ended December 31, 2000, and 44% of our revenues for the fiscal year ended December 31, 1999. We have several thousand customers worldwide and no other customer accounted for more than five percent of our revenues for such periods.

SALES AND MARKETING

DIRECT SALES

We periodically produce and mail approximately 100,000 copies of our 1,000-page catalog, which contains approximately 10,000 items. We distribute the majority of our products ordered from our catalog through our worldwide subsidiaries. Our manufactured products accounted for approximately 82% of our revenues for the fiscal year ended December 31, 2000. The complete catalog is also available as a CD-ROM and can be accessed on our website, www.harvardbioscience.com. Our

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significant positions in many of our manufactured products create traffic to the catalog and web site that enables cross-selling and facilitates the introduction of new products. In addition to the comprehensive catalog, we create and mail abridged catalogs that focus on specific product areas along with direct mailers which introduce or promote new products.

AMERSHAM PHARMACIA BIOTECH DISTRIBUTOR

Since the 1970s, our Biochrom subsidiary has used Amersham Pharmacia Biotech, or APBiotech, and its predecessors as its primary marketing and distribution channel. When we acquired Biochrom from Pharmacia and Upjohn in 1999, we signed a distribution, marketing and new product development agreement with APBiotech. Under the terms of this agreement, APBiotech serves as the exclusive distributor, marketer and seller of a majority of the products of our Biochrom subsidiary. During the term of this agreement, APBiotech has agreed to purchase a minimum number of our products for an annual amount of

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\$12.5 million, subject to adjustment for price increases and product sales volume. We have certain affirmative duties under the agreement to assist APBiotech in the sale of our products. For example, we have agreed to cooperate with APBiotech in its sales and marketing program and to provide sales, demonstration and support training for APBiotech. This agreement may be terminated early under specified circumstances. For example, if we breach the exclusivity, pricing or shipping provisions of the agreement and fail to remedy the breach within 30 days of receiving written notice of the breach from APBiotech, then the agreement may be terminated. In addition, we may terminate the agreement under specified circumstances. For example, failure by APBiotech to place certain information in escrow, to pay for products or to purchase a minimum number of products each year enables us to terminate the agreement unless APBiotech remedies the breach within 30 days of receiving written notice of the breach from us. This agreement may be terminated by either party upon 18 months' prior written notice. This agreement does not have a finite term, but remains in effect until terminated in accordance with its terms by either us or APBiotech.

RESEARCH AND DEVELOPMENT

Our principal research and development mission is to develop a broad portfolio of technologies, products and core competencies in drug discovery tools, particularly for application in the areas of proteomics and ADMET.

Our development expenditures were \$1.5 million, \$1.2 million and \$325,000 in 2000, 1999 and 1998, respectively. We anticipate that we will continue to make significant development expenditures. We plan to continue to pursue a balanced development portfolio strategy of originating new products from internal research and development programs and business and technology acquisitions.

We maintain development staff in each of our manufacturing facilities to design and develop new products. In-house development is focused on our current technologies. For new technologies, our strategy has been to license or acquire proven technology from universities and biotechnology companies and then develop the technology into commercially viable products.

MANUFACTURING

We manufacture and test the majority of our products in our five principal manufacturing facilities located in the United States, the United Kingdom and Germany. We have considerable manufacturing flexibility at our various facilities, and each facility can manufacture multiple products at the same time. We maintain in-house key manufacturing know-how, technologies and resources. We seek to maintain multiple suppliers for key components that are not manufactured in-house.

Our manufacturing operations are essentially to assemble and test. Our manufacturing of syringe pumps, ventilators, cell injectors and protein purification products takes place in Holliston, Massachusetts. Our MitoScan toxicology assay is manufactured in Madison, Wisconsin. Our manufacturing of spectrophotometers and amino acid analysis systems takes place in Cambridge,

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England. Our manufacturing of surgery-related products and teaching products takes place in Edenbridge, England. Our manufacturing of complete organ testing systems takes place in March-Hugstetten, Germany. Our Cambridge, England facility is certified to ISO 9001.

COMPETITION

The markets into which we sell our products are highly competitive, and we

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expect the intensity of competition to increase. We compete with many companies engaged in developing and selling tools for drug discovery. Many of our competitors have greater financial, operational, sales and marketing resources, and more experience in research and development and commercialization than we have. Moreover, competitors may have greater name recognition than we do, and many offer discounts as a competitive tactic. These competitors and other companies may have developed or could in the future develop new technologies that compete with our products or which could render our products obsolete. We cannot assure you that we will be able to make the enhancements to our technologies necessary to compete successfully with newly emerging technologies. We are not aware of any significant products sold by us which are currently obsolete.

We believe that we offer one of the broadest selections of protein purification and ADMET technologies to companies engaged in drug discovery. We are not aware of any competitor that offers a product line of comparable breadth within the protein purification and ADMET product markets. We have numerous competitors on a product line basis. We believe that we compete favorably with our competitors on the basis of product performance, including quality, reliability and speed, technical support, price and delivery time. We compete with several companies that provide instruments for proteomics and ADMET screening. In the DNA/RNA/protein calculator area, we compete with PerkinElmer Instruments, Inc. and Bio-Rad Laboratories, Inc. In the molecular biology spectrophotometer area, we compete with Beckman Coulter, Inc. and PerkinElmer Instruments, Inc. In the protein sample preparation area, we compete with Millipore Corporation, Pierce Chemical Company and Spectrum Medical. In the ADMET screening area, we compete with KD Scientific, Razel Scientific Instruments, Inc., Experimetria Ltd., Kent Scientific Corporation, Warner Instruments, General Valve Company, Eppendorf-Netheler-Hinz GmbH, Ugo Basile and Becton, Dickinson and Company. In the area of OEM products, we face competition primarily from the in-house engineering teams of our OEM customers.

INTELLECTUAL PROPERTY

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade-secret laws, as well as confidentiality provisions in our contracts. Most of our new technology is covered by patents or patent applications. Most of our base business is protected by trade names and trade secrets only.

We have implemented a patent strategy designed to provide us with freedom to operate and facilitate commercialization of our current and future products. We currently own ten issued U.S. patents and have four pending applications. We also hold exclusive licenses for the technologies used in our ScanTox in vitro toxicology products, our MitoScan high throughput toxicology products, our NaviCyte drug absorption products and our PureTip pipette tip products. In addition to these licenses, our principal technologies are covered by issued patents for our dialyzers and our Ultra Micro spin columns and by pending applications for our PrepTip pipette tips. Furthermore, international patent applications are pending in connection with one of our U.S. patent applications and one of our licensed patents.

Generally, U.S. patents have a term of 17 years from the date of issue for patents issued from applications filed with the U.S. Patent Office prior to June 8, 1995, and 20 years from the application filing date or earlier claimed priority date in the case of patents issued from applications filed on or after June 8, 1995. Our issued US patents will expire between 2011 and 2018. Our success depends to a

significant degree upon our ability to develop proprietary products and

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technologies. We intend to continue to file patent applications as we develop new products and technologies.

Patents provide some degree of protection for our intellectual property. However, the assertion of patent protection involves complex legal and factual determinations and is therefore uncertain. The scope of any of our issued patents may not be sufficiently broad to offer meaningful protection. In addition, our issued patents or patents licensed to us may be successfully challenged, invalidated, circumvented or unenforceable so that our patent rights would not create an effective competitive barrier. Moreover, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States. In addition, the laws governing patentability and the scope of patent coverage continue to evolve, particularly in areas of interest to us. As a result, there can be no assurance that patents will issue from any of our patent applications or from applications licensed to us. In view of these factors, our intellectual property positions bear some degree of uncertainty.

We also rely in part on trade-secret protection of our intellectual property. We attempt to protect our trade secrets by entering into confidentiality agreements with third parties, employees and consultants. Our employees and consultants also sign agreements requiring that they assign to us their interests in patents and copyrights arising from their work for us. Many of our U.S. employees have signed agreements not to compete unfairly with us during their employment and after termination of their employment, through the misuse of confidential information, soliciting employees, soliciting customers and the like. However, it is possible that these agreements may be breached or invalidated and if so, there may not be an adequate corrective remedy available. Despite the measures we have taken to protect our intellectual property, we cannot assure you that third parties will not independently discover or invent competing technologies, or reverse engineer our trade secrets or other technologies. Therefore, the measures we are taking to protect our proprietary rights may not be adequate.

We do not believe that our products infringe on the intellectual property rights of any third party. We cannot assure you, however, that third parties will not claim such infringement by us or our licensors with respect to current or future products. We expect that product developers in our market will increasingly be subject to such claims as the number of products and competitors in our market segment grows and the product functionality in different market segments overlaps. In addition, patents on production and business methods are becoming more common and we expect that more patents will issue in our technical field. Any such claims, with or without merit, could be time-consuming, result in costly litigation and diversion of management's attention and resources, cause product shipment delays or require us to enter into royalty or licensing agreements. Moreover, such royalty or licensing agreements, if required, may not be on terms acceptable to us, or at all, which could seriously harm our business or financial condition.

GOVERNMENT REGULATION

We are not subject to direct governmental regulation other than the laws and regulations generally applicable to businesses in the domestic and foreign jurisdictions in which we operate. In particular, we are not subject to regulatory approval by the United States Food and Drug Administration as none of our products are sold for use in diagnostic procedures or on human clinical patients. In addition, we believe we are in compliance with all relevant environmental laws.

EMPLOYEES

As of December 31, 2000, we had 131 full-time employees and 8 part-time

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employees, 46 of whom resided in the United States, 74 of whom resided in the United Kingdom, 12 of whom resided in Germany, 3 of whom resided in France and 4 of whom resided in Canada. None of our employees is subject to any collective bargaining agreement. We believe that our relationship with our employees is good.

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ITEM 2. PROPERTIES.

Our five principal facilities incorporate manufacturing, development, sales and marketing and administration functions. Our facilities consist of:

- a leased 20,000 square foot facility in Holliston, Massachusetts, which is our corporate headquarters,
- a leased 28,000 square foot facility in Cambridge, England,
- an owned 15,500 square foot facility in Edenbridge, England,
- a leased 9,000 square foot facility in March-Hugstetten, Germany, and
- a leased 1,400 square foot facility in Madison, Wisconsin.

We lease additional facilities for sales and administrative support in Les Ulis, Paris, France and Montreal, Quebec Canada.

ITEM 3. LEGAL PROCEEDINGS.

On December 26, 2000, Harvard University filed a lawsuit in U.S. District Court, District of Massachusetts alleging that our use of the "Harvard Bioscience" and "Harvard Apparatus" names infringes on Harvard University's trademarks. Harvard University is seeking both injunctive relief and monetary damages. We believe that these claims are without merit, and we are vigorously defending against such claims. We believe that the defense of these claims could involve significant litigation-related expenses, but that it will not have a material adverse effect on our business, financial condition or results of operations.

From time to time, we may be involved in various other claims and legal proceedings arising in the ordinary course of business. We are not currently a party to any other claims or proceedings which, we believe, if decided adversely to us, would either individually or in the aggregate have a material adverse effect on our business, financial condition or results of operations.

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

On October 25, 2000, the sole stockholder of Harvard Bioscience, Inc. approved the merger of our predecessor Harvard Apparatus, Inc., a Massachusetts corporation, with and into Harvard Bioscience, Inc., a Delaware corporation.

On November 29, 2000, the sole stockholder of Harvard Bioscience, Inc. consented to the adoption of the following resolutions without meeting:

- to approve and adopt Harvard Bioscience, Inc.'s Amended and Restated Certificate of Incorporation,
- to approve and adopt Harvard Bioscience, Inc.'s Second Amended and Restated Certificate of Incorporation,
- to approve and adopt Harvard Bioscience, Inc.'s 2000 Stock Option and Incentive Plan,

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- to approve and adopt Harvard Bioscience, Inc.'s Employee Stock Purchase Plan,
- to approve and adopt the conversion, on a one-for-one basis, of all outstanding warrants to purchase common stock of Harvard Apparatus, Inc. into warrants to purchase common stock of Harvard Bioscience, Inc., and

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- to accept the assignment of the Amended and Restated Securityholders' Agreement, by and among Harvard Apparatus, Inc., certain outside investors and certain management investors from Harvard Apparatus, Inc. to Harvard Bioscience, Inc.

ITEM 4A. EXECUTIVE OFFICERS OF THE REGISTRANT.

The following table shows information about our executive officers as of December 31, 2000.

NAME	AGE	POSITION
-----	-----	-----
Chane Graziano.....	62	Chief Executive Officer and Director
David Green.....	36	President and Director
James Warren.....	55	Chief Financial Officer
Mark Norige.....	46	Chief Operating Officer
John House.....	56	Managing Director, Biochrom Ltd
		Vice President of Finance and
Susan Lusinski.....	44	Administration

CHANE GRAZIANO has served as our Chief Executive Officer and as a member of our board of directors since March 1996. Prior to joining Harvard Bioscience, Mr. Graziano served as the President of Analytical Technology Inc., an analytical electrochemistry instruments company, from 1993 to 1996 and as the President and Chief Executive Officer of its predecessor, Analytical Technology Inc.-Orion, an electrochemistry instruments and laboratory products company, from 1990 until 1993. Mr. Graziano served as the President of Waters Corporation, an analytical instrument manufacturer, from 1985 until 1989. Mr. Graziano has over 36 years experience in the laboratory products and analytical instruments industry.

DAVID GREEN has served as our President and as a member of our board of directors since March 1996. Prior to joining Harvard Bioscience, Mr. Green was a strategy consultant with Monitor Company, a strategy consulting company, in Cambridge, Massachusetts and Johannesburg, South Africa from June 1991 until September 1995 and a brand manager for household products with Unilever PLC, a packaged consumer goods company, in London from September 1985 to February 1989. Mr. Green graduated from Oxford University with a B.A. Honors degree in physics and holds a M.B.A. degree with distinction from Harvard Business School.

JAMES WARREN has served as our Chief Financial Officer since July 2000. Prior to joining Harvard Bioscience, Mr. Warren served as the Chief Financial Officer of Aquila Biopharmaceuticals, Inc., a life sciences company, from January 1998 until July 2000 and as the Corporate Controller of Genzyme Corporation, a biotechnology company, from 1991 until January 1998. Mr. Warren holds a M.B.A. degree from Boston University.

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MARK NORIGE has served as our Chief Operating Officer since January 2000 and in various other positions with us since September 1996. Prior to joining Harvard Bioscience, Mr. Norige served as a Business Unit Manager at QuadTech, Inc., an impedance measuring instrument manufacturer, from May 1995 until September 1996. Mr. Norige worked at Waters Corporation from 1977 until May 1995.

JOHN HOUSE has served as Managing Director of our Biochrom Ltd subsidiary since July 2000. Prior to joining Biochrom, Mr. House was retired from January 1995 until July 2000 and engaged during that period primarily in charitable activities. Mr. House served in various positions with, and most recently as a Managing Director of, Unicam Ltd., a manufacturer of analytical instruments, from 1987 until January 1995.

SUSAN LUSCINSKI has served as our Vice President of Finance and Administration since May 1999. Ms. Luscinski served as our Corporate Controller from May 1988 until May 1999 and has served in various other positions at our company and its predecessor since January 1985.

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PART II

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

PRICE RANGE OF COMMON STOCK.

Our common stock has been quoted on the Nasdaq National Market since our initial public offering on December 7, 2000 and currently trades under the symbol "HBIO." The following table sets forth the high and low sales prices per share of our common stock as reported on the Nasdaq National Market for the periods indicated.

