#### REGISTRATION STATEMENT NO.

- ------

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

 ${\tt HARVARD\ BIOSCIENCE,\ INC.} \\ ({\tt Exact\ Name\ of\ Registrant\ as\ Specified\ in\ its\ Charter})$ 

DELAWARE
(State or Other Jurisdiction
of Incorporation or Organization)

3826 (Primary Standard Industrial Classification Code Number)

04-3306140 (I.R.S. Employer Identification No.)

84 OCTOBER HILL ROAD HOLLISTON, MASSACHUSETTS 01746-1371 (508) 893-8066

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive office)

CHANE GRAZIANO
CHIEF EXECUTIVE OFFICER
HARVARD BIOSCIENCE, INC.

84 OCTOBER HILL ROAD HOLLISTON, MASSACHUSETTS 01746-1371 (508) 893-8066

(Name, address, including zip code, and telephone number, including area code,

of agent for service)

COPIES TO:

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BOSTON, MASSACHUSETTS 02111

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. / / \_\_\_\_\_\_

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. /

If this Form is a post-effective amendment filed pursuant to Rule  $462\,(c)$  under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / / \_\_\_\_\_

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. / / \_\_\_\_\_

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)

AMOUNT OF REGISTRATION

Common Stock, par value \$0.01 per share......

\$75,000,000

\$19,800

(1) Estimated solely for purposes of calculating the registration fee in accordance with Rule  $457\,(\text{o})$  under the Securities Act of 1933.

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THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SEC, ACTING PURSUANT TO SECTION 8(a), MAY DETERMINE.

\_\_\_\_\_

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES, AND IT IS NOT SOLICITING OFFERS TO BUY THESE SECURITIES IN ANY STATE IN WHICH THE OFFER OR SALE IS NOT PERMITTED.

[LOGO]

## HARVARD BIOSCIENCE, INC.

#### Shares Common Stock

We are selling shares of our common stock and the selling stockholder identified in this prospectus is offering an additional shares. See "Principal and Selling Stockholders." We will not receive any of the proceeds from the sale of shares by the selling stockholder. We have granted the underwriters a 30-day option to purchase up to an additional shares to cover over-allotments, if any.

This is an initial public offering of our common stock. We currently expect the initial public offering price to be between \$ and \$ per share. We have applied for approval for quotation of our common stock on the Nasdaq National Market under the symbol "HBIO."

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INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE "RISK FACTORS" ON PAGE 6.

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	Per Share	Total
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to us	\$	\$
Proceeds, before expenses, to the selling stockholder	\$	\$

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

\_ -----

THOMAS WEISEL PARTNERS LLC

ING BARINGS

The date of this prospectus is

, 2000

## INSIDE FRONT COVER-GATEFOLD

Gatefold has title "Harvard Bioscience Products and the Bottlenecks in Post-Genomics Drug Discovery" at the top. Below these words is a process flow diagram illustrating the drug discovery process and the key bottlenecks within this process. The diagram begins on the upper left portion of the gatefold and flows horizontally to the upper right portion of the gatefold. Below and to the right of the diagram is an orange arrow indicating that orange portions of the diagram represent bottlenecks in the drug discovery process. The diagram is initially split into two parallel tracks which merge into a single track near the middle of the pages as the flow diagram moves to the right. The upper track of the diagram is titled "Compound Development" and includes a green arrow titled "Compound Libraries." Below the arrow is a bullet point followed by the words "Combinatorial Chemistry." The lower track of the diagram is titled "Target Discovery" and includes two arrows. The first arrow is green and is titled "Target Identification." Below this arrow is a bullet point followed by the word "Genomics." The next arrow to the right is orange and is titled "Target Validation." Below this arrow is a bullet point followed by the word "Proteomics." Following the "Compound Libraries" arrow on the upper track and the "Target Validation" arrow on the lower track, the two tracks of the diagram combine and include green and orange arrows to illustrate the remaining stages and key bottlenecks in the drug discovery process. The individual arrows from left to right include an orange arrow titled "Assay Development" followed by a green arrow titled "High Throughput Screening." These two arrows in the diagram appear under the title "Primary Screening." To the right of the "High Throughput Screening" arrow is an orange arrow titled "Lead Optimization" followed by an orange arrow titled "ADMET Screening." These two arrows in the diagram appear under the title "Secondary Screening." To the right of the "ADMET Screening" is a green arrow titled "Clinical Trials," the final arrow in the process flow diagram.