FISCAL YEAR ENDED DECEMBER 31, 2000 -----	HIGH -----	LOW -----
Fourth Quarter (from December 7, 2000 through December 31, 2000).....	\$13.50	\$8.00

On March 23, 2001, the closing sale price of our common stock on the Nasdaq National Market was \$7.13 per share. The number of record holders of our common stock as of March 23, 2001 was approximately 23. We believe that the number of beneficial owners of our common stock at that date was substantially greater.

DIVIDEND POLICY.

We have never declared or paid dividends on our common stock in the past and do not intend to pay dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors the board of directors deems relevant.

RECENT SALES OF UNREGISTERED SECURITIES.

During the fiscal year ended December 31, 2000, we issued and sold unregistered securities as set forth below. There was no public offering in any such transaction and we believe that each transaction was exempt from the registration requirements of the Securities Act of 1933 by reason of Section 4(2) thereof based on the private nature of the transactions and the

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financial sophistication of the purchasers, all of whom had access to complete information concerning us and acquired the securities for investment and not with a view to the distribution thereof. In addition, we believe that the transactions described below with respect to option issuances to, and option exercises by, our employees were exempt from the registration requirements of the Securities Act of 1933 by reason of Section 4(2) thereof or Rule 701 promulgated thereunder.

- (1) In March 2000, we issued an aggregate of 1,091,716 shares of our common stock upon the exercise by certain employees of previously granted stock options at an aggregate exercise price of \$1,792.14.
- (2) In September 2000, we issued an aggregate of 2,376,236 shares of our common stock upon the exercise by certain employees of previously granted stock options at an aggregate exercise price of \$1,549,155.40.
- (3) In December 2000, we issued an aggregate of 955,935 shares of our common stock to Ascent Venture Partners, L.P. and Citizens Capital Incorporated in connection with the automatic conversion of our outstanding series B convertible preferred stock into common stock upon the closing of our initial public offering. No consideration was received by us in connection with this automatic conversion.
- (4) In December 2000, we issued an aggregate of 8,509,337 shares of our common stock to Chane Graziano, Ascent Venture Partners, L.P., Ascent Venture Partners II, L.P. and First New England Capital, L.P. upon the cashless exercise of previously issued warrants to acquire common stock. In

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connection with this cashless exercise, the number of shares issuable upon exercise of the warrants was reduced by an aggregate of 572 shares.

- (5) As of December 31, 2000, options to purchase 599,096 shares of our common stock were outstanding under our 1996 Stock Option and Grant Plan. All such options were granted between March 1996 and October 2000 to our officers, directors, employees and consultants.
- (6) In December 2000, Messrs. Kennedy, Lewis and Dishman, our newly appointed directors, were each granted an option to purchase 10,000 shares of our common stock under our 2000 Stock Option and Incentive Plan. These options vest in three equal installments on each of the first three anniversaries of the grant date and have an exercise price of \$8.00 per share.

USE OF PROCEEDS FROM REGISTERED SECURITIES.

- (1) The effective date of the Securities Act registration statement for which the use of proceeds information is being disclosed was December 6, 2000, and the Commission file number assigned to the registration statement is 333-45996.
- (2) The offering commenced as of December 7, 2000.
- (3) The offering did not terminate before any securities were sold.
- (4) (i) As of the date of the filing of this report, the offering has terminated, and all securities registered were sold.

(ii) The names of the managing underwriters are Thomas Weisel Partners LLC, Dain Rauscher Incorporated and ING Barings LLC.

(iii) Our common stock, par value \$0.01 per share, was the class of

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securities registered.

- (iv) 7,359,950 shares of our common stock (which includes 937,500 shares solely to cover over-allotments) were registered at an aggregate offering price of \$58,879,600. As of the date of the filing of this report, 7,359,950 of the shares registered have been sold at an aggregate offering price of \$58,879,600, of which 172,450 shares were sold by a selling stockholder at an aggregate offering price of \$1,379,600.
- (v) From December 7, 2000 to the date hereof, the amount of expenses incurred by us in connection with the issuance and distribution of the securities totaled \$5.7 million, which consisted of direct payments of:
 - (i) \$1.4 million in legal, accounting and printing fees;
 - (ii) \$4.0 million in underwriting discount, fees and commissions; and
 - (iii) \$300,000 in miscellaneous expenses. No payments for such expenses were made to (i) any of our directors, officers, general partners or their associates, (ii) any person(s) owning 10% or more of any class of our equity securities or (iii) any of our affiliates.
- (vi) Our net offering proceeds after deducting our total expenses were \$51.8 million.
- (vii) We used the net proceeds as follows: (i) approximately \$665,000 was used to repay subordinated debt; (ii) approximately \$9.6 million was used to repay amounts outstanding under our credit facility; (iii) approximately \$1.5 million was used to redeem our series A redeemable preferred stock; and (iv) approximately \$370,000 was used to fund the acquisition of substantially all of the assets of MitoScan Corporation in December 2000. No payments were made to (i) any of our directors, officers, general partners or their associates, (ii) any person(s) owning 10% or more of any class of our equity securities or (iii) any of our affiliates.
- (viii) The uses of proceeds described do not represent a material change in the use of proceeds described in our prospectus.

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ITEM 6. SELECTED FINANCIAL DATA.

	YEARS ENDED DECEMBER 31,				FOR THE FROM INC MARCH 15 TO DECEMBER
	2000	1999	1998	1997	
(IN THOUSANDS, EXCEPT SHARE AND PER SHA					
STATEMENT OF OPERATIONS DATA:					
Revenues.....	\$ 30,575	\$ 26,178	\$ 12,154	\$ 11,464	\$ 8
Cost of goods sold.....	15,833	13,547	5,351	5,128	4
Stock compensation expense.....	264	--	--	--	--
Gross profit.....	14,478	12,631	6,803	6,336	4
General and administrative expense.....	5,181	4,147	2,317	2,338	1
Sales and marketing expense.....	3,186	2,448	1,722	1,672	1
Research and development.....	1,533	1,188	325	207	

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Stock compensation expense.....	14,412	3,284	--	--	
Amortization of goodwill.....	604	368	27	--	
	-----	-----	-----	-----	-----
Operating income (loss).....	(10,438)	1,196	2,412	2,119	
	-----	-----	-----	-----	-----
Other (expense) income:					
Foreign currency (loss) gain....	(324)	(48)	21	(96)	
Common stock warrant interest expense.....	(36,885)	(29,694)	(1,379)	(117)	
Interest expense, net.....	(756)	(657)	(210)	(223)	
Amortization of deferred financing costs.....	(153)	(63)	--	--	
Other.....	45	(17)	10	106	
	-----	-----	-----	-----	-----
Other expense, net.....	(38,073)	(30,479)	(1,558)	(330)	
(Loss) income before income taxes.....	(48,511)	(29,283)	854	1,789	
Income taxes.....	1,359	137	783	682	
	-----	-----	-----	-----	-----
Net (loss) income.....	(49,870)	(29,420)	71	1,107	
Preferred stock dividends.....	(136)	(157)	(122)	(122)	
Net (loss) income available to common shareholders....	\$ (50,006)	\$ (29,577)	\$ (51)	\$ 985	\$
	=====	=====	=====	=====	=====
(Loss) income per share:					
Basic.....	\$ (6.25)	\$ (5.28)	\$ (0.01)	\$ 0.13	\$
	=====	=====	=====	=====	=====
Diluted.....	\$ (6.25)	\$ (5.28)	\$ (0.01)	\$ 0.06	\$
	=====	=====	=====	=====	=====
Weighted average common shares:					
Basic.....	8,005,386	5,598,626	5,598,626	7,406,486	10,259
	=====	=====	=====	=====	=====
Diluted.....	8,005,386	5,598,626	5,598,626	17,500,194	20,241
	=====	=====	=====	=====	=====

	AS OF DEC		
	2000	1999	19
	-----	-----	-----
	(IN THO		
BALANCE SHEET DATA:			
Cash and cash equivalents.....	\$35,817	\$ 2,396	\$ 9
Working capital.....	40,552	3,783	2,2
Total assets.....	58,809	20,610	7,2
Long-term obligations, net of current portion.....	1	5,073	6
Preferred stock.....	--	2,500	1,5
Common stock warrants.....	--	31,194	1,5
Stockholders' equity (deficit).....	52,335	(25,711)	6

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

FORWARD-LOOKING STATEMENTS

THE FOLLOWING SECTION OF THIS ANNUAL REPORT ON FORM 10-K ENTITLED

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"MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS" CONTAINS STATEMENTS THAT ARE NOT STATEMENTS OF HISTORICAL FACT AND ARE FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF FEDERAL SECURITIES LAWS. THESE STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE OUR ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY THE FORWARD-LOOKING STATEMENTS. THESE STATEMENTS REFLECT OUR CURRENT VIEWS WITH RESPECT TO FUTURE EVENTS AND ARE BASED ON ASSUMPTIONS AND SUBJECT TO RISKS AND UNCERTAINTIES. WE DISCUSS MANY OF THESE RISKS IN DETAIL UNDER THE HEADING "IMPORTANT FACTORS THAT MAY AFFECT FUTURE OPERATING RESULTS" BEGINNING ON PAGE 25. YOU SHOULD CAREFULLY REVIEW ALL OF THESE FACTORS, AS WELL AS THE COMPREHENSIVE DISCUSSION OF FORWARD-LOOKING STATEMENTS ON PAGE 2 OF THIS ANNUAL REPORT ON FORM 10-K.

OVERVIEW

We are a provider of innovative, enabling tools for drug discovery research at pharmaceutical and biotechnology companies, universities and government research laboratories. We focus on two critical bottlenecks in the drug discovery process, proteomics during the target validation stage of the drug discovery process and ADMET screening during the secondary screening stage of the drug discovery process. Our proteomics products consist of tools that allow our customers to purify and analyze proteins. Our ADMET screening products are tools that enable our customers to test drug candidates to determine their absorption, distribution, metabolism, elimination and toxicology properties prior to conducting costly clinical trials.

In providing tools for drug discovery generally, we have established a significant base business and have achieved brand recognition through our sale of precision pumps, ventilators and tissue/organ systems. Since our reorganization in 1996, we have built upon our base business and brand recognition by adding new technologies in the areas of proteomics and ADMET screening. Specifically, we have acquired the following product lines, businesses and technologies:

- In June 1998, we acquired products for cell injection systems from Medical Systems Corporation for \$1.0 million in cash,
- In March 1999, we acquired Biochrom, which develops and manufactures DNA/RNA/protein calculators, spectrophotometers, amino acid analyzers and related consumables in the United Kingdom, from Pharmacia Biotech (Biochrom) Ltd for \$7.0 million in cash,
- In March 1999, we entered into an exclusive license for the technology underlying our ScanTox in vitro toxicology testing product for \$25,000 in cash and ongoing royalties and licensing fee payments,
- In September 1999, we acquired products for intracellular research from Clark Electromedical Instruments for \$349,000 in cash,
- In November 1999, we acquired our NaviCyte diffusion chamber systems product for drug absorption testing from a subsidiary of Trega Biosciences for \$390,000 in cash and future royalties,
- In November 1999, we acquired substantially all the assets and certain liabilities of Hugo Sachs Elektronik, consisting primarily of products for organ testing, for \$730,000 in cash,
- In May 2000, we acquired certain assets of Biotronik, consisting primarily of products for amino acid analysis, for \$469,000 in cash,

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- In July 2000, we acquired substantially all the assets of AmiKa Corporation consisting of purification tips, spin columns, a 96 well drug binding assay and related technology and intellectual property for \$3.1 million in cash, and
- In December 2000, we acquired substantially all the assets and certain liabilities of MitoScan Corporation, a company that produces tools for toxicity testing for \$370,000 in cash and future milestone payments and royalties.

REVENUES. We generate revenues by selling instruments, devices and consumables through our catalog, our distributors and our website. Every one to three years, we intend to distribute a new, comprehensive catalog initially in a series of bulk mailings, first to our existing customers, followed by mailings to targeted markets of potential customers. Distribution will then be made periodically to potential and existing customers through direct mail and trade shows and in response to telephone inquiries over the life of the catalog. From time to time, we also intend to distribute catalog supplements that promote selected areas of our catalog or new products to targeted subsets of our customer base. Future distributions of our comprehensive catalog and our catalog supplements will be determined primarily by the incidence of new product introductions, which cannot be predicted. Our customers are end user research scientists at pharmaceutical and biotechnology companies, universities and government laboratories. Revenue from catalog sales in any period is a function of time elapsed since the last mailing of the catalog, the number of catalogs mailed and the number of new items included in the catalog. For the year ended December 31, 2000, approximately 82% of our revenues were derived from products we manufacture. The remaining 18% of our revenues were derived from complementary products we distribute in order to provide the researcher with a single source for all equipment needed to conduct a particular experiment. For the year ended December 31, 2000, approximately one-half of our revenues were derived through catalog sales and through reference to our website, which is an electronic version of our catalog. We do not currently have the capability to accept purchase orders through our website. For the year ended December 31, 2000, approximately 69% of our revenues were derived from sales made by our non-U.S. operations. A majority of our international sales during this period consisted of sales to Amersham Pharmacia Biotech, the distributor for our spectrophotometers and amino acid analyzers. Amersham Pharmacia Biotech distributes these products to customers around the world from its distribution center in Upsalla, Sweden, including to many customers located in the United States. As a result, we believe our international sales would have been less as a percentage of our revenues for the year ended December 31, 2000 than if we had shipped our products directly to our end users.

COST OF GOODS SOLD. Cost of goods sold includes material, labor and manufacturing overhead costs, obsolescence charges, packaging costs, warranty costs, shipping charges and royalties. Our costs of goods sold may vary over time based on the mix of products sold. We sell products that we manufacture and products that we purchase from third parties. The products that we purchase from third parties have higher cost of goods sold because the profit is effectively shared with the original manufacturer. We anticipate that our manufactured products will continue to have a lower cost of goods sold as a percentage of revenues from such products as compared with our manufactured products for the foreseeable future.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administrative expense consists primarily of salaries and other related costs for personnel in executive, finance, accounting, information technology and human relations functions. Other costs include facility costs, professional fees for legal and accounting services, and provision for doubtful accounts.

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SALES AND MARKETING EXPENSE. Sales and marketing expense consists primarily of salaries and related expenses for personnel in sales, marketing and customer support functions. We also incur costs for trade shows, demonstration equipment, public relations and marketing materials, consisting primarily of the printing and distribution of our 1,000 page catalog and the maintenance of our web

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site. We may from time to time expand our marketing efforts by employing additional technical marketing specialists in an effort to increase sales of selected categories of products in our catalog.

RESEARCH AND DEVELOPMENT EXPENSE. Research and development expense consists primarily of salaries and related expenses for personnel and capital resources used to develop and enhance our products. Other research and development expense includes fees paid to consultants and outside service providers, and material costs for prototype and test units. We expense research and development costs as incurred. We believe that significant investment in product development is a competitive necessity and plan to continue this investment in order to realize the potential of our new technologies for proteomics and ADMET.

STOCK COMPENSATION EXPENSE. Stock compensation resulting from stock option grants to our employees represents the difference between the fair market value and the exercise price of the stock options on the date the stock options were granted for those options that are considered fixed awards. Stock compensation expense is also recorded for stock option grants that were considered variable awards as the number of shares to be acquired by employees was indeterminable at the date of grant. Deferred compensation on fixed awards is amortized as a charge to operations over the vesting period of the options.

COMMON STOCK WARRANT INTEREST EXPENSE. On March 15, 1996, in connection with the issuance of redeemable preferred stock and subordinated debentures, 8,509,905 common stock warrants were issued. The related common stock warrant interest expense represents accrual of a liability to warrant holders to require us to pay cash equal to the fair market value of the warrants in exchange for the warrants, or any common stock from the exercise of the warrants, beginning March 15, 2002. Effective with our initial public offering of common stock in December 2000, the warrants were exercised for common stock and, as a result, the right to be paid cash terminated.

Our business has historically been affected by a number of factors that cause revenue and earnings to vary from quarter to quarter, including catalog mailings, new product introductions, acquisitions and our substantial European business, which in summer months defers purchases. As a result, we believe that revenue and earnings in one quarter of the year may not be indicative of revenue and earnings in a subsequent quarter.

RESULTS OF OPERATIONS

YEAR ENDED DECEMBER 31, 2000 COMPARED TO YEAR ENDED DECEMBER 31, 1999

REVENUES. Revenues increased \$4.4 million, or 17%, to \$30.6 million in 2000 from \$26.2 million in 1999. Approximately \$2.2 million of the \$4.4 million increase, or 50%, was attributable to the full period effect of revenues from the acquisition of our Hugo Sachs subsidiary in November 1999. Approximately \$1.9 million of the increase was from existing business revenue growth and the balance was from product line acquisitions made in the second half of 1999. Revenues for 2000 would have been approximately \$31.8 million if our sales denominated in foreign currencies were translated into U.S. dollars using 1999 exchange rates, an increase of 22% over 1999.

COST OF GOODS SOLD. Cost of goods sold increased \$2.3 million, or 17%, to

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\$15.8 million in 2000 from \$13.5 million in 1999. As a percentage of revenues, cost of goods sold was virtually unchanged for 2000 compared to 1999.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administrative expense increased \$1.0 million, or 25%, to \$5.2 million in 2000 from \$4.2 million in 1999 due primarily to increased headcount and additional expenses related to being a public company and the full period effect of the Biochrom subsidiary which was acquired in March 1999. As a percentage of revenues, general and administrative expense increased to 17% in 2000 from 16% in 1999.

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SALES AND MARKETING EXPENSE. Sales and marketing expense increased \$737,000, or 30%, to \$3.2 million in 2000 from \$2.5 million in 1999. The increase was primarily due to additional sales and marketing expenses incurred in acquired businesses and to a lesser extent the addition of marketing personnel and additional catalog costs. As a percentage of revenues, sales and marketing expense was 10% in 2000 compared to 9% in 1999. This increasing percentage also reflects the addition of marketing personnel to promote newly acquired technology. In the future we may add employees to expand selected categories of our catalog as well as to expand the capabilities of our web site and integrate it into our business planning and processes. These activities, if undertaken, could increase sales and marketing expense as a percentage of revenues.

RESEARCH AND DEVELOPMENT EXPENSE. Research and development spending increased \$345,000, or 29%, to \$1.5 million in 2000 from \$1.2 million in 1999. The increase in research and development expense resulted from additional research and development expenses incurred in acquired businesses, spending on product enhancement and new product development, primarily on ScanTox in vitro toxicology testing and other core technology. As a percentage of revenues, research and development expense was 5% in each of 2000 and 1999.

STOCK COMPENSATION EXPENSE. We recorded \$14.7 million of stock compensation expense in the twelve months ended December 31, 2000. In connection with the grant of stock options to employees in 2000, we recorded deferred compensation of approximately \$4.6 million and will recognize approximately \$5.2 million of additional expense over the remaining vesting life of the options. In addition, in 2000, we also recorded \$10.0 million of non-recurring stock compensation expense in connection with options granted in 1996 and 1999. In 1999, we recorded \$3.3 million of stock compensation expense related to these 1996 and 1999 option grants.

AMORTIZATION OF GOODWILL. Amortization of goodwill was \$604,000 in 2000 and \$368,000 in 1999. This increase of \$236,000, or 64%, was the result of amortizing additional goodwill incurred in connection with our acquisitions in 2000 and the full year effect of our 1999 acquisitions.

OTHER EXPENSE, NET. Other expense, net, was \$38.1 million in 2000 compared to \$30.5 million in 1999. Other expense, net, included a non-cash charge for common stock warrant interest expense of \$36.9 million in 2000 and \$29.7 million in 1999. This amount represents the difference between the fair value of the warrant for financial reporting purposes and its exercise price. This liability represented the right of warrant holders to require us to pay cash equal to the fair market value of the warrants in exchange for the warrants, or any common stock from the exercise of the warrants, beginning March 15, 2002. Effective with our initial public offering in December 2000, the warrants were exercised for common stock and the right to be paid cash terminated. The liability previously recorded became part of common stock and additional-paid-in capital. Net interest expense increased \$100,000, or 15%, to \$756,000 in 2000 from \$656,000 in 1999. The increase resulted primarily from higher debt balances in 2000, which were incurred to finance acquisitions,

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partially offset by interest income on proceeds from the initial public offering. Currency loss increased \$276,000 to \$324,000 due primarily to dollar denominated debt in a foreign subsidiary.

INCOME TAXES. The Company's effective income tax rates were 36% for 2000 and 33% for 1999 notwithstanding the impact for common stock warrant interest expense that is not deductible for income tax purposes. The increase in the rate was principally due to increased taxable income in certain foreign jurisdictions that have higher statutory income tax rates.

YEAR ENDED DECEMBER 31, 1999 COMPARED TO YEAR ENDED DECEMBER 31, 1998

REVENUES. Revenues increased \$14.0 million, or 115%, to \$26.2 million in 1999 from \$12.2 million in 1998. Approximately \$12.2 million, or 87%, of the increase was derived from the March 1999 acquisition of Biochrom. Excluding the impact of changes in foreign currency exchange rates, revenues

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based on 1998 rates would have been approximately \$26.3 million in 1999. Revenues from our existing business increased \$1.8 million, or 15%, to \$14.0 million in 1999 from \$12.2 million in 1998. The increase was attributable to full year revenues of \$570,000 from the products acquired from Medical Systems in June 1998, increased sales resulting from our expanded direct marketing efforts on traditional products of \$884,000, which included hiring additional marketing staff, producing a CD-ROM of our catalog, and creating and installing an electronic version of our catalog on our website, with the balance due to revenues from product lines acquired in the second half of 1999.

COST OF GOODS SOLD. Cost of goods sold increased \$8.2 million, or 153%, to \$13.5 million in 1999 from \$5.4 million in 1998. As a percentage of revenues, cost of goods sold increased to 52% in 1999 from 44% in 1998. The increase in cost of goods sold in 1999 was primarily the result of the acquisition of Biochrom. The percentage increase was also the result of Biochrom, which experiences higher costs of goods sold as a percentage of revenues due to the marketing of its products primarily through a distributor, which receives a discount to the list price that is calculated to cover the distributor's costs and profits.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administration expense increased \$1.8 million, or 79%, to \$4.4 million in 1999 from \$2.3 million in 1998. Biochrom accounted for \$1.1 million, or 60%, of the increase. Also in 1999, \$3.3 million was recorded as non-cash compensation expense from options granted in 1996. Excluding the Biochrom acquisition, expenses increased \$800,000, or 35%, to \$3.1 million in 1999 from \$2.3 million in 1998. The increase was due to the need to support expanding operations. As a percentage of revenues, general and administration expense decreased to 16% in 1999 from 19% in 1998.

SALES AND MARKETING EXPENSE. Sales and marketing expense increased \$727,000, or 42%, to \$2.4 million in 1999 from \$1.7 million in 1998. Biochrom accounted for \$608,000, or 84%, of the increase. Excluding the Biochrom acquisition, expenses increased \$119,000, or 7%, to \$1.8 million in 1999 from \$1.7 million in 1998. The increase was due to expanded direct marketing efforts and the full year effect of support for the products acquired in June 1998. As a percentage of revenues, sales and marketing expense decreased to 9% in 1999 from 14% in 1998. The decrease in sales and marketing expense as a percentage of revenues was primarily due to the acquisition of Biochrom, which has lower sales and marketing expense because those expenses are primarily borne by its distributor.

RESEARCH AND DEVELOPMENT EXPENSE. Research and development spending

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increased \$863,000 in 1999, or 266%, to \$1.2 million from \$325,000 in 1998. The acquisition of Biochrom contributed \$577,000 to the increase. The balance of the increase was spending for development of our newly licensed ScanTox technology and expansion of our core drug screening products. As a percentage of revenues, research and development expense increased to 5% in 1999 from 3% in 1998. The increase in research and development expense as a percentage of revenues was primarily due to Biochrom, our employment of additional engineers and increased charges for outside services.

AMORTIZATION OF GOODWILL. Amortization of goodwill was \$368,000 in 1999 and \$28,000 in 1998. The increase is the result of amortizing additional goodwill incurred in connection with our acquisitions in 1999 and the full year effect of the acquisition of the Medical Systems products in June 1998.

OTHER EXPENSE, NET. Other expense, net was \$30.5 million in 1999 compared to \$1.6 million in 1998. Other expense, net, included a non-cash charge for common stock warrant interest expense of \$29.7 million in 1999 and \$1.4 million in 1998. Net interest expense increased \$447,000, or 214%, to \$656,000 in 1999 from \$209,000 in 1998. The increase resulted primarily from higher debt balances in 1999, which were incurred to finance acquisitions.

INCOME TAXES. The Company's effective income tax rates were 33% for 1999 and 35% for 1998 notwithstanding the impact for common stock warrant interest expense which is not deductible for

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income tax purposes. The decrease in the rate was principally due to certain lower foreign statutory jurisdiction income tax rates, specifically the result of the acquisition of a United Kingdom subsidiary.

LIQUIDITY AND CAPITAL RESOURCES

Historically, we have financed our business through cash provided by operating activities, the issuance of common stock, preferred stock, and bank borrowings. Our liquidity requirements have arisen primarily from investing activities, including funding of acquisitions, payments on outstanding indebtedness, research and development expenditures, and capital expenditures. As of December 31, 2000, we had cash of \$35.8 million. Since our reorganization in March 1996, we have raised \$59.0 million, consisting of \$2.5 million of preferred and common stock issued in private placements or upon exercise of stock options and warrants, \$11.7 million of debt and \$44.8 million from issuance of common stock in our initial public offering in December 2000. Upon receipt of the initial public offering proceeds on December 12, 2000, we repaid all debt and redeemed all outstanding preferred stock. In January 2001, we issued additional common stock upon the underwriters' exercise of the over-allotment option from our initial public offering which resulted in an additional \$7.0 million in net proceeds to us.

Our operating activities generated cash of \$2.1 million in 2000, \$2.9 million in 1999 and \$1.8 million in 1998. For all periods presented, operating cash flows were primarily due to operating results, including the full-year effect of acquisitions prior to non-cash charges, partially offset by working capital requirements. Working capital requirements were affected by acquisitions, which increased accounts receivable and inventory carrying amounts partially offset by increased amounts in accounts payable and accrued expenses.

Our investing activities used cash of \$5.3 million in 2000, \$8.5 million in 1999 and \$1.4 million in 1998. Cash has been used in the following technology and business acquisitions:

- \$370,000 for substantially all the assets of MitoScan Corporation in

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December 2000,

- \$3.1 million for substantially all the assets of AmiKa Corporation in July 2000,
- \$469,000 for Biotronik's amino acid analysis systems business in May 2000,
- \$390,000 for the NaviCyte diffusion chamber systems product line in November 1999,
- \$730,000 for Hugo Sachs Elektronik in November 1999,
- \$349,000 for intracellular research products from Clark Electromedical Instruments in September 1999,
- \$7.0 million for Biochrom in March 1999, and
- \$1.0 million for Medical Systems Corporation's cell injection systems business in June 1998.

Our financing activities have consisted of borrowings under a revolving credit facility, long-term debt and the issuance of preferred stock and common stock, including in our initial public offering. Financing activities provided cash of \$36.5 million in 2000 and \$7.0 million in 1999, and used cash of \$105,000 in 1998. Prior to 1999, we had historically generated sufficient cash flow from operations to fund expenditures on capital equipment, debt service, equity transactions, stock repurchases and preferred dividend payments. In 1999, in connection with the acquisition of Biochrom, we increased our long-term indebtedness by approximately \$5.5 million and issued approximately \$1.0 million in convertible preferred stock. As a result, the level of debt service required increased substantially compared to historical levels. Upon completion of the initial public offering, the convertible preferred stock was converted into common stock, and we used \$1.5 million of the offering proceeds to redeem our series A redeemable preferred stock and \$10.4 million to repay the bank term loan, the subordinated debt and the revolving credit facility.

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Based on our operating plans, we expect that proceeds from the initial public offering, available cash and cash generated from operations will be sufficient to finance operations and capital expenditures for at least two years from December 31, 2000, however, we may use substantial amounts of capital to accelerate product development, expand our sales and marketing activities or make acquisitions. We may need to raise additional capital to the extent that we exhaust our available capital through these activities in the next two years. Additional capital raising activities may be dilutive to existing stockholders to the extent we raise capital by issuing equity securities. Moreover, additional capital may not be available on acceptable terms or at all. Accordingly, there can be no assurance that we will be successful in raising additional capital.

IMPACT OF FOREIGN CURRENCIES

We sell our products in many countries and a substantial portion of our sales, costs and expenses are denominated in foreign currencies, especially the United Kingdom pound sterling and the Euro. For fiscal years 2000 and 1999, the U.S. dollar strengthened against these currencies resulting in reduced consolidated revenue growth, as expressed in U.S. dollars. In addition, the currency fluctuations resulted in foreign currency losses of approximately \$48,000 in 1999 and \$324,000 in 2000.

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Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we plan to evaluate our currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

BACKLOG

Our order backlog was approximately \$2.8 million as of December 31, 2000 and \$2.1 million as of December 31, 1999. We include in backlog only those orders for which we have received valid purchase orders. Purchase orders may be cancelled at any time prior to shipment. Our backlog as of any particular date may not be representative of actual sales for any succeeding period. We typically ship all of our backlog at any given time within 90 days thereafter.

ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standard Board issued Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities." SFAS 133 establishes accounting and reporting standards requiring that every derivative instrument be recorded in the balance sheet as either an asset or liability measured at its fair value. SFAS 133, as amended by SFAS 137 and SFAS 138, is effective for years beginning after June 15, 2000. SFAS 133 was adopted on January 1, 2001. The adoption of this statement did not have a significant impact on our financial position, results of operations or cash flows.

IMPACT OF INFLATION

We believe that our revenues and results of operations have not been significantly impacted by inflation during the past three years.

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IMPORTANT FACTORS THAT MAY AFFECT FUTURE OPERATING RESULTS

Our operating results may vary significantly from quarter to quarter depending on a number of factors, including:

IF WE ARE UNABLE TO ACHIEVE AND SUSTAIN MARKET ACCEPTANCE OF OUR NEW PROTEOMICS AND ADMET SCREENING PRODUCTS ACROSS THEIR BROAD INTENDED RANGE OF APPLICATIONS, WE WILL NOT GENERATE EXPECTED REVENUE GROWTH. Our business strategy depends on our successfully developing and commercializing our new proteomics and ADMET screening technologies to meet our customers' expanding needs and demands. For example, our recent acquisition of AmiKa Corporation involved the purchase of the technology that we are using to develop our 96 well plate for serum protein binding analysis. Market acceptance of this and other new products will depend on many factors, including the extent of our marketing efforts and our ability to demonstrate to existing and potential customers that our technologies are superior to other technologies and products that are available now or may become available in the future. If our new products do not gain market acceptance, it could materially adversely affect our business and future growth prospects.