The lower portion of the gatefold consists of product descriptions. The lower left portion begins with the words "Protein Purification" with the following product photos and short descriptions appearing below "Protein Purification." A drawing of a pipette tip is followed by the words "PrepTip-TM Coated pipette tips for the purification of protein samples as small as 1ul." Below this is a photo of spin columns followed by the words "UltraMicro Spin Columns Loaded spin columns for the purification of protein samples as small as 5 ul." Below this is a photo of disposable dialyzers followed by the words "Disposable Dialyzers For the purification of protein samples as small as 1ul." Below this are the words "Protein Analysis" with the following product photos and short descriptions appearing below "Protein Analysis." A photo of a DNA/RNA/protein calculator followed by the words "GeneQuant/Pro-TM DNA/RNA/Protein calculators." Below this are photos of a purple spectrophotometer, a yellow spectrophotometer and a green spectrophotometer followed by the words "UltraSpec-TM Range of spectrophotometers for molecular biology." Below this is a photo of an amino acid analysis system followed by the words "Biochrom 20 Amino Acid Analysis System."

The lower right portion begins with the word "Absorption." Below this is a photo of an absorption measurement chamber followed by the words "NaviCyte-TM Absorption measurement chambers." Below this is the word "Distribution" with a photo of an equilibrium dialysis plate and followed by the words "96 Well Equilibrium Dialysis Plate Equilibrium dialysis plate for serum protein binding assays." Below this are the words "Metabolism and Elimination" with a photo of an isolated organ system and followed by the words "Isolated Organ Systems Liver and kidney systems are used for studying metabolism and elimination." Below this is the word "Toxicology" with a photo of a desktop computer and the ScanTox product followed by the words "ScanTox-TM In Vitro toxicology assay." Below this is a photo of an infusion pump followed by the words "PHD 2000 Infusion Pump for toxicology testing."

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#### PROSPECTUS SUMMARY

THIS SUMMARY HIGHLIGHTS INFORMATION CONTAINED ELSEWHERE IN THIS PROSPECTUS. YOU SHOULD READ THE ENTIRE PROSPECTUS CAREFULLY, INCLUDING THE "RISK FACTORS"

#### OUR COMPANY

We are a leading global developer, manufacturer and marketer of innovative, enabling tools used in drug discovery research at pharmaceutical and biotechnology companies, universities and government laboratories. We sell approximately 10,000 products to more than 5,000 customers in over 60 countries. Our proprietary products accounted for approximately 82% of our revenues for the six months ended June 30, 2000. We have designed our tools to accelerate the speed and to reduce the cost at which our customers can discover and commercialize new drugs. By providing research tools, we participate in the revolutions in genomics and proteomics without bearing the risks inherent in attempting to discover new drugs.

Since our reorganization in March 1996, we have focused on developing tools to alleviate two critical bottlenecks in the drug discovery process:

- PROTEIN PURIFICATION, which is the removal of contaminants such as salts, buffers, detergents and cellular debris from a protein sample, and
- ADMET SCREENING, which is the testing of the absorption, distribution, metabolism, elimination and toxicology properties of drug candidates.

Our proteomics products are tools that allow researchers to purify and analyze proteins contained in a sample. Our ADMET screening products are tools that enable researchers to test drug candidates to determine their ADMET properties prior to conducting costly clinical trials.

We market our products primarily through our 1,000 page catalog to approximately 100,000 researchers worldwide. Our catalog is also available on our website. We distribute most of our products directly through our operations in the United States, the United Kingdom, Germany, France and Canada. In addition to our catalog distribution channel, we have a long-standing distribution and marketing relationship with Amersham Pharmacia Biotech, or APB, one of the largest companies in the life sciences industry.

#### OUR OPPORTUNITY

Drug discovery is a time-consuming and costly process. In the pre-genomics era, the compound development, primary screening and clinical trials stages were bottlenecks in this process. The recent successes of genomics, combinatorial chemistry and high throughput screening have alleviated the bottlenecks at the compound development and primary screening stages. However, these bottlenecks have been replaced by bottlenecks at the target validation, assay development and ADMET screening stages. Our opportunity lies in alleviating these bottlenecks with products that increase the productivity and reduce the cost of drug discovery.

## OUR PRODUCTS

We have a broad array of established products for proteomics and ADMET screening. We believe our products offer drug discovery researchers the most comprehensive protein purification and ADMET screening solutions. In the past two years, we have expanded our product base by introducing the following proprietary tools:

## PROTEIN PURIFICATION:

- specially coated pipette tips,

- micro spin columns, and
- micro dialyzers.

#### ADMET SCREENING:

- NaviCyte diffusion chambers for drug absorption testing,
- 96 well equilibrium dialysis plates for drug distribution testing, and
- ScanTox instrument for in vitro toxicology testing.