OUR PRODUCTS COMPETE IN MARKETS THAT ARE SUBJECT TO RAPID TECHNOLOGICAL CHANGE, AND THEREFORE ONE OR MORE OF OUR PRODUCTS COULD BE MADE OBSOLETE BY NEW TECHNOLOGIES. Because the market for drug discovery tools is characterized by rapid technological change and frequent new product introductions, our product lines may be made obsolete unless we are able to continually improve our existing products and develop new products. To meet the evolving needs of our customers, we must continually enhance our current and planned products and develop and introduce new products. However, we may experience difficulties that

may delay or prevent the successful development, introduction and marketing of new products or product enhancements. In addition, our product lines are based on complex technologies that are subject to rapid change as new technologies are developed and introduced in the marketplace. We may have difficulty in keeping abreast of the rapid changes affecting each of the different markets we serve or intend to serve. Our failure to develop and introduce products in a timely manner in response to changing technology, market demands or the requirements of our customers could cause our product sales to decline, and we could experience significant losses.

We offer and plan to offer a broad product line and have incurred and expect to continue to incur substantial expenses for development of new products and enhanced versions of our existing products. The speed of technological change in our market may prevent us from being able to successfully market some or all of our products for the length of time required to recover their often significant development costs. Failure to recover the development costs of one or more products or product lines could decrease our profitability or cause us to experience significant losses.

WE HAVE LIMITED EXPERIENCE IN MANUFACTURING SOME OF OUR PRODUCTS THAT COULD CAUSE PROBLEMS OR DELAYS RESULTING IN LOST REVENUE. We have only recently begun to manufacture and therefore currently have limited manufacturing capacity for some of our products, such as our PrepTip protein purification pipette tips. If we fail to manufacture and deliver products in a timely manner, our relationships with our customers could be seriously harmed, and our revenue could decline. To achieve the production levels necessary for successful commercialization, we will need to scale-up our manufacturing facilities and establish automated manufacturing methods and quality control procedures. We cannot assure you that manufacturing or quality control problems will not arise as we attempt to scale-up our production or that we can scale-up manufacturing and quality control in a timely manner or at commercially reasonable costs. If we are unable to manufacture these products consistently on a timely basis because of these or other factors, we may not achieve the level of sales from these products that we otherwise anticipate.

IF AMERSHAM PHARMACIA BIOTECH TERMINATES ITS DISTRIBUTION AGREEMENT WITH US OR FAILS TO PERFORM ITS OBLIGATIONS UNDER OUR DISTRIBUTION AGREEMENT, IT COULD IMPAIR THE MARKETING AND DISTRIBUTION EFFORTS FOR SOME

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OF OUR PRODUCTS AND RESULT IN LOST REVENUES. For the year ended December 31, 2000, approximately 39% of our revenues were generated through an agreement with Amersham Pharmacia Biotech, or APBiotech, under which APBiotech acts as our primary marketing and distribution channel for the products of our Biochrom subsidiary. Under the terms of this agreement, we are restricted from allowing another person or entity to distribute, market and sell the majority of the products of our Biochrom subsidiary. We are also restricted from making or promoting sales of the majority of the products of our Biochrom subsidiary to any person or entity other than APBiotech or its authorized subdistributors. We have little or no control over APBiotech's marketing and sales activities or the use of its resources. APBiotech may fail to purchase sufficient quantities of products from us or perform appropriate marketing and sales activities. The failure by APBiotech to perform these activities could materially adversely affect our business and growth prospects during the term of this agreement. In addition, our inability to maintain our arrangement with APBiotech for product distribution, could materially impede the growth of our business and our ability to generate sufficient revenue. Our agreement with APBiotech may be terminated under some circumstances, including in the event of a breach of a material term by us. This agreement has a perpetual term; however, it may be terminated in accordance with its terms by either party upon 18 months' prior written notice. While we believe our relationship with APBiotech is good, we cannot guarantee

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that the contract will be renewed or that APBiotech will aggressively market our products in the future.

WE MAY BE ADVERSELY AFFECTED BY LITIGATION INVOLVING HARVARD UNIVERSITY. On December 26, 2000, Harvard University filed a lawsuit in U.S. District Court, District of Massachusetts alleging that our use of the "Harvard Bioscience" and "Harvard Apparatus" names infringes on Harvard University's trademarks. Harvard University is seeking both injunctive relief and monetary damages. We believe that these claims are without merit, and we are vigorously defending against such claims. We believe that the defense of these claims could involve significant litigation-related expenses, but that it will not have a material adverse effect on our business, financial condition or results of operations. If claims for injunctive relief or other damages are decided against us, we could suffer monetary damages, lose our ability to use the names "Harvard Bioscience" and "Harvard Apparatus," lose the reputation and goodwill associated with these names and ultimately experience decreased revenues and earnings in subsequent periods.

OUR COMPETITORS AND POTENTIAL COMPETITORS MAY DEVELOP PRODUCTS AND TECHNOLOGIES THAT ARE MORE EFFECTIVE OR COMMERCIALY ATTRACTIVE THAN OUR PRODUCTS. We expect to encounter increased competition from both established and development-stage companies that continually enter our market. We anticipate that these competitors will include:

- companies developing and marketing life sciences research tools,
- health care companies that manufacture laboratory-based tests and analyzers,
- diagnostic and pharmaceutical companies, and
- companies developing drug discovery technologies.

Currently, our principal competition comes from established companies that provide products that perform many of the same functions for which we market our products. Our competitors may develop or market products that are more effective or commercially attractive than our current or future products. Many of our competitors have substantially greater financial, operational, marketing and technical resources than we do. Moreover, these competitors may offer broader product lines and tactical discounts, and may have greater name recognition. In addition, we may face competition from new entrants into our field. We may not have the financial resources, technical expertise or marketing, distribution or support capabilities to compete successfully in the future.

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IF WE ARE UNABLE TO EFFECTIVELY PROTECT OUR INTELLECTUAL PROPERTY, THIRD PARTIES MAY USE OUR TECHNOLOGY, WHICH WOULD IMPAIR OUR ABILITY TO COMPETE IN OUR MARKETS. Our continued success will depend in significant part on our ability to obtain and maintain meaningful patent protection for our products throughout the world. Patent law relating to the scope of claims in the technology fields in which we operate is still evolving. The degree of future protection for our proprietary rights is uncertain. We own ten U.S. patents and have four patent applications pending in the U.S. We also own numerous U.S. registered trademarks and trade names and have applications for the registration of trademarks and trade names pending. We rely on patents to protect a significant part of our intellectual property and to enhance our competitive position. However, our presently pending or future patent applications may not issue as patents, and any patent previously issued to us may be challenged, invalidated, held unenforceable or circumvented. Furthermore, the claims in patents which have been issued or which may be issued to us in the future may not be sufficiently broad to prevent third parties from producing competing products similar to our

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products. In addition, the laws of various foreign countries in which we compete may not protect our intellectual property to the same extent as do the laws of the United States. If we fail to obtain adequate patent protection for our proprietary technology, our ability to be commercially competitive will be materially impaired.

In addition to patent protection, we also rely on protection of trade secrets, know-how and confidential and proprietary information. To maintain the confidentiality of trade secrets and proprietary information, we generally seek to enter into confidentiality agreements with our employees, consultants and strategic partners upon the commencement of a relationship with us. However, we may not obtain these agreements in all circumstances. In the event of unauthorized use or disclosure of this information, these agreements, even if obtained, may not provide meaningful protection for our trade secrets or other confidential information. In addition, adequate remedies may not exist in the event of unauthorized use or disclosure of this information. The loss or exposure of our trade secrets and other proprietary information would impair our competitive advantages and could have a material adverse effect on our operating results, financial condition and future growth prospects.

WE MAY BE INVOLVED IN LAWSUITS TO PROTECT OR ENFORCE OUR PATENTS WHICH WOULD BE EXPENSIVE AND TIME-CONSUMING. In order to protect or enforce our patent rights, we may initiate patent litigation against third parties. We may also become subject to interference proceedings conducted in the patent and trademark offices of various countries to determine the priority of inventions. Several of our products are based on patents which are closely surrounded by patents held by competitors or potential competitors. As a result, we believe there is a greater likelihood of a patent dispute than would be expected if our patents were not closely surrounded by other patents. The defense and prosecution, if necessary, of intellectual property suits, interference proceedings and related legal and administrative proceedings would be costly and divert our technical and management personnel from their normal responsibilities. We may not prevail in any of these suits. An adverse determination of any litigation or defense proceedings could put our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. For example, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments in the litigation. Securities analysts or investors may perceive these announcements to be negative, which could cause the market price of our stock to decline.

OUR SUCCESS WILL DEPEND PARTLY ON OUR ABILITY TO OPERATE WITHOUT INFRINGING ON OR MISAPPROPRIATING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. We may be sued for infringing on the intellectual property rights of others, including the patent rights, trademarks and trade names of third parties. Intellectual property litigation is costly and the outcome is uncertain. If we do not prevail in any intellectual property litigation, in addition to any damages we might have to pay, we could be required to stop the infringing

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activity, or obtain a license to or design around the intellectual property in question. If we are unable to obtain a required license on acceptable terms, or are unable to design around any third party patent, we may be unable to sell some of our products and services, which could result in reduced revenue.

AmiKa Corporation, whose assets we purchased in July 2000, received and responded to correspondence from counsel to a third party competitor regarding

the possible infringement by it of a patent and other pending patent applications held by such third party. Because this competitor has not pursued this matter since AmiKa's reply on June 7, 2000 in which AmiKa stated that it did not believe it was infringing on this competitor's patents, we believe that this matter has been concluded. However, we cannot assure you that this third party competitor will not assert these or similar claims in the future. We do not currently derive a significant portion of our revenue from products which depend on the intellectual property related to this alleged infringement.

CHANGES IN ACCOUNTING FOR GOODWILL AMORTIZATION MAY HAVE A MATERIAL ADVERSE AFFECT ON US. We currently amortize goodwill purchased in our acquisitions on a straight line basis ranging from 5 to 15 years. At December 31, 2000, we had unamortized goodwill of \$9.6 million, or 16.3% of total assets. Any changes in accounting rules under generally accepted accounting principles that reduce the period over which we may amortize goodwill may have an adverse effect on our ability to consummate future acquisitions and our financial results. A shorter goodwill amortization period would increase annual amortization expense and reduce our net income over the amortization period. In addition, we continually evaluate whether any portion of the remaining balance of goodwill may not be recoverable. If it is determined in the future that a portion of our goodwill is impaired, we may be required to write off that portion of our goodwill which would have an adverse effect on our net income for the period in which the write off occurs.

WE ARE DEPENDENT UPON OUR LICENSED TECHNOLOGIES AND MAY NEED TO OBTAIN ADDITIONAL LICENSES IN THE FUTURE TO OFFER OUR PRODUCTS AND REMAIN COMPETITIVE. We have licensed key components of our technologies from third parties. While we do not currently derive a material portion of our revenue from products that depend on these licensed technologies, we may in the future. If our license agreements were to terminate prematurely or if we breach the terms of any licenses or otherwise fail to maintain our rights to these technologies, we may lose the right to manufacture or sell our products that use these licensed technologies. In addition, we may need to obtain licenses to additional technologies in the future in order to keep our products competitive. If we fail to license or otherwise acquire necessary technologies, we may not be able to develop new products that we need to remain competitive.

MANY OF OUR CURRENT AND POTENTIAL CUSTOMERS ARE FROM THE PHARMACEUTICAL AND BIOTECHNOLOGY INDUSTRIES AND ARE SUBJECT TO RISKS FACED BY THOSE INDUSTRIES. We derive a substantial portion of our revenues from pharmaceutical and biotechnology companies. We expect that pharmaceutical and biotechnology companies will continue to be our major source of revenues for the foreseeable future. As a result, we are subject to risks and uncertainties that affect the pharmaceutical and biotechnology industries, such as pricing pressures as third-party payers continue challenging the pricing of medical products and services, government regulation, ongoing consolidation and uncertainty of technological change, and to reductions and delays in research and development expenditures by companies in these industries. In particular, several proposals are being contemplated by lawmakers in the United States to extend the federal Medicare program to include reimbursement for prescription drugs. Many of these proposals involve negotiating decreases in prescription drug prices or imposing price controls on prescription drugs. If appropriate reimbursement cannot be obtained, it could result in our customers purchasing fewer products from us as they reduce their research and development expenditures.

In addition, we are dependent, both directly and indirectly, upon general health care spending patterns, particularly in the research and development budgets of the pharmaceutical and biotechnology industries, as well as upon the financial condition of various governments and government agencies.

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Many of our customers, including universities, government research laboratories, private foundations and other institutions, obtain funding for the purchase of our products from grants by governments or government agencies. There exists the risk of a potential decrease in the level of governmental spending allocated to scientific and medical research which could substantially reduce or even eliminate these grants. If government funding necessary to purchase our products were to decrease, our business and results of operations could be materially adversely affected.

OUR BUSINESS IS SUBJECT TO ECONOMIC POLITICAL AND OTHER RISKS ASSOCIATED WITH INTERNATIONAL REVENUES AND OPERATIONS. Since we manufacture and sell our products worldwide, our business is subject to risks associated with doing business internationally. Our revenues from our non-U.S. operations represented approximately 69% of our total revenues for the year ended December 31, 2000. We anticipate that revenue from international operations will continue to represent a substantial portion of our total revenues. In addition, a number of our manufacturing facilities and suppliers are located outside the United States. Accordingly, our future results could be harmed by a variety of factors, including:

- changes in foreign currency exchange rates, which resulted in a foreign currency loss of \$324,000 for the year ended December 31, 2000,
- changes in a specific country's or region's political or economic conditions, including Western Europe, in particular,
- potentially negative consequences from changes in tax laws affecting our ability to expatriate profits,
- difficulty in staffing and managing widespread operations, and
- unfavorable labor regulations applicable to our European operations, such as the unenforceability of non-competition agreements in the United Kingdom.

OUR QUARTERLY REVENUES WILL LIKELY BE AFFECTED BY VARIOUS FACTORS, INCLUDING THE SEASONAL NATURE OF PURCHASING IN EUROPE. Our revenues may vary from quarter to quarter due to a number of factors, including the timing of catalog mailings and new product introductions, future acquisitions and our substantial sales to European customers, who in summer months often defer purchases. Therefore, we expect our revenues from European sales to be lower during the summer season and as a result our quarter-to-quarter revenues will likely experience fluctuations.

WE MAY LOSE MONEY WHEN WE EXCHANGE FOREIGN CURRENCY RECEIVED FROM INTERNATIONAL REVENUES INTO U.S. DOLLARS. For the year ended December 31, 2000, approximately 69% of our business was conducted in currencies other than the U.S. dollar, which is our reporting currency. As a result, currency fluctuations among the U.S. dollar and the currencies in which we do business have caused and will continue to cause foreign currency transaction gains and losses. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. In the future, we may undertake to manage foreign currency risk through additional hedging methods. We recognize foreign currency gains or losses arising from our operations in the period incurred. We cannot guarantee that we will be successful in managing foreign currency risk or in predicting the effects of exchange rate fluctuations upon our future operating results because of the number of currencies involved, the variability of currency exposure and the potential volatility of currency exchange rates.

IF WE ENGAGE IN ANY ACQUISITION, WE WILL INCUR A VARIETY OF COSTS, AND MAY NEVER REALIZE THE ANTICIPATED BENEFITS OF THE ACQUISITION. Our business strategy includes the future acquisition of businesses, technologies, services or products that we believe are a strategic fit with our business. If we do

undertake any acquisition, the process of integrating an acquired business, technology, service or product may result in unforeseen operating difficulties and expenditures and may absorb significant management attention that would otherwise be available for ongoing development of our business. Moreover, we may fail to realize the anticipated benefits of any acquisition. Future acquisitions could

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reduce our stockholders' ownership and could cause us to incur debt, expose us to future liabilities and result in amortization expenses related to goodwill and other intangible assets.

IF WE FAIL TO RETAIN OUR KEY PERSONNEL AND HIRE, TRAIN AND RETAIN QUALIFIED EMPLOYEES, WE MAY NOT BE ABLE TO COMPETE EFFECTIVELY, WHICH COULD RESULT IN REDUCED REVENUE. Our success is highly dependent on the continued services of key management, technical and scientific personnel. Our management and other employees may voluntarily terminate their employment with us at any time upon short notice. The loss of the services of any member of our senior management team, including our Chief Executive Officer, Chane Graziano, and our President, David Green, or any of our technical or scientific staff may significantly delay or prevent the achievement of product development and other business objectives. We maintain key person life insurance on Messrs. Graziano and Green. Our future success will also depend on our ability to identify, recruit and retain additional qualified scientific, technical and managerial personnel. Competition for qualified personnel in the technology area is intense, and we operate in several geographic locations where labor markets are particularly competitive, including Boston, Massachusetts and London and Cambridge, England, and where demand for personnel with these skills is extremely high and is likely to remain high. As a result, competition for qualified personnel is intense, particularly in the areas of information technology, engineering and science and the process of hiring suitably qualified personnel is often lengthy. If we are unable to hire and retain a sufficient number of qualified employees, our ability to conduct and expand our business could be seriously reduced.

WE PLAN SIGNIFICANT GROWTH, AND THERE IS A RISK THAT WE WILL NOT BE ABLE TO MANAGE THIS GROWTH. Our success will depend on the expansion of our operations. Effective growth management will place increased demands on our management, operational and financial resources. To manage our growth, we must expand our facilities, augment our operational, financial and management systems, and hire and train additional qualified personnel. Our failure to manage this growth effectively could impair our ability to generate revenue or could cause our expenses to increase more rapidly than revenue, resulting in operating losses.

CERTAIN OF OUR STOCKHOLDERS HAVE SUBSTANTIAL INFLUENCE OVER MATTERS REQUIRING A STOCKHOLDER VOTE. The holders of our stock prior to our initial public offering, beneficially own or control approximately 71% of the outstanding shares of our common stock. If all of these stockholders were to vote together as a group, they would have the ability to elect our board of directors and control the outcome of stockholder votes, including votes concerning by-law amendments and possible mergers, corporate control contests and other significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change of control of our company at a premium price if these stockholders oppose it. The interests of these stockholders may not always coincide with our interests as a company or the interests of other stockholders.

BECAUSE OUR STOCK PRICE MAY BECOME HIGHLY VOLATILE, OUR STOCK PRICE COULD EXPERIENCE SUBSTANTIAL DECLINES AND OUR MANAGEMENT'S ATTENTION MAY BE DIVERTED FROM MORE PRODUCTIVE TASKS.

The market price of our common stock may become volatile and could decline,

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perhaps substantially, in response to various factors, many of which are beyond our control, including:

- technological innovations by competitors or in competing technologies,
- revenues and operating results fluctuating or failing to meet the expectations of securities analysts or investors in any quarter,
- downward revisions in securities analysts' estimates,
- conditions or trends in the biotechnology and pharmaceutical industries,

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- announcements by us of significant acquisitions or financings or changes in strategic partnerships, and
- a decrease in the demand for our common stock.

In addition, the stock market in general, and the Nasdaq National Market and the biotechnology industry market in particular, have experienced significant price and volume fluctuations that at times have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, securities class action litigation has often been instituted following periods of volatility in the market price of a company's securities. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of our management's attention and resources.

PROVISIONS OF DELAWARE LAW AND OF OUR CHARTER AND BY-LAWS MAY MAKE A TAKEOVER MORE DIFFICULT WHICH COULD CAUSE OUR STOCK PRICE TO DECLINE. Provisions in our certificate of incorporation and by-laws and in the Delaware corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt which is opposed by our management and board of directors. Public stockholders who might desire to participate in such a transaction may not have an opportunity to do so. We also have a staggered board of directors that makes it difficult for stockholders to change the composition of the board of directors in any one year. These anti-takeover provisions could substantially impede the ability of public stockholders to change our management and board of directors. Such provisions may also limit the price that investors might be willing to pay for shares of our common stock in the future.

FAILURE TO RAISE ADDITIONAL CAPITAL OR GENERATE THE SIGNIFICANT CAPITAL NECESSARY TO EXPAND OUR OPERATIONS AND INVEST IN NEW PRODUCTS COULD REDUCE OUR ABILITY TO COMPETE AND RESULT IN LOWER REVENUE. We anticipate that our existing capital resources and the net proceeds from our initial public offering will enable us to maintain currently planned operations for at least the next two years. However, we premise this expectation on our current operating plan, which may change as a result of many factors, including market acceptance of our new products and future opportunities with collaborators. Consequently, we may need additional funding sooner than anticipated. Our inability to raise capital could seriously harm our business and product development efforts.

If we raise additional funds through the sale of equity or convertible debt or equity-linked securities, your percentage ownership in the company will be reduced. In addition, these transactions may dilute the value of our outstanding stock. We may issue securities that have rights, preferences and privileges senior to our common stock. If we raise additional funds through collaborations or licensing arrangements, we may relinquish rights to certain of our technologies or products, or grant licenses to third parties on terms that are

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unfavorable to us. We may be unable to raise additional funds on terms acceptable to us. If future financing is not available to us or is not available on terms acceptable to us, we may have to curtail or cease operations.

FUTURE ISSUANCE OF OUR PREFERRED STOCK MAY DILUTE THE RIGHTS OF OUR COMMON STOCKHOLDERS. Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock and to determine the price, privileges and other terms of these shares. The board of directors may exercise this authority without any further approval of our stockholders. The rights of the holders of common stock may be adversely affected by the rights of future holders of our preferred stock.

CASH DIVIDENDS WILL NOT BE PAID ON OUR COMMON STOCK. We intend to retain all of our earnings to finance the expansion and development of our business and do not anticipate paying any cash dividends in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future.

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AN ACTIVE TRADING MARKET FOR OUR COMMON STOCK MAY NOT BE SUSTAINED. Although our common stock is quoted on the Nasdaq National Market, an active trading market for our shares may not be sustained.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We manufacture and test the majority of products in research centers in the United States, the United Kingdom and Germany. We sell our products globally through our direct catalog sales and indirect distributor channel. As a result, our financial results are affected by factors such as changes in foreign currency exchange rates and weak economic conditions in foreign markets.

We collect amounts representing a substantial portion of our revenues and pay amounts representing a substantial portion of our operating expenses in foreign currencies. As a result, changes in currency exchange rates from time to time may affect our operating results. Historically, we have not hedged our foreign currency position. Currently, we attempt to manage foreign currency risk through the matching of assets and liabilities. However, as our sales expand internationally, we plan to evaluate currency risks and we may enter into foreign exchange contracts from time to time to mitigate foreign currency exposure.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The financial statements filed as part of this Annual Report on Form 10-K are listed under Item 14 below.

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

None.

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PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF REGISTRANT.

Incorporated by reference to the Company's definitive Proxy Statement to be filed pursuant to Regulation 14A, in connection with the 2001 Annual Meeting of Stockholders. Information concerning executive officers of the Registrant is included in Part I of this Report as Item 4.A.

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ITEM 11. EXECUTIVE COMPENSATION.

Incorporated by reference to the Company's definitive Proxy Statement to be filed pursuant to Regulation 14A, in connection with the 2001 Annual Meeting of Stockholders.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

Incorporated by reference to the Company's definitive Proxy Statement to be filed pursuant to Regulation 14A, in connection with the 2001 Annual Meeting of Stockholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

Incorporated by reference to the Company's definitive Proxy Statement to be filed pursuant to Regulation 14A, in connection with the 2001 Annual Meeting of Stockholders.

PART IV

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

(a) (1) Financial Statements.

The following documents are filed as part of this report:

1. Independent Auditors Report.
2. Consolidated Balance Sheets as of December 31, 2000 and 1999.
3. Consolidated Statements of Operations for each of the years ended December 31, 2000, 1999 and 1998.
4. Consolidated Statements of Stockholders' Equity (Deficit) and Comprehensive Income (Loss) for each of the years ended December 31, 2000, 1999 and 1998.
5. Consolidated Statements of Cash Flows for each of the years ended December 31, 2000, 1999 and 1998.
6. Notes to Financial Statements.

(a) (2) Financial Statement Schedules.

None required.

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(a) (3) Exhibits.

The following exhibits are filed as part of this report. Where such filing is made by incorporation by reference to a previously filed document, such document is identified.

- *2.1 Asset Purchase Agreement dated March 2, 1999 by and among Biochrom Limited and Pharmacia Biotech Limited and Pharmacia & Upjohn, Inc. and Harvard Apparatus, Inc.
- *2.2 Asset Purchase Agreement dated July 14, 2000 by and between Harvard Apparatus, Inc., AmiKa Corporation and Ashok Shukla.

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- 3.1 Second Amended and Restated Certificate of Incorporation of the Registrant.
- 3.2 Amended and Restated By-laws of the Registrant.
- *4.1 Specimen certificate for shares of Common Stock, \$0.01 par value, of the Registrant.
- *4.2 Amended and Restated Securityholders' Agreement dated as of March 2, 1999 by and among Harvard Apparatus, Inc., Pioneer Partnership II, Pioneer Capital Corp., First New England Capital, L.P. and Citizens Capital, Inc. and Chane Graziano and David Green.
- *10.1 Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan.
- *10.2 Harvard Bioscience, Inc. 2000 Stock Option and Incentive Plan.
- *10.3 Harvard Bioscience, Inc. Employee Stock Purchase Plan.
- *+10.4 Distribution Agreement dated March 2, 1999 by and between Biochrom Limited and Amersham Pharmacia Biotech AB.
- 10.5 Employment Agreement between Harvard Bioscience and Chane Graziano.
- 10.6 Employment Agreement between Harvard Bioscience and David Green.
- 10.7 Employment Agreement between Harvard Bioscience and James L. Warren.
- *10.8 Form of Director Indemnification Agreement.
- *10.9 Lease Agreement dated December 16, 1996 between Seven October Hill LLC and Harvard Apparatus, Inc.
- *10.10 First Amendment to Lease dated November 13, 1998 to Lease Agreement dated December 16, 1996 between Seven October Hill LLC and Harvard Apparatus, Inc.
- *10.11 Lease of Unit 22 Phase I Cambridge Science Park, Milton Road, Cambridge dated March 3, 1999 between The Master Fellows and Scholars of Trinity College Cambridge, Biochrom Limited and Harvard Apparatus, Inc.
- *10.12 Lease Agreement for Commercial Premises dated November 6, 1999 made between Mr. Heinz Dehnert, Grunstrabe 1, 79232 March-Hugstetten, Lessor and the Company of Harvard Appartus GmbH, Lessee.
- *10.13 Amended and Restated Loan and Security Agreement dated March 2, 1999 between Brown Brothers Harriman & Co., BankBoston N.A. and Harvard Apparatus, Inc.
- *10.14 Amendment and Waiver dated December 31, 1999 to Amended and Restated Loan and Security Agreement between Brown Brothers Harriman & Co., Fleet National Bank (formerly known as BankBoston N.A.) and Harvard Apparatus, Inc.
- *10.15 Second Amendment dated July 14, 2000 to Amended and Restated Loan and Security Agreement between Brown Brothers Harriman & Co., Fleet National Bank (formerly known as BankBoston N.A.) and Harvard Apparatus, Inc.
- *10.16 Third Amendment dated October 25, 2000 to Amended and Restated Loan and Security Agreement between Brown Brothers Harriman & Co., Fleet National Bank (formerly known as BankBoston N.A.) and Harvard Apparatus, Inc.
- 21.1 Subsidiaries of the Registrant.
- 23.1 Consent of KPMG LLP.

* Previously filed as an exhibit to the Company's Registration Statement on Form S-1 (File No. 333-45996) and incorporated by reference thereto.

+ Confidential treatment granted as to this previously filed exhibit.

The Company will furnish to stockholders a copy of any exhibit without charge upon written request.

(b) Reports on Form 8-K.

On January 3, 2001, the Company filed a report on Form 8-K reporting in Item 5 the lawsuit described above in Item 3 of this Annual Report on Form 10-K.

INDEPENDENT AUDITORS REPORT

The Board of Directors
Harvard Bioscience, Inc.:

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We have audited the accompanying consolidated balance sheets of Harvard Bioscience, Inc. and subsidiaries (the "Company") as of December 31, 2000 and 1999, and the related consolidated statements of operations, stockholders' equity (deficit) and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2000. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Harvard Bioscience, Inc. and subsidiaries at December 31, 2000 and 1999, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2000, in conformity with accounting principles generally accepted in the United States of America.

/s/ KPMG LLP
KPMG LLP

February 23, 2001
Boston, Massachusetts

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	DECEMBER 31,	
	2000	1999
ASSETS (NOTES 6 AND 7)		
Current assets:		
Cash and cash equivalents.....	\$35,816,994	\$ 2,396,053
Trade accounts receivable, net of reserve for uncollectible accounts of \$88,955 and \$87,642 at December 31, 2000 and 1999, respectively (note 19).....	4,697,663	4,191,850
Other receivables and other assets.....	1,237,414	201,946
Inventories (note 4).....	3,722,180	2,849,670
Catalog costs.....	453,209	66,829
Prepaid expenses.....	478,562	593,348
Income tax receivable (note 13)	513,458	987,853
Total current assets.....	46,919,480	11,287,549
Property, plant and equipment, net (notes 5 and 10).....	1,715,726	1,559,922

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Other assets:		
Catalog costs, less current portion.....	105,182	165,419
Deferred tax asset (note 13).....	57,478	432,797
Goodwill, net of accumulated amortization of \$1,000,087 and \$395,896 at December 31, 2000 and 1999, respectively (note 3).....	9,562,385	6,583,354
Other assets (notes 3 and 12)	448,273	580,829
Total other assets.....	\$10,173,318	\$ 7,762,399
	\$58,808,524	\$20,609,870
	=====	=====

See accompanying notes to consolidated financial statements.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	DECEMBER 31,	
	2000	1999
Current liabilities:		
Short-term debt (note 6).....	\$ --	\$ 2,200,000
Current installments of long-term debt (note 7).....	6,644	794,173
Trade accounts payable.....	2,117,446	1,880,246
Accrued income taxes payable.....	669,788	957,834
Accrued expenses (note 17).....	3,305,560	1,399,523
Other liabilities.....	268,075	272,731
Total current liabilities.....	6,367,513	7,504,507
Long-term debt, less current installments (note 7).....	1,142	5,072,941
Deferred income tax liability (note 13).....	104,946	48,649
Total long-term liabilities.....	106,088	5,121,590
Commitments and contingencies (notes 10, 18 and 22)		
Preferred stock, 600,000 shares authorized (note 8);		
Redeemable series "A" 469,300 shares issued and outstanding.....	--	1,500,000
Convertible and redeemable series "B" 48,500 shares issued and outstanding.....	--	1,000,000
Common stock warrants (note 9).....	--	31,194,371
Total redeemable preferred stock and common stock warrants.....	--	33,694,371
Stockholders' equity (deficit) (notes 9 and 14):		
Common stock, par value \$.01 per share, 80,000,000 shares authorized; 29,442,632 and 10,259,410 shares issued and outstanding at December 31, 2000 and 1999, respectively.....	294,426	102,604
Accumulated other comprehensive loss.....	(554,573)	(54,690)