In protein purification, these new products increase productivity and reduce cost by avoiding the cumbersome sample handling steps required by current technology and by being compatible with automated liquid-handling robots. Many of the products are available in 96 well plate formats. In ADMET screening, these new products lower the cost and increase automation by using molecular, cellular tissue and organ based assays, which reduce the use of live animals.

In addition to our proprietary products, we provide a broad selection of non-proprietary products which are frequently used in conjunction with our proprietary products. We seek to be a single source for our customers' product needs in protein purification and ADMET screening.

## OUR STRATEGY

of this prospectus.

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 new proteomics and ADMET screening products as industry standards.
- launch a broad range of innovative new tools for drug discovery,
- leverage our existing distribution and marketing channels,
- provide a single source of tools for our customers' research needs in proteomics and ADMET screening, and
- acquire complementary technologies.

We organized our company as a Massachusetts corporation on March 7, 1996 in connection with our purchase of a portion of the assets of Harvard Apparatus, a business which, with its predecessors, had been in existence since 1901. We will be reincorporated by merger in Delaware prior to the closing of this offering. In connection with the reincorporation, we will change our corporate name from Harvard Apparatus, Inc. to Harvard Bioscience, Inc. Our principal executive offices are located at 84 October Hill Road, Holliston, Massachusetts 01746. Our telephone number at that location is (508) 893-8066 and our Internet address is www.harvardbioscience.com. The information contained on our website is not part

The names Harvard Bioscience and Harvard Apparatus and our logo are names and trademarks that belong to us. We have the rights to numerous trademarks and trade names including AmiKa, Biochrom, CPK, GeneQuant, GeneQuantPro, NaviCyte, NovaSpec, PrepTip, PureTip, ScanTox, Stronghold and UltraSpec. This prospectus also contains the trademarks and trade names of other entities that are the property of their respective owners.

#### THE OFFERING

offering..... shares

general corporate purposes.

Proposed Nasdaq National Market symbol..... HBIO

The above information is based on 819,695 shares outstanding as of September 15, 2000 and excludes:

- 150,831 shares issuable upon exercise of options then outstanding at a weighted average exercise price of \$14.22\$ per share.

Unless otherwise noted, this prospectus assumes:

- no exercise of the underwriters' over-allotment,
- an assumed initial offering price of \$ per share,
- a stock split of our common stock effected in connection with this offering,
- our reincorporation by merger in Delaware and our related name change prior to the closing of this offering,
- the redemption of our outstanding series  ${\tt A}$  redeemable preferred stock upon the closing of this offering,
- the automatic conversion of our outstanding series B convertible preferred stock into 48,500 shares of our common stock upon the closing of this offering,
- the issuance of 431,756 shares of our common stock upon exercise of all outstanding warrants at a weighted average exercise price of \$0.01 per share prior to the closing of this offering, and
- the amendment and restatement of our certificate of incorporation in connection with this offering.

	COMPANY FISCAL YEAR ENDED	FROM INCEPTION			FISCAL YEAR FOR THE PERIOD			Ε	ECEM	EAR ENI BER 31,		
	1995	TO DECEMB	15, 1996) ER 31, 1996 	1		1	998	1999				
	(UNAUDITED)	(IN THOUSANDS,							_			
TATEMENT OF OPERATIONS DATA:												
evenues Cost of goods sold	\$ 10,032 5,286		8,198 4,080		1,464 5,128		2,154 5,351	13,54	17			
Gross profit	4,746		4,118 3,141		6,336 4,217				31			
tock compensation expense								3,28	34			
Operating income	494		977		2,119							
operating income												
other (expense) income: Common stock warrant												
interest expense  Interest expense, net	 (472)		 (177)		(117) (223)		1,379) (210)	(29 <b>,</b> 69				
Amortization of deferred financing costs								(6	53)			
Other	(62)		98		10		31		55)			
ther (expense) income,												
net	(534)		(79) 		(330)		1,558) 	(30,47				
(Loss) income before income taxes	(40)		898		1,789		854	(29,28	331			
ncome taxes	85 		362		682		783	1.3	37			
Net (loss) income	\$ (125) ======	\$ ====	536 =====		1,107	\$ ===	71 =====					
Loss) income per share:												
Basic	\$ (0.24) ======		0.84		2.62		(0.18)					
Diluted	\$ (0.24) ======	\$ ====	0.44		1.27		(0.18)	\$(104.0				
eighted average common												
shares: Basic	520 <b>,</b> 518		20,518		5,773			284,05				
Diluted	520,518 ======	1,0	06,403 =====	86		28	4,050 =====	284,05	50			
ro forma (loss) income per												
share: Basic	\$ (0.24)	Ś	0.46	Ś	1.37	s	1.86	\$ 0.2	20			
Diluted	\$ (0.24)		0.44					\$ 0.1				
ro forma weighted average common shares:												
Basic Diluted	520,518 520,518		52,274 06,403		7,529 57,339		5,806 5,616					
	SIX	MONTHS ENDED JUNE 30,										
	1999	2000										