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Additional paid-in capital--stock options.....	4,635,949	3,283,164
Additional paid-in capital--common stock.....	128,594,672	--
Retained earnings (accumulated deficit).....	(78,379,867)	(28,373,931)
Notes receivable.....	(1,587,939)	--
Treasury stock, 4,660,784 common shares, at cost.....	(667,745)	(667,745)
	-----	-----
Total stockholders' equity (deficit).....	52,334,923	(25,710,598)
	-----	-----
	\$ 58,808,524	\$ 20,609,870
	=====	=====

See accompanying notes to consolidated financial statements.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
	-----	-----	-----
Revenues (notes 15 and 19).....	\$ 30,574,800	\$ 26,177,814	\$12,154,025
Cost of goods sold.....	15,833,338	13,546,933	5,351,271
Stock compensation expense (note 14).....	264,054	--	--
	-----	-----	-----
Gross profit.....	14,477,408	12,630,881	6,802,754
General and administrative expense.....	5,181,299	4,146,564	2,317,021
Sales and marketing expense.....	3,185,340	2,448,505	1,721,606
Research and development.....	1,532,896	1,187,584	324,792
Stock compensation expense (note 14).....	14,411,245	3,283,164	--
Amortization of goodwill (note 3).....	604,191	368,235	27,661
	-----	-----	-----
Operating (loss) income.....	(10,437,563)	1,196,829	2,411,674
	-----	-----	-----
Other (expense) income:			
Foreign currency (loss) gain.....	(324,153)	(47,982)	21,418
Common stock warrant interest expense (note 9).....	(36,884,915)	(29,694,019)	(1,379,460)
Interest expense.....	(916,210)	(679,122)	(221,932)
Interest income.....	159,849	22,767	12,567
Amortization of deferred financing costs.....	(152,683)	(63,442)	--
Other.....	45,291	(17,468)	10,067
	-----	-----	-----
Other expense, net.....	(38,072,821)	(30,479,266)	(1,557,340)
	-----	-----	-----
(Loss) income before income taxes.....	(48,510,384)	(29,282,437)	854,334
Income taxes (note 13).....	1,359,401	137,480	783,192
	-----	-----	-----
Net (loss) income.....	(49,869,785)	(29,419,917)	71,142
Preferred stock dividends.....	(136,151)	(156,586)	(121,666)
	-----	-----	-----
Net (loss) available to common shareholders.....	\$ (50,005,936)	\$ (29,576,503)	\$ (50,524)
	=====	=====	=====
(Loss) per share (note 16):			
Basic.....	\$ (6.25)	\$ (5.28)	\$ (0.01)
	=====	=====	=====
Diluted.....	\$ (6.25)	\$ (5.28)	\$ (0.01)

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	=====	=====	=====
Weighted average common shares:			
Basic.....	8,005,386	5,598,626	5,598,626
	=====	=====	=====
Diluted.....	8,005,386	5,598,626	5,598,626
	=====	=====	=====

See accompanying notes to consolidated financial statements.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT) AND COMPREHENSIVE INCOME (LOSS)

	COMMON STOCK	ACCUMULATED OTHER COMPREHENSIVE LOSS	ADDITIONAL PAID-IN CAPITAL-- STOCK OPTIONS	ADDITIONAL PAID-IN CAPITAL-- COMMON STOCK	RETAIN EARNIN (ACCUMUL DEFICI
	-----	-----	-----	-----	-----
Balance at December 31, 1997.....	102,604	(26,261)	--	--	1,327,
Preferred stock dividends.....	--	--	--	--	(121,
Comprehensive income (loss):					
Net income.....	--	--	--	--	71,
Translation adjustments.....	--	(8,459)	--	--	
Total comprehensive income.....	-----	-----	-----	-----	-----
Balance at December 31, 1998.....	102,604	(34,720)	--	--	1,277,
Preferred stock dividends.....	--	--	--	--	(156,
Preferred stock issuance costs.....	--	--	--	--	(74,
Stock compensation expense.....	--	--	3,283,164	--	
Comprehensive income (loss):					
Net loss.....	--	--	--	--	(29,419,
Translation adjustments.....	--	(19,970)	--	--	
Total comprehensive (loss).....	(29,439,887)	-----	-----	-----	-----
Balance at December 31, 1999.....	102,604	(54,690)	3,283,164	--	(28,373,
Preferred stock dividends.....	--	--	--	--	(136,
Issuance of common stock.....	191,822	--	(13,322,514)	128,594,672	

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Stock compensation expense.....	--	--	14,675,299	--	
Comprehensive income (loss):					
Net loss.....	--	--	--	--	(49,869,
Translation adjustments.....	--	(499,883)	--	--	
Total comprehensive (loss).....					
Balance at December 31, 2000.....	\$ 294,426	\$ (554,573)	\$ 4,635,949	\$128,594,672	\$ (78,379
	=====	=====	=====	=====	=====

TOTAL
STOCKHOLDERS'
EQUITY
(DEFICIT)

Balance at December 31, 1997.....	736,520
Preferred stock dividends.....	(121,666)
Comprehensive income (loss):	
Net income.....	71,142
Translation adjustments.....	(8,459)
Total comprehensive income.....	62,683
Balance at December 31, 1998.....	677,537
Preferred stock dividends.....	(156,586)
Preferred stock issuance costs.....	(74,826)
Stock compensation expense.....	3,283,164
Comprehensive income (loss):	
Net loss.....	(29,419,917)
Translation adjustments.....	(19,970)
Total comprehensive (loss).....	
Balance at December 31, 1999.....	(25,710,598)
Preferred stock dividends.....	(136,151)
Issuance of common stock.....	113,876,041
Stock compensation expense.....	14,675,299
Comprehensive income (loss):	
Net loss.....	(49,869,785)
Translation	

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adjustments.....	(499,883)
Total comprehensive	
(loss).....	(50,369,668)

Balance at December 31,	
2000.....	\$ (52,334,923)
	=====

See accompanying notes to consolidated financial statements.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
	-----	-----	-----
Cash flows from operating activities:			
Net (loss) income.....	\$ (49,869,785)	\$ (29,419,917)	\$ (1,310,325)
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Common stock warrant interest expense.....	36,884,915	29,694,019	1,310,325
Stock compensation expense.....	14,675,299	3,283,164	1,310,325
Depreciation.....	393,357	331,822	1,310,325
Amortization of catalog costs.....	340,037	493,428	5,000,000
Loss (gain) on sale of fixed assets.....	(2,207)	7,584	(1,310,325)
Provision for bad debts.....	2,430	26,877	(1,310,325)
Amortization of goodwill.....	604,191	368,235	(1,310,325)
Amortization and write-off of deferred financing costs.....	152,683	63,442	(1,310,325)
Deferred income taxes.....	927,665	(1,310,325)	(1,310,325)
Changes in operating assets and liabilities, net of effects of business acquisitions:			
(Increase) decrease in accounts receivable.....	(737,414)	(2,282,344)	(1,310,325)
(Increase) decrease in other receivables.....	(1,045,776)	(113,949)	(1,310,325)
(Increase) decrease in inventories.....	(737,737)	215,152	(1,310,325)
(Increase) decrease in prepaid expenses and other assets.....	85,555	(260,285)	(1,310,325)
(Increase) decrease in other assets.....	(108,492)	(202,460)	(1,310,325)
Increase (decrease) in trade accounts payable.....	324,672	541,065	(1,310,325)
Increase (decrease) in accrued income taxes payable...	(225,672)	797,633	(1,310,325)
Increase in accrued expense.....	442,794	666,637	(1,310,325)
Increase in other liabilities.....	39,295	26,663	(1,310,325)
	-----	-----	-----
Net cash provided by operating activities.....	2,145,810	2,926,441	1,810,325
	-----	-----	-----
Cash flows from investing activities:			
Additions to property, plant and equipment.....	(629,518)	(332,474)	(1,310,325)
Additions to catalog costs.....	(673,811)	(121,644)	(2,000,000)
Proceeds from sales of fixed assets.....	2,658	34,566	(1,310,325)
Acquisition of businesses, net of cash acquired.....	(4,031,625)	(8,126,656)	(1,000,000)
	-----	-----	-----
Net cash used in investing activities.....	(5,332,296)	(8,546,208)	(1,400,000)
	-----	-----	-----

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Cash flows from financing activities:

Proceeds from short-term debt.....	1,600,000	2,300,000	6
Repayments of short-term debt.....	(3,800,000)	(1,150,000)	(3)
Proceeds from long-term debt.....	2,000,000	5,500,000	(2)
Repayments of long-term debt.....	(7,859,328)	(460,663)	(1)
Dividends paid.....	(171,072)	(121,666)	(1)
Net proceeds from issuance of preferred stock.....	--	925,174	--
Redemption of preferred stock.....	(1,500,000)	--	--
Net proceeds from issuance of common stock.....	46,250,994	--	--
	-----	-----	-----
Net cash provided by (used in) financing activities.....	36,520,594	6,992,845	(1)
	-----	-----	-----
Effect of exchange rate changes on cash.....	86,833	66,204	(
	-----	-----	-----
Increase (decrease) in cash and cash equivalents.....	33,420,941	1,439,282	2
Cash and cash equivalents at beginning of period.....	2,396,053	956,771	7
	-----	-----	-----
Cash and cash equivalents at end of period.....	\$ 35,816,994	\$ 2,396,053	\$ 9
	=====	=====	=====
Supplemental disclosures of cash flow information:			
Cash paid for interest.....	\$ 1,008,673	\$ 671,452	\$ 2
	=====	=====	=====
Cash paid for income taxes.....	\$ 1,571,192	\$ 686,675	\$ 1,1
	=====	=====	=====

See accompanying notes to consolidated financial statements.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) ORGANIZATION

On March 15, 1996, HAI Acquisition Corp. and its subsidiary, Guell Limited, purchased certain assets and assumed certain liabilities of the former Harvard Apparatus, Inc. and its subsidiary in the United Kingdom, Harvard Apparatus, Ltd. (the "Purchase"). For cash consideration of approximately \$3,342,000 (including \$342,000 of acquisition related expenses). The costs of the acquisition were allocated based on the fair market value of the assets acquired. The assets acquired consisted principally of cash of \$441,000, accounts receivable of \$1,397,000, inventories of \$1,661,000, miscellaneous prepaid assets of \$241,000, fixed assets of \$846,000, and catalog costs of \$366,000. The Company assumed liabilities of approximately \$1,605,000. The acquisition was financed principally by issuing preferred stock of \$1,500,000 and debt of \$1,750,000. Assets acquired at the time of the purchase included 79% of the capital stock of Ealing Scientific Ltd. (Canada) and Ealing S.A.R.L., now Harvard Apparatus S.A.R.L. (France). The remainder of the capital stock of Ealing Scientific Ltd. and Ealing S.A.R.L. was also acquired directly from the stockholder at the time of the Purchase. After the date of the Purchase, HAI Acquisition Corp. and Guell Limited legally changed their names to Harvard Apparatus, Inc. and Harvard Apparatus, Ltd., respectively. On November 29, 2000, Harvard Apparatus, Inc. changed its name to Harvard Bioscience, Inc.

We are a global provider of innovative, research enabling tools for drug discovery. We provide a broad array of tools designed to accelerate the speed and to reduce the cost at which our customers can introduce new drugs. Since our 1996 reorganization, we have focused on alleviating the protein purification and ADMET (absorption, distribution, metabolism, elimination and toxicology)

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screening bottlenecks in drug discovery. We manufacture and distribute syringe pumps, ventilators, cell injectors, diffusion chambers and other products principally used in the toxicology, metabolism and efficacy testing of new drugs, as well as spectrophotometers and amino acid analyzers primarily used in molecular biology, which are manufactured by Biochrom Ltd., a wholly owned subsidiary acquired during 1999.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(A) PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of Harvard Bioscience, Inc. and its subsidiaries (the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

(B) CASH AND CASH EQUIVALENTS

For purposes of the consolidated statements of cash flows, the Company considers all highly liquid instruments with original maturities of three months or less to be cash equivalents.

(C) INVENTORIES

Inventories are stated at the lower of cost or market. Cost is determined using a standard costing system which approximates the first-in, first-out (FIFO) method.

(D) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost. Equipment under capital leases is stated at the present value of the minimum lease payments at the lease agreement date. Property, plant

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

and equipment is depreciated using the straight-line method over the estimated useful lives of the assets as follows:

Buildings.....	40 years
Machinery and equipment.....	3-10 years
Computer equipment.....	3-7 years
Furniture and fixtures.....	5-10 years
Automobiles.....	4-6 years

(E) CATALOG COSTS

Significant costs of product catalog design, development and production are capitalized and amortized over the expected useful life of the catalog (usually one to three years). Costs of drawings and design that were acquired at the purchase on March 15, 1996 are being amortized over their estimated useful life of six years.

(F) INCOME TAXES

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Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to be applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

(G) FOREIGN CURRENCY TRANSLATION

All assets and liabilities of the Company's foreign subsidiaries are translated at exchange rates in effect at year-end. Income and expenses are translated at rates which approximate those in effect on the transaction dates. The resulting translation adjustment is recorded as a separate component of stockholders' equity (deficit) in other comprehensive income/(loss).

(H) STOCK OPTIONS

The Company accounts for stock options granted to employees in accordance with the requirements of Statement of Financial Accounting Standards (SFAS) No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION. As is permitted by this Statement, the Company has elected to account for stock options in accordance with the provisions of APB Opinion No. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES and provide the additional disclosures that are required by SFAS No. 123.

(I) USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the use of management's estimates. Such estimates include the determination and establishment of certain accruals and provisions,

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

including those for inventory obsolescence, catalog cost amortization and reserves for bad debts. Actual results could differ from those estimates.

(J) REVENUE RECOGNITION

The Company recognizes revenue from product sales at the time of shipment. Product returns are estimated and provided for based on historical experience.

(K) GOODWILL

Goodwill, which represents the excess of purchase price over fair value of net assets acquired, is amortized on a straight-line basis over the expected periods to be benefited, ranging from 5 to 15 years. The Company continually evaluates whether events or circumstances have occurred that indicate that the remaining useful life of goodwill may warrant revision or that the remaining balance may not be recoverable. When factors indicate that goodwill should be evaluated for possible impairment, the Company estimates the undiscounted cash flow of the business segment, net

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of tax, over the remaining life of the asset in determining whether the asset is recoverable. Charges for impairment of goodwill would be recorded to the extent unamortized book value exceeds the related future discounted cash flow, net of tax. The discount factor would be the long-term debt rate currently obtainable by the Company.

(L) IMPAIRMENT OF LONG-LIVED ASSETS AND LONG-LIVED ASSETS TO BE DISPOSED OF

The Company uses the provisions of SFAS No. 121, ACCOUNTING FOR THE IMPAIRMENT OF LONG-LIVED ASSETS AND FOR LONG-LIVED ASSETS TO BE DISPOSED OF. This statement requires that long-lived assets and certain identifiable intangibles be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(M) EFFECT OF ACCOUNTING CHANGES

In 1998, the Financial Accounting Standards Board issued SFAS 133, ACCOUNTING FOR DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES. SFAS 133, which was deferred through the issuance of SFAS 137 and subsequently amended by SFAS 138, is effective for fiscal years beginning after June 15, 2000. SFAS 133 was adopted on January 1, 2001. Its impact on the consolidated financial statements is not material.