	(UNAUDITED)							
	(IN THOUSAN	NDS,	EXCEPT	SHARE	AND	PER	SHARE	DATA)
STATEMENT OF OPERATIONS DATA:								
Revenues	\$ 11,533 5,661				7	1,458 7,488		
Gross profit Other operating expenses Stock compensation					6	5,970 1,72		
expense	937					16	5	
Operating income						2,22	7	
Other (expense) income: Common stock warrant								
interest expense  Interest expense, net  Amortization of deferred					(67	7,526 (401		
financing costs Other	(25) (181)					(3° (27)		

Other (expense) income,

net	(7,888)	(68,234)
(Loss) income before income taxes	(6,575) 261	(66,007) 579
Net (loss) income	\$ (6,836) ======	\$ (66,586)
(Loss) income per share:		
Basic	\$ (24.28) ======	\$ (210.66)
Diluted	\$ (24.28)	\$ (210.66)
Weighted average common shares:		
Basic	284,050	316,488
Diluted	284,050	316,488
Pro forma (loss) income per share:		
Basic		\$ 1.10 \$ 0.98
Pro forma weighted average common shares:		
Basic Diluted	747,784 807,594	796,744 902,002

Pro forma basic and diluted net income (loss) per share have been calculated assuming the conversion of all outstanding shares of convertible preferred stock into common stock and the exercise of all outstanding warrants into common stock as if they had been converted on the dates of issuance. Accordingly, common stock warrant interest expense is excluded from the pro forma per share amounts.

The financial data presented above for the year ended December 31, 1995 represents the financial data of our predecessor company without any adjustments relating to our purchase of a portion of its assets.

## AS OF JUNE 30, 2000 (UNAUDITED)

	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
		(IN THOUSANDS)	
BALANCE SHEET DATA:			
Cash and cash equivalents	\$ 2,145	\$ 2,150	
Working capital	3,813	3,818	
Total assets	20,634	20,639	
Long-term obligations, net of current portion	4,532	4,532	
Preferred stock and common stock warrants	101,221	1,500	
Stockholders' equity (deficit)	(92,738)	6,983	

The preceding table presents a summary of our balance sheet data as of June 30, 2000:

- on an actual basis,
- on a pro forma basis to give effect to the conversion of all outstanding shares of convertible preferred stock into an aggregate of 48,500 shares of common stock and the exercise of all outstanding warrants into an aggregate of 431,756 shares of common stock, upon the closing of this offering, and
- on a pro forma as adjusted basis to reflect the sale of shares of common stock in this offering at an assumed initial offering price of \$ per share, after deducting estimated underwriting discounts, commissions and offering expense and the redemption of all outstanding shares of redeemable preferred stock upon the closing of this offering.

#### RISK FACTORS

AN INVESTMENT IN OUR COMMON STOCK INVOLVES SIGNIFICANT RISKS. YOU SHOULD CAREFULLY CONSIDER THE FOLLOWING RISKS BEFORE YOU DECIDE TO BUY OUR COMMON STOCK

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 which 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 which 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 WHICH 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 OF OUR PRODUCTS AND RESULT IN LOST REVENUES.

For the six months ended June 30, 2000, approximately 40% of our revenues were generated through an agreement with Amersham Pharmacia Biotech, or APB, under which APB acts as our primary marketing and distribution channel for the products of our Biochrom subsidiary. We have little or no control over APB's marketing and sales activities or the use of its resources. APB may fail to purchase sufficient quantities of products from us or perform appropriate marketing and sales activities. In addition, our inability to maintain our arrangement with APB for product distribution, could materially impede the growth of our business and our ability to generate sufficient revenue. Our agreement with APB may be terminated early under some circumstances, including in the event of a breach of a material term by us. The initial three-year term of this agreement expires in February 2002 after which it is subject to annual renewal. While we believe our relationship with APB is good, we cannot guarantee that the contract will be renewed or that APB will aggressively market our products in the future.

OUR COMPETITORS AND POTENTIAL COMPETITORS MAY DEVELOP PRODUCTS AND TECHNOLOGIES THAT ARE MORE EFFECTIVE OR COMMERCIALLY 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 which 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.

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 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. 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 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, has received and responded to correspondence from counsel to a third party competitor regarding the possible infringement by us of a patent and other pending patent applications held by such third party. While we believe that this matter has been concluded, we cannot assure you that this third party competitor will not assert these or similar claims in the future.

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. If these 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. 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. 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. 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 71% of our total revenues for the six months ended June 30, 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,
- changes in a specific country's or region's political or economic conditions,
- trade protection measures and import or export licensing requirements or other restrictive actions by foreign governments,
- potentially negative consequences from changes in tax laws,
- difficulty in staffing and managing widespread operations,
- differing labor regulations,

- differing protection of intellectual property, and
- unexpected changes in regulatory requirements.

WE MAY LOSE MONEY WHEN WE EXCHANGE FOREIGN CURRENCY RECEIVED FROM INTERNATIONAL REVENUES INTO U.S. DOLLARS.

A significant portion of our business is 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 exposures 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. We currently have no commitments or agreements with respect to any material acquisitions. 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 reduce your 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.

OUR MANUFACTURE AND SALE OF PRODUCTS COULD LEAD TO PRODUCT LIABILITY CLAIMS FOR WHICH WE COULD HAVE SUBSTANTIAL LIABILITY.

The manufacture and sale of our products exposes us to product liability claims if any of our products cause injury or are found otherwise unsuitable during manufacturing, marketing, sale or customer use. A successful product liability claim brought against us in excess of, or outside the coverage of, our insurance coverage could have a material adverse effect on our financial condition. We may not be able to maintain product liability insurance on acceptable terms, if at all, and insurance may not provide adequate coverage against potential liabilities.

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 and the turnover rate is high, 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.

AS OUR BUSINESS EXPANDS, WE MAY INCREASE OUR USE OF HAZARDOUS MATERIALS LEADING TO INCREASED ENVIRONMENTAL COMPLIANCE REQUIREMENTS AND THE POSSIBILITY OF CLAIMS RELATING TO IMPROPER HANDLING, STORAGE OR DISPOSAL OF THESE MATERIALS WHICH COULD BE TIME CONSUMING AND COSTLY.

Although we currently use fairly small quantities of hazardous substances in the manufacture and development of our products, as we expand our operations, our use, transportation, storage and disposal of hazardous substances may increase and lead to additional and more stringent requirements under environmental and health and safety statutes and regulations. We could be required to incur significant costs to comply with current or future environmental laws and regulations. In addition, our failure to comply with laws and regulations and any costs associated with unexpected and unintended releases of hazardous substances by us into the environment, or at disposal sites used by us, could expose us to substantial liability in the form of fines, penalties, remediation costs or other damages, or could lead to a shut down of our operations. We are not aware of any current claims associated with our use of hazardous substances. We intend to remain at all times in full compliance with all applicable environmental and health and safety laws and regulations.

OUR EXISTING STOCKHOLDERS WILL HAVE SUBSTANTIAL INFLUENCE OVER MATTERS REQUIRING A STOCKHOLDER VOTE.

Following the completion of this offering, our current stockholders will beneficially own or control approximately % 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 IS LIKELY TO BE 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 is likely to be volatile and could decline, perhaps substantially, following this offering 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 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.
- 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 which 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.

NEW INVESTORS IN OUR COMMON STOCK WILL EXPERIENCE IMMEDIATE AND SUBSTANTIAL DILUTION

The initial public offering price of our common stock will be substantially higher than the net tangible book value per share of our existing capital stock. As a result, if you purchase common stock in this offering you will incur immediate and substantial dilution of \$\(\) in net tangible book value per share of common stock, based on an assumed public offering price of \$\(\) per share. You will also experience additional dilution upon the exercise of outstanding stock options. In addition, the number of shares available for issuance under our 2000 Stock Option and Incentive Plan will automatically increase without stockholder approval.

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 this 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 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.

SHARES ELIGIBLE FOR PUBLIC SALE AFTER THIS OFFERING COULD ADVERSELY AFFECT OUR STOCK PRICE.

The market price of our common stock could decline as a result of sales of shares by our existing stockholders after this offering, or the perception that such sales will occur. These sales also might make it difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. After this offering, we will have shares of common stock of the shares sold in this offering will be outstanding. Of these shares, freely tradeable. All of our existing stockholders have executed lock-up agreements. Those lock-up agreements restrict all of our existing stockholders from selling, pledging or otherwise disposing of their shares for a period of 180 days after the date of this prospectus without the prior written consent of Thomas Weisel Partners LLC. However, Thomas Weisel Partners LLC may, in its sole discretion, release all or any portion of the common stock from the restrictions of the lock-up agreements. In addition, after this offering, we also intend to register 50,000 shares of common stock for issuance under our 2000 Stock Option and Incentive Plan and 25,000 shares under our Employee Stock Purchase Plan.