(N) FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying value of the Company's cash and cash equivalents, trade accounts receivable, trade accounts payable and accrued expenses approximate their fair values because of the short maturities of those instruments.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(3) ACQUISITION OF BUSINESSES

On June 30, 1998, the Company acquired certain assets of Medical Systems Corporation, a manufacturer and product developer of research medical equipment. Cash consideration of approximately \$1,000,000 plus certain acquisition costs was paid for the assets. The costs of the acquisition were allocated on the basis of the estimated fair market value of the assets acquired. The net purchase price resulted in an allocation of \$784,047 to goodwill and \$281,506 to tangible net assets.

On February 26, 1999, the Company acquired substantially all of the assets and certain liabilities of Pharmacia Biotech (Biochrom) Ltd. ("Biochrom"), a UK manufacturer and developer of spectrophotometers, amino acid analyzers and other related research equipment. Cash consideration of approximately \$6,981,000 (including \$502,000 of acquisition related expenses) was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired using the purchase method of accounting resulted in an allocation of \$5,446,000 to goodwill and other intangibles. The assets

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acquired consisted of approximately \$61,000 of accounts receivable, \$1,039,000 of inventory, \$100,000 of prepaid expenses, \$612,000 of fixed assets, \$372,000 of pension assets and liabilities assumed totaled approximately \$649,000.

On September 10, 1999, the Company acquired certain assets of Clark Electromedical Instruments, a manufacturer of glass capillaries and distributor of research equipment. Cash consideration of approximately \$349,000 was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired using the purchase method of accounting resulted in an allocation of \$288,000 to goodwill and other intangibles.

On November 19, 1999, the Company acquired the NaviCyte diffusion chamber systems product line from NaviCyte, a wholly-owned subsidiary of Trega Biosciences, Inc. Cash consideration of approximately \$390,000 (including \$33,000 of acquisition related expenses) was paid for the assets. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of \$333,000 to goodwill and other intangibles.

On November 30, 1999, the Company acquired substantially all of the assets and certain liabilities of Hugo Sachs Elektronik a developer and manufacturer of perfusion systems for research. Cash consideration of approximately \$730,000 was paid for the assets (including approximately \$162,000 of acquisition related expenses), net of cash acquired of \$31,000. The costs of the acquisition allocated on the basis of estimated fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of \$251,000 to goodwill and other intangibles.

On May 19, 2000, the Company acquired substantially all of the assets of Biotronik, a manufacturer of Amino Acid Analyzers. Cash consideration of approximately \$469,000 was paid for the assets (including approximately \$12,000 of acquisition related expenses). The costs of the acquisition allocated on the basis of fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of \$335,000 to goodwill.

On July 14, 2000, the Company acquired substantially all of the assets of Amika Corporation, a manufacturer and distributor of sample preparation devices and consumables. Cash consideration of \$3,100,000 was paid for the assets (including approximately \$61,000 of acquisition related expenses). The cost of the acquisition allocated on the basis of fair market value of the assets acquired and the purchase method of accounting resulted in an allocation of \$3,015,000 to goodwill and other intangibles. The assets acquired consisted of approximately \$85,000 of inventory. In addition, the

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(3) ACQUISITION OF BUSINESSES (CONTINUED)

Company acquired the right of first refusal to all new technologies developed and offered for sale by the predecessor Company for a period of four years on a fair value licensing arrangement.

On December 21, 2000, the Company acquired substantially all the assets and certain liabilities of MitoScan Corporation, a manufacturer of a submitochondrial particle toxicity testing products for cash and future contingent payments based on future product revenues. Cash consideration of approximately \$370,000 was paid for the assets (including approximately \$70,000 of acquisition related expenses). The cost of the acquisition allocated on the basis of fair market value of assets acquired and the purchase method of

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accounting resulted in an allocation of approximately \$386,000 to goodwill and other intangibles.

All acquisitions have been accounted for by the purchase method of accounting for business combinations. Accordingly, the accompanying consolidated statements of operations do not include any revenues or expenses related to these acquisitions prior to the respective acquisition dates.

The following unaudited pro forma results of operations gives effect to the acquisition of Biochrom as if it had occurred at the beginning of fiscal 1998 (the effect of the other acquisitions are considered insignificant). Such pro forma information reflects certain adjustments including amortization of goodwill, interest expense, income tax effect and an increase in the number of weighted average shares outstanding. The pro forma information does not necessarily reflect the results of operations that would have occurred had the acquisition taken place as described and is not necessarily indicative of results that may be obtained in the future.

	YEARS ENDED DECEMBER 31,	
	1999	1998
	(UNAUDITED)	
Pro forma revenues.....	\$ 27,590,714	\$23,942,973
	=====	=====
Pro forma net earnings (loss).....	\$ (29,415,046)	\$ (120,186)
	=====	=====
Pro forma basic net earnings (loss) per share:		
Basic.....	\$ (5.25)	\$ (0.04)
	=====	=====
Diluted.....	\$ (5.25)	\$ (0.04)
	=====	=====
Pro forma weighted average common shares:		
Basic.....	5,598,626	5,598,626
	=====	=====
Diluted.....	5,598,626	5,598,626
	=====	=====

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(4) INVENTORIES

Inventories consist of the following:

	DECEMBER 31,	
	2000	1999
Finished goods.....	\$1,414,951	\$ 857,202
Work in process.....	399,064	359,505
Raw materials.....	1,908,165	1,632,963

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\$3,722,180	\$2,849,670
=====	=====

(5) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following:

	DECEMBER 31,	
	2000	1999
Land and buildings.....	\$ 588,187	\$ 636,250
Machinery and equipment.....	1,051,458	726,933
Computer equipment.....	535,596	378,400
Furniture and fixtures.....	356,264	326,978
Automobiles.....	139,399	123,113
	-----	-----
	2,670,904	2,191,674
Less accumulated depreciation.....	955,178	631,752
	-----	-----
	\$1,715,726	\$1,559,922
	=====	=====

(6) SHORT-TERM DEBT

At December 31, 1999 short-term debt consisted of an amount outstanding under a bank line of credit that was secured by a first priority security interest in all assets of the Company and a pledge of 65% of the capital stock of the Company's subsidiaries. Interest on the line of credit was payable monthly, in arrears, at the related bank's "base rate" plus 1% (9.5% at December 31, 1999). Borrowings under the line of credit were limited to an available amount determined by an accounts receivable and inventory based formula, \$3,750,000 at December 31, 1999. This line of credit was due to mature on January 29, 2002. At December 31, 1999 borrowings under the line of credit were \$2,200,000. In December 2000, the line of credit including interest was paid in full.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(7) LONG-TERM DEBT

Long-term debt consists of the following:

	DECEMBER 31,	
	2000	1999
Subordinated debentures, at 13%, payable in quarterly installments through March 15, 2003.....	\$ --	\$ 727,500

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Notes payable.....	--	5,125,000
Capital lease obligations (note 10).....	7,786	14,614
	-----	-----
	7,786	5,867,114
Less current installments.....	6,644	794,173
	-----	-----
	\$1,142	\$5,072,941
	=====	=====

On March 2, 1999, the Company entered into two loan agreements with two banks to borrow up to \$5.5 million. The purpose of the loan agreements was to partially finance the acquisition of Biochrom (see note 3). The interest rate as determined by one of the banks base rate plus 1%, was 9.5% at December 31, 1999. In December 2000, the subordinated debt and the bank loans including interest were paid in full.

Financing costs of \$221,074 were incurred in 1999. These costs were capitalized and initially amortized over the term of the loans. As a result of the loans being paid in full in 2000, any remaining deferred financing costs were written off.

(8) CONVERTIBLE AND REDEEMABLE PREFERRED STOCK

During 1999, 48,500 shares of Series B convertible and redeemable preferred stock were issued to partially finance the acquisition of Biochrom (see note 3). The net proceeds from this issuance were \$925,174. The Company's Series B convertible redeemable preferred stock had a dividend preference over the Series A preferred stock, and as a result, no dividends were paid in respect of shares of Series A preferred stock unless all accrued dividends that became payable in respect of Series B preferred stock were paid. The Series B redeemable convertible preferred stock was convertible at the option of the holder, at any time, into shares of common stock of the Company at a conversion rate of 19.71 shares of common stock for each share of Series B redeemable convertible preferred stock, subject to adjustment for subdivision of Series B preferred stock or any issuance of additional shares of Series B preferred stock. In December 2000, the convertible preferred stock was converted to 955,935 shares of common stock of the Company simultaneously with the initial public offering of the Company's common stock.

Redeemable preferred Series A stock paid quarterly cumulative dividends in arrears at a rate of approximately \$0.26 per share. On March 3, 2000, convertible and redeemable preferred "B" stock started to accrue dividends at a rate of \$1.44 that were payable a year in arrears on March 3, 2001, and thereafter quarterly in arrears. In December 2000, the redeemable preferred stock was redeemed in full simultaneously with the initial public offering of the Company's common stock.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(9) COMMON STOCK WARRANTS

At December 31, 1999 and 1998, there were outstanding 8,509,905 warrants, which enabled the holders to purchase a like amount of the Company's common stock for \$0.0005 per share. The warrants were issued in connection with the issuance of Series A redeemable preferred stock (6,046,510 warrants) and subordinated debentures (2,463,395 warrants) that occurred on March 15, 1996.

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Commencing on March 15, 2002, the holders of the warrants may have at any time required the Company to repurchase the warrants, or any common shares previously acquired from exercise of the warrants, for their fair market value as determined in good faith by the Company's board of directors. Such repurchase price would have been repaid in 12 equal quarterly installments beginning on the first business day of the month following the surrender of the warrants or applicable shares of common stock. In 2000, 1999 and 1998, interest expense of \$36,884,915, \$29,694,019, and \$1,397,460, respectively, was recorded to accrue the estimated amount of this potential liability in accordance with EITF 96-13, ACCOUNTING FOR DERIVATIVE FINANCIAL INSTRUMENTS INDEXED TO AND POTENTIALLY SETTLED IN, A COMPANY'S OWN STOCK.

In December 2000, the holders of the outstanding common stock warrants terminated the requirement of the Company to repurchase the warrants. Accordingly, the outstanding common stock warrants were converted to 8,509,337 shares of the Company's common stock simultaneously with the initial public offering of the Company's common stock and the liability previously recorded was reclassified to stockholders' equity.

(10) LEASES

The Company leases automobiles under various leases that are classified as capital leases. The carrying value of automobiles under capital leases at December 31, 2000, 1999 and 1998 was \$7,265, \$14,532 and \$40,795, respectively, which is net of \$30,735, \$68,602 and \$76,352, respectively, of accumulated depreciation.

The Company has noncancelable operating leases for office and warehouse space expiring at various dates through 2009. Rent expense for the years ended December 31, 2000, 1999 and 1998 was approximately \$541,000, \$484,000 and \$134,000, respectively.

Future minimum lease payments for both capital and operating leases, with initial or remaining terms in excess of one year at December 31, 2000, are as follows:

	CAPITAL LEASES	OPERATING LEASES
	-----	-----
2001.....	\$7,234	\$ 585,192
2002.....	1,157	472,819
2003.....	--	426,253
2004.....	--	401,673
2005 and thereafter.....	--	--
	-----	-----
Net minimum lease payments.....	8,391	\$1,885,937
		=====
Less amount representing interest.....	605	

Present value of net minimum lease payments.....	\$7,786	
	=====	

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(11) RELATED PARTY TRANSACTIONS

The Company paid an annual consulting fee to a former stockholder who formerly served on its board of directors and, by written agreement, provided no less than five days of consulting services each month. The agreement was scheduled to expire on March 15, 2001 or at the time of any initial public offering of the Company's stock or other sale of a material portion of the Company's stock or assets, if such a transaction occurred before that date. As of September 30, 2000, the agreement with the former stockholder was rescinded. The related consulting expense for the years ended December 31, 2000, 1999 and 1998 was \$294,583, \$258,437 and \$262,040, respectively.

(12) EMPLOYEE BENEFIT PLANS

The Company sponsors a profit sharing retirement plan for its U.S. employees, which includes an employee savings plan established under Section 401(k) of the U.S. Internal Revenue Code. The plan covers substantially all full-time employees who meet certain eligibility requirements. Contributions to the profit sharing retirement plan are at the discretion of management. For the years ended December 31, 2000, 1999, and 1998, the Company contributed approximately \$81,000, \$67,000, and \$41,000, respectively, to the plan.

Certain of the Company's subsidiaries in the United Kingdom (UK), Harvard Apparatus Limited, and Biochrom Limited maintain contributory, defined benefit pension plans for substantially all of their employees.

The components of the Company's pension expense, primarily for Biochrom, for the years ended December 31, 2000 and 1999 follow:

	YEARS ENDED DECEMBER 31,	
	2000	1999
Components of net periodic benefit cost:		
Service cost.....	\$ 319,053	\$ 288,640
Interest cost.....	347,215	250,437
Expected return on plan assets.....	(527,397)	(364,684)
Net amortization gain.....	(20,769)	6,965
	-----	-----
Net periodic benefit cost.....	\$ 118,102	\$ 181,358
	=====	=====

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(12) EMPLOYEE BENEFIT PLANS (CONTINUED)

The funded status of the Company's defined benefit pension plans and the amount recognized in the balance sheet at December 31, 2000 and 1999 follow:

	YEARS ENDED DECEMBER 31,	
	2000	1999
	-----	-----

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Change in benefit obligation:

Balance at beginning of period.....	\$5,829,403	\$1,215,000
Acquisitions.....	--	4,848,552
Service cost.....	319,053	288,640
Interest cost.....	347,215	250,437
Participants' contributions.....	81,369	60,745
Actuarial (gain)/loss.....	1,158,295	(824,672)
Benefits paid.....	(46,058)	(9,299)
Currency translation adjustment.....	(467,336)	--
	-----	-----
Balance at end of period.....	7,221,941	5,829,403
	-----	-----

Change in fair value of plan assets:

Balance at beginning of period.....	7,062,645	1,158,138
Acquisitions.....	--	5,231,470
Actual return on plan assets.....	(51,692)	440,606
Participants' contributions.....	81,369	60,745
Employer contributions.....	258,756	180,985
Benefits paid.....	(46,058)	(9,299)
Currency translation adjustment.....	(560,352)	--
	-----	-----
Balance at end of period.....	\$6,744,668	\$7,062,645
	=====	=====

YEARS ENDED DECEMBER 31,

2000	1999
------	------

Funded status:

Plan assets greater than benefit obligation.....	(477,273)	1,233,242
Unrecognized (gain) loss.....	921,611	(881,299)
	-----	-----
Prepaid pension expense in consolidated balance sheet.....	\$ 444,338	\$ 351,943
	=====	=====

The weighted average assumptions used in determining the net pension cost for the Company's plans follows:

YEARS ENDED DECEMBER 31,

2000	1999
------	------

Weighted average assumptions:

Discount rate.....	6.0%	5.5%
Expected return on assets.....	7.0-8.0%	7.0-8.0%
Rate of compensation increase.....	4.5%	3.8-4.0%

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(13) INCOME TAXES

The significant components of the Company's deferred tax assets and liabilities at December 31, 2000 and 1999 are as follows:

	YEARS ENDED DECEMBER 31,	
	2000	1999
Deferred tax assets:		
Accounts receivable.....	\$ 31,755	\$ 31,755
Inventory.....	185,990	129,097
Operating loss carryforward.....	175,998	34,417
Accrued expenses.....	82,698	1,196,338
Goodwill.....	51,368	37,679
Catalog costs.....	--	8,503
Total deferred tax assets.....	527,809	1,437,789
Deferred tax liabilities:		
Catalog costs.....	12,141	--
Pension fund asset.....	22,010	18,461
Property, plant and equipment.....	15,927	42,632
Other.....	11,741	4,695
Total deferred tax liabilities.....	61,819	65,788
Net deferred tax assets.....	\$465,990	\$1,372,001

The amount recorded as net deferred tax assets as of December 31, 2000 and 1999 represents the amount of tax benefits of existing deductible temporary differences or carryforwards that are more likely than not to be realized through the generation of sufficient future taxable income within the carryforward period. The Company believes that the net deferred tax asset of \$465,990 at December 31, 2000 will more likely than not be realized in the carryforward period. Management reviews the recoverability of deferred tax assets during each reporting period.