WE WILL HAVE BROAD DISCRETION AS TO THE USE OF THE PROCEEDS FROM THIS OFFERING AND MAY USE THE PROCEEDS IN A MANNER WITH WHICH YOU DISAGREE.

Our board of directors and our management will have broad discretion over the use of the net proceeds of this offering. You may disagree with the judgment of our board of directors and our management regarding the application of the proceeds of this offering. We intend to use a majority of the proceeds from this offering for payment of existing debt, redemption of our series A preferred stock, working capital and general corporate purposes and to fund potential acquisitions, if any. Because of the number and variability of factors that determine our use of the net proceeds from this offering, we cannot assure you that our actual use will not vary substantially from our currently planned uses. Initially, we intend to invest the net proceeds from this offering in income producing, investment grade securities.

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.

YOU WILL NOT RECEIVE CASH DIVIDENDS ON YOUR INVESTMENT IN OUR COMMON STOCK.

We intend to retain all of our earnings to finance the development and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Moreover, our ability to declare and pay cash dividends on our common stock is restricted by covenants in our senior credit facility and in the indenture governing our senior subordinated notes. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

AN ACTIVE TRADING MARKET FOR OUR COMMON STOCK MAY NOT DEVELOP.

Prior to this offering, there has been no public market for our common stock. Although we expect our common stock to be quoted on the Nasdaq National Market, an active trading market for our shares may not develop or be sustained following this offering. You may not be able to resell your shares at prices equal to or greater than the initial public offering price. The initial public offering price will be determined through negotiations between us and the underwriters and may not be indicative of the market price for these shares following this offering. You should read "Underwriting" for a discussion of the factors to be considered in determining the initial public offering price.

#### INFORMATION REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. The forward-looking statements are principally contained in the sections on "Prospectus Summary," "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." These statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performances 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:

- our business strategy,
- the market opportunity for our products, including the willingness of our customers to expand proteomics and ADMET investments,
- our plans for hiring additional personnel,
- our estimates regarding our capital requirements and our needs for additional financing, and
- our plans, objectives, expectations and intentions contained in this prospectus 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 greater detail under the heading "Risk Factors." Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus.

You should read this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. 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. We qualify all of our forward-looking statements by these cautionary statements.

#### USE OF PROCEEDS

We estimate that the net proceeds we will receive from the sale of shares of common stock will be approximately \$ million, or approximately \$ million if the underwriters fully exercise their over-allotment option, at the assumed offering price of \$ per share, in each case after deducting estimated underwriting discounts, commissions and offering expenses payable by us. We will not receive any proceeds from the sale of shares by the selling stockholder in this offering.

We expect to use the net proceeds of this offering as follows:

- for payment of approximately \$665,000 in subordinated debt and \$9.6 million under our credit facility,
- for redemption of our series A redeemable preferred stock at a cost of approximately \$1.5 million,
- to fund potential acquisitions, if any,
- for working capital, and
- for general corporate purposes.

Except for the payment of existing debt and the redemption of preferred stock listed above, the use of proceeds has not been specifically identified or allocated due to the flexible nature of our planning process and the constantly changing nature of our industry. We will retain broad discretion in the allocation and use of the net proceeds of this offering. Pending the uses described above, we intend to invest the remaining net proceeds from this offering in short-term, investment grade, interest-bearing securities.

Our subordinated debt bears interest at an annual rate of 13.0% and matures upon the consummation of this offering. All of the subordinated debt will be retired out of the proceeds of this offering.

Our credit facility consists of two term loans and a revolving credit line. One term loan and the revolving line of credit mature in January 2002. The other term loan matures in June 2004. The interest rate for the credit facility is equal to our lender's base rate plus 1.5%. This interest rate was 10.5% at September 15, 2000. In July 2000, we increased our borrowings under our credit facility by \$2.5 million to finance the acquisition of AmiKa Corporation. All of our outstanding indebtedness under our credit facility will be repaid out of the proceeds of this offering.

#### DIVIDEND POLICY

We have never declared or paid dividends on our common stock in the past and do not intend to pay dividends on our common stock 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. In addition, our existing credit facility does not permit us to pay cash dividends, and any future credit facilities may not permit us to pay cash dividends.

#### CAPITALIZATION

The following table describes our capitalization as of June 30, 2000:

- on an actual basis,
- on a pro forma basis to give effect to the conversion of all outstanding shares of convertible preferred stock into an aggregate of 48,500 shares of common stock, the exercise of all outstanding warrants into an aggregate of 431,756 shares of common stock upon the closing of this offering and the filing of our amended and restated certificate of incorporation prior to the effective date of this offering, and
- on a pro forma as adjusted basis to reflect the sale of shares of common stock in this offering at an assumed initial offering price of \$ per share, after deducting estimated underwriting discounts, commissions and offering expenses payable by us and the application of the net proceeds therefrom.

	AS OF JUNE 30, 2000					
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED			
		SANDS, EXCEPT				
Series A redeemable preferred stock, par value \$0.01 per share; 469,300 shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	\$ 1,500	\$ 1,500	\$			
forma and pro forma as adjusted	1,000					
Total preferred stock		\$ 1,500				
Common stock warrants	98 <b>,</b> 721					
Undesignated preferred stock, par value \$0.01 per share; 82,200 shares authorized, no shares issued and outstanding, actual; 5,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted						
Additional paid-in capital	3,299					
Treasury stock, 236,468 shares, actual and pro forma; no shares, pro forma as adjusted	(668) (94,911) (465)	, ,				
Total stockholders' equity (deficit)		6,987				
Total capitalization	\$ 8,482	\$ 8,487 ======	\$ =====			

The above table excludes 96,369 shares of common stock issuable upon exercise of stock options outstanding as of June 30, 2000 at a weighted average exercise price of \$10.60 per share. The above table also assumes no exercise of the underwriters' over-allotment option.

#### DILUTION

Our pro forma net tangible book value as of June 30, 2000, was approximately \$9.7 million, or \$12.34 per share of common stock. Pro forma net tangible book value per share represents the amount of our total pro forma tangible assets less total liabilities divided by the pro forma number of shares of common stock outstanding. After giving effect to the issuance and sale by us of

shares of common stock offered by this prospectus at an initial offering price of \$ per share and after deducting estimated underwriting discounts, commissions and offering expenses payable by us, our pro forma net tangible book value as of June 30, 2000 would have been \$ , or \$ per share. This represents an immediate increase in the pro forma net tangible book value of \$ per share to existing stockholders and an immediate dilution of \$ per share to new stockholders in this offering illustrated by the following table:

Initial public offering price per share		\$
Pro forma net tangible book value per share before this offering	\$ 12.34	
Increase per share attributable to new stockholders	 	
Pro forma net tangible book value per share after the offering		
Pro forma net tangible book value per share to new stockholders		\$

The following table sets forth on a pro forma basis as of June 30, 2000, the number of shares of common stock purchased from us, the total consideration paid and the average price per share paid by existing and new stockholders before deducting underwriting discounts, commissions and offering expenses payable by us:

	SHARES F	PURCHASED		TOTAL CONSIDERATION		
	NUMBER	PERCENT	AMOUNT	PERCENT	AVERAGE PRICE PER SHARE	
Existing stockholders New stockholders	819,695	ે ર	\$	ે	\$	
Total		100.0%	\$	100.0%		
	======			=====		

The foregoing discussion and tables assume no issuance of shares by us pursuant to the underwriters' over-allotment option and no exercise of any stock options outstanding. As of June 30, 2000, there were options outstanding to purchase a total of approximately 96,369 shares of common stock with a weighted average exercise price of \$10.60 per share. To the extent that any of these options are exercised, your investment will be further diluted. In addition, we may grant more options in the future under our stock plans.

#### SELECTED FINANCIAL DATA

You should read the following selected consolidated financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this prospectus. The statement of operations data for the years ended December 31, 1997, 1998 and 1999 and the balance sheet data at December 31, 1998 and 1999 are derived from our audited consolidated financial statements appearing elsewhere in this prospectus. The balance sheet data at December 31, 1997 and 1996, and the statement of operations data for the period ended December 31, 1996 are derived from our audited consolidated financial statements not included in this prospectus. The statement of operations data for the year ended December 31, 1995 and the balance sheet data at December 31, 1995 represents data of a predecessor company and are derived from their unaudited consolidated financial statements not included in this prospectus. The interim statement of operations data for the six-month periods ended June 30, 1999 and June 30, 2000 and the interim balance sheet data at June 30, 2000 are derived from our unaudited consolidated interim financial statements appearing elsewhere in this prospectus which, in the opinion of management, have been prepared on the same basis as the audited consolidated financial statements and reflect all adjustments necessary for a fair presentation of that data. The data for the six-month period ended June 30, 2000 are not necessarily indicative of results for the year ending December 31, 2000 or any future period.