Income tax expense is based on the following pre-tax income (loss) for the years ended December 31, 2000, 1999 and 1998:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
Domestic.....	\$ (51,098,496)	\$ (32,040,219)	\$115,418
Foreign.....	2,588,112	2,757,782	738,916
	\$ (48,510,384)	\$ (29,282,437)	\$854,334

HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(13) INCOME TAXES (CONTINUED)

Income tax expense (benefit) for the years ended December 31, 2000, 1999 and 1998 consisted of:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
Current income tax expense:			
Federal and state.....	\$ (560,364)	\$ 403,149	\$579,152
Foreign.....	992,100	1,043,539	214,112
	431,736	1,446,688	793,264
Deferred income tax (benefit) expense:			
Federal and state.....	903,168	(1,238,399)	(19,380)
Foreign.....	24,497	(70,809)	9,308
	927,665	(1,309,208)	(10,072)
Total income tax expense.....	\$1,359,401	\$ 137,480	\$783,192
	=====	=====	=====

Income tax expense for the years ended December 31, 2000, 1999 and 1998 differed from the amount computed by applying the U.S. federal income tax rate of 34% to pretax income/(loss) as a result of the following:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
Computed "expected" income tax (benefit) expense.....	\$ (16,493,531)	\$ (9,956,029)	\$290,474
Increase (decrease) in income taxes resulting from:			
Foreign tax rate and regulation differential.....	112,097	35,804	(27,811)
State income taxes, net of federal income tax benefit.....	63,600	(154,569)	86,068
Interest expense (common stock warrants).....	12,539,403	10,254,946	469,002
Foreign Sales Corporation tax benefits.....	(32,596)	(28,761)	(27,804)
Other.....	(26,721)	(13,911)	(6,737)
Stock compensation expense in excess of allowable tax benefits on exercise of options.....	5,197,149	--	--

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Total.....	\$ 1,359,401	\$ 137,480	\$783,192
	=====	=====	=====

Undistributed earnings of the Company's foreign subsidiaries amounted to approximately \$5,297,594, \$2,992,805 and \$1,565,000 at December 31, 2000, 1999 and 1998, respectively. Those earnings are considered to be indefinitely reinvested and, accordingly, no related provision for U.S federal and state income taxes has been provided. Upon distribution of those earnings in the form of dividends or otherwise, the Company will be subject to both U.S. income taxes (less foreign tax credits) and withholding taxes in the various foreign countries.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(14) STOCK COMPENSATION PLANS

In 2000, the Company approved a stock purchase plan allowing employees to purchase the Company's common stock at 85% of the lesser of beginning or ending fair market value at six month intervals. Under this plan, 500,000 shares of common stock are authorized for issuance of which no shares were issued as of December 31, 2000.

In 1996, the Company adopted the 1996 Stock Option and Grant Plan (the "1996 Plan") and in 2000, the Company adopted the 2000 Stock Option and Incentive Plan (the "2000 Plan" and, together with the 1996 Plan, the "Plans") pursuant to which the Company's Board of Directors can grant stock options to employees. The Plans authorize grants of options to purchase up to 4,349,096 shares of authorized but unissued stock.

As of December 31, 2000, 1999 and 1998, 1,582,910, 1,119,725 and 1,119,725 "Incentive Stock Options," and 2,519,576, 1,812,295 and 895,780 "Non-qualified Stock Options," respectively, had been granted to employees. The Incentive Stock Options become fully vested over a four year period, on a pro rata basis. The Non-qualified Stock Options granted prior to 1999 became vested during 2000 as the fair market value of the Company's common stock was determined to be, on a fully diluted basis, not less than \$1.42 per common share. For non-qualified options granted under the 1996 Plan during 1999, prior to an amendment to the 1996 Plan dated September 29, 2000, the options were deemed to be vested and exercisable upon either (i) the sale of all or substantially all of the assets or capital stock of the Company for an actual or implied price per share of not less than \$2.09 or (ii) an initial public offering of the Company's stock with a price per share of not less than \$2.09 and gross proceeds to the Company of at least \$15 million. On September 29, 2000, the vesting schedule was amended so that the options were vested and exercisable upon either (i) a sale of all or substantially all of the assets or capital stock of the Company for an actual or implied net price per share of Common Stock of not less than \$2.09 or (ii) if the fair market value of the Company at any time prior to December 31, 2000 resulted in a per share valuation, on a fully diluted basis, of not less than \$2.09 per share. As a result of the 1996 Plan amendment, the related options vested immediately as a per share valuation of \$2.09 was attained.

The Company applies APB Opinion No. 25 in accounting for the Plans. APB No. 25 requires no recognition of compensation expense for stock option awards when on the date of grant the exercise price is equal to the estimated fair market value of the Company's common stock and the number of options granted is fixed. During the year ended December 31, 2000, 1,140,466 stock options were

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granted to employees at an exercise price of \$1.05 which was estimated to be less than the fair market value of the Company's common stock on the date of grant. Accordingly, for the year ended December 31, 2000, compensation expense of \$4,635,949 was recognized on these stock option grants. Additional compensation expense will be recognized in future periods over the four year vesting period of the options. The Company's 1996 and 1999 Non-qualified Stock Option awards were considered variable awards as the number of shares to be acquired by the employees was indeterminable at the date of grant. Accordingly, for the year ended December 31, 1999 the Company recognized compensation expense of \$3,283,164 on the non-qualified Stock Options granted in 1996. At December 31, 1999, all non-qualified stock options granted in 1996 were fully vested because a per share valuation of \$1.42 was attained. For the year ended December 31, 2000, the Company recognized compensation expense of \$10,039,350 on the non-qualified options granted in 1999.

On September 29, 2000, two employees exercised 563,942 non-vested options that were granted during 2000 for 563,942 shares of restricted common shares for cash consideration of \$286 and two

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(14) STOCK COMPENSATION PLANS (CONTINUED)

promissory notes amounting to \$589,652 payable to the Company. The notes have a three-year maturity and a fixed interest rate of 10% per annum, compounded annually. The restricted stock becomes fully vested over a four-year period, on a pro rata basis. The estimated fair market value of the shares awarded on the original option date grant and on the date of exercise was estimated to be \$6,767,310 of which \$3,217,154 has been recognized as stock compensation expense for the year ended December 31, 2000. The remaining unearned compensation is being amortized to expense over the four year vesting period. Also on September 29, 2000, two employees of the Company exercised 916,514 fully vested options for cash of \$465 and two promissory notes amounting to \$958,298 payable to the Company. The notes have a three-year maturity and a fixed interest rate of 10% per annum, compounded annually.

The following is a summary of stock option activity.

	EMPLOYEE STOCK OPTIONS	
	OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE
Balance at December 31, 1997.....	2,015,505	0.02
Options granted.....	--	--
	-----	-----
Balance at December 31, 1998.....	2,015,505	0.02
Options granted.....	916,515	1.05
	-----	-----
Balance at December 31, 1999.....	2,932,020	0.33
Options exercised.....	(3,467,955)	0.45
Options forfeited.....	(5,421)	1.05
Options granted.....	1,170,466	1.23
	-----	-----
Balance at December 31, 2000.....	629,110	\$1.33
	=====	=====

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During 2000, 1999 and 1998, there were no other additional options exercised, canceled, expired or forfeited, or changes in any option terms, including exercise prices. The weighted average fair value of options granted during 2000 and 1999 was \$9.70, and \$1.05, respectively. No options were granted during 1998.

The following is a summary of information relating to stock options outstanding at December 31, 2000 (no options were exercisable at December 31, 2000):

RANGE OF EXERCISE PRICE	OPTIONS OUTSTANDING		
	NUMBER OUTSTANDING AT DECEMBER 31, 2000	WEIGHTED- AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED AVERAGE EXERCISE PRICE
\$0.01	28,008	6.0 years	\$0.01
\$1.05	571,102	9.3 years	\$1.05
\$8.00	30,000	9.9 years	\$8.00
\$0.01-\$8.00	629,110	9.2 years	\$1.33

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(14) STOCK COMPENSATION PLANS (CONTINUED)

Had the Company determined compensation cost based on the fair value of the options at the grant date, as is permitted by SFAS No. 123, the Company's net income would have been as follows:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
Net income (loss) as reported.....	\$ (49,869,785)	\$ (29,419,917)	\$71,142
Pro forma net income (loss).....	\$ (50,021,589)	\$ (29,420,033)	\$70,922
Basic net income (loss) per share.....	\$ (6.25)	\$ (5.28)	\$ (0.01)
Pro forma basic net income (loss) per share.....	\$ (6.26)	\$ (5.28)	\$ (0.01)
Diluted net income (loss) per share.....	\$ (6.25)	\$ (5.28)	\$ (0.01)
Diluted pro forma net income (loss) per share.....	\$ (6.26)	\$ (5.28)	\$ (0.01)

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The fair value of each option grant for the Company's Plans is estimated on the date of the grant using the Black-Scholes pricing model, with the following weighted average assumptions used for grants in 2000 and 1999. There were no grants of options in 1998.

	YEARS ENDED DECEMBER 31,	
	2000	1999
Risk free interest rates.....	5.9%	5.6%
Expected option lives.....	2 years	7 years
Expected dividend yields.....	0%	0%
Expected volatility.....	80.90%	0%

(15) SEGMENT AND RELATED INFORMATION

The Company operates in one significant business segment.

Revenues by geographic area consists of the following:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
United States.....	\$ 9,379,986	\$ 8,169,470	\$ 7,347,907
United Kingdom.....	15,828,225	15,353,761	2,458,772
Canada and Europe.....	5,366,589	2,654,583	2,347,346
	-----	-----	-----
	\$30,574,800	\$26,177,814	\$12,154,025
	=====	=====	=====

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(15) SEGMENT AND RELATED INFORMATION (CONTINUED)

Long lived assets by geographic area consists of the following:

	DECEMBER 31,		
	2000	1999	1998
United States.....	\$ 448,243	\$ 307,286	\$260,977
United Kingdom.....	1,204,981	1,189,269	677,889
Canada and Europe.....	62,502	63,367	31,039
	-----	-----	-----
	\$1,715,726	\$1,559,922	\$969,905

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(16) INCOME (LOSS) PER SHARE

Basic income (loss) per share is based upon net income less dividends on preferred stock divided by the weighted average common shares outstanding during each year. The calculation of diluted net income (loss) per share assumes conversion of convertible preferred stock, stock options and common stock warrants into common stock, and also adjusts net income (loss) for the effect of converting convertible preferred stock and common stock warrants into common stock. Net income (loss) and shares used to compute net income per share, basic and diluted, are reconciled below:

	YEARS ENDED DECEMBER 31,		
	2000	1999	1998
Net income (loss) available to common shareholders.....	\$ (50,005,936)	\$ (29,576,503)	\$ (50,524)
Effect of dilutive securities:			
Common stock warrants.....	--	--	--
Net income (loss), assuming dilution...	\$ (50,005,936)	\$ (29,576,503)	\$ (50,524)
Weighted average common shares outstanding during the year.....	8,005,386	5,598,626	5,598,626
Effect of dilutive securities:			
Common stock warrants.....	--	--	--
Common stock options.....	--	--	--
	8,005,386	5,598,626	5,598,626

For the years ended December 31, 2000, 1999 and 1998, common equivalent shares of 7,456,010, 11,378,110, and 9,688,766 respectively, resulting from stock options, warrants and restricted stock were not included in the computation of diluted earnings per share because to do so would have been antidilutive.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(17) ACCRUED EXPENSES

Accrued expenses consist of:

	DECEMBER 31,	
	2000	1999
Accrued compensation and payroll.....	\$1,188,553	\$ 736,021

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Accrued interest.....	--	158,101
Accrued legal and professional fees.....	1,843,644	251,926
Other.....	273,363	253,475
	-----	-----
	\$3,305,560	\$1,399,523
	=====	=====

(18) CONTINGENCIES

The Company is subject to legal proceedings and claims arising out of its normal course of business. Management, after review and consultation with counsel, considers that amounts accrued for in connection therewith are adequate.

(19) CONCENTRATIONS OF CREDIT RISK

One commercial customer accounted for 39% and 44% of revenues for the year ended December 31, 2000 and 1999, respectively. At December 31, 2000 and 1999, one customer accounted for 39% and 48% of accounts receivable, respectively. Except as noted above, no other individual customer accounted for more than 10% of revenues for the years ended December 31, 2000, 1999 and 1998. In addition, except as noted above, no other individual customer accounted for more than 10% of accounts receivable at December 31, 2000 and 1999.

(20) STOCK SPLIT

On October 25, 2000, the Board of Directors approved a merger, subject to stockholder approval, of the Company with and into its wholly-owned subsidiary, Harvard Bioscience, Inc., to be effected prior to the consummation of the anticipated initial public offering ("IPO"). In the merger each share of common stock of the Company was exchanged for one share of Harvard Bioscience, Inc. The Board of Directors of Harvard Bioscience, Inc. approved a 19.71-for-1 stock split effective immediately after consummation of the merger. All common stock share and per share data have been restated in these financial statements for all periods presented to reflect this split.

(21) INITIAL PUBLIC OFFERING

On December 7, 2000, the Company sold, pursuant to an underwritten initial public offering, 6,250,000 shares of common stock at a price of \$8 per share. The net proceeds to the Company were \$44.8 million. Following the offering, proceeds were used to repay substantially all of the Company's short term and long term debt as well as redeem its redeemable preferred stock (see notes 6, 7 and 8). On January 4, 2001, the underwriters exercised their allotment option whereby the Company sold an additional 937,500 shares of its common stock at a price of \$8 per share. The net proceeds to the Company were approximately \$7.0 million.

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HARVARD BIOSCIENCE, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(22) ASSERTED LEGAL CLAIM

On December 26, 2000 Harvard University filed a lawsuit against the Company in U.S. District Court, District of Massachusetts alleging that the Company's use of the "Harvard Bioscience" and "Harvard Apparatus" names infringes on Harvard University's trademarks. Harvard University is seeking both injunctive relief and monetary damages. Management denies the allegations contained in the

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lawsuit and is defending the Company against such claims.

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SIGNATURES

Pursuant to the requirements of Section 13 and 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.

HARVARD BIOSCIENCE, INC.

By: /s/ CHANE GRAZIANO

Chane Graziano
CHIEF EXECUTIVE OFFICER

DATE: APRIL 2, 2001

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

SIGNATURE -----	TITLE -----	DATE -----
/s/ CHANE GRAZIANO ----- Chane Graziano	Chief Executive Officer and Director (Principal Executive Officer)	April 2,
/s/ JAMES L. WARREN ----- James L. Warren	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 2,
/s/ DAVID GREEN ----- David Green	President and Director	April 2,
/s/ CHRISTOPHER W. DICK ----- Christopher W. Dick	Director	April 2,
/s/ RICHARD C. KLAFFKY, JR. ----- Richard C. Klaffky, Jr.	Director	April 2,
/s/ ROBERT DISHMAN ----- Robert Dishman	Director	April 2,
/s/ JOHN F. KENNEDY ----- John F. Kennedy	Director	April 2,
/s/ EARL R. LEWIS ----- Earl R. Lewis	Director	April 2,