	PREDECESSOR COMPANY FISCAL YEAR ENDED	FOR THE PERIOD FROM INCEPTION		CAL YEAR END DECEMBER 31,		SIX MONTE	30,	
	DECEMBER 31, 1995	(MARCH 15, 1996 TO DECEMBER 31, 1996)	1997	1998	1999	1999	2000	
	(UNAUDITED)	(IN THOUSANDS, EX				(UNAUDITED)		
STATEMENT OF OPERATIONS DATA:								
Revenues  Cost of goods sold	\$ 10,032 5,286	\$ 8,198 4,080	\$ 11,464 5,128	\$ 12,154 5,351	\$ 26,178 13,547	\$ 11,533 5,661	\$ 14,458 7,488	
Gross profit	4,746	4,118	6,336	6,803	12,631	5,872	6 <b>,</b> 970	
General and administrative expense	2,435 1,469 348	1,834 1,058 249	2,338 1,672 207 	2,317 1,722 325 27	7,431 2,448 1,188 368	2,704 1,255 461 139	2,179 1,505 799 260	
Operating income	494	977	2,119	2,412	1,196	1,313	2,227	
Other (expense) income: Foreign currency (loss) gain	23	108	(96)	21	(48)	(169)	(280)	
Common stock warrant interest expense			(117)	(1,379)	(29,694)	(7,403)	(67,526)	
Interest expense, net  Amortization of deferred	(472)	(177)	(223)	(210)	(657)	(279)	(401)	
financing costs Other	(85)	(10)	106	10	(63) (17)	(25) (12)	(37) 10	
Other expense, net	(534)	(79)	(330)	(1,558)	(30,479)	(7,888)	(68,234)	
(Loss) income before income	(40)	000	4 500	0.5.4	(00.000)	46 555	455 0071	
taxes	(40) 85	898 362	1,789 682	854 783	(29,283) 923	(6,575) 261	(66,007) 579	
Net (loss) income	\$ (125) ======	\$ 536 ========	\$ 1,107	\$ 71	\$(29,420)	\$ (6,836)	\$ (66,586)	
(Loss) income per share:								
Basic	\$ (0.24)	\$ 0.84	\$ 2.62	\$ (0.18)	\$(104.00)	\$ (24.28)	\$(210.66) ======	
Diluted	\$ (0.24) ======	\$ 0.44	\$ 1.27	\$ (0.18) ======	\$(104.00) ======	\$ (24.28) ======	\$(210.66) ======	
Weighted average common shares:								
Basic	520 <b>,</b> 518	520,518 =======	375 <b>,</b> 773	284,050 ======	284,050 =====	284,050 =====	316,488 ======	
Diluted	520,518 ======	1,006,403	867,339 =====	284,050 =====	284,050 =====	284,050 =====	316,488 ======	

			3.0.00			
	1995	1996	1997	1998	1999	AS OF JUNE 30, 2000
	(UNAUDITED)		(IN THOUSANDS)			(UNAUDITED)
BALANCE SHEET DATA:						
Cash and cash equivalents	\$ 1,043	\$1,088	\$ 707	\$ 957	\$ 2,396	\$ 2,145
Working capital	(4,910)	1,677	1,698	2,230	3,032	3,813
Total assets	11,204	6,397	6,161	7,192	20,561	20,634
Long-term obligations, net of current portion	498	1,112	829	672	5,073	4,532
Preferred stock and common stock warrants		1,504	1,621	3,000	33,694	101,221
Stockholders' equity (deficit)	1,203	516	737	678	(25,676)	(92,738)

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

YOU SHOULD READ THE FOLLOWING DISCUSSION IN CONJUNCTION WITH OUR CONSOLIDATED FINANCIAL STATEMENTS, THE RELATED NOTES AND OTHER FINANCIAL INFORMATION APPEARING ELSEWHERE IN THIS PROSPECTUS.

#### OVERVIEW

We are a leading 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 contained in a given sample. 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 within 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 \$568,000 in cash,
- In May 2000, we acquired certain assets of Biotronik, consisting primarily of products for amino acid analysis, for \$493,000 in cash, and
- 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 \$3.0 million in cash.

REVENUES. We generate revenues by selling instruments, devices and consumables through our catalog, our distributors and our web site. For the six months ended June 30, 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 researchers with a single source for all equipment needed to conduct a particular experiment. For the six months ended June 30, 2000, approximately 71% 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 six months ended June 30, 2000 than indicated above if we had shipped our products directly to their 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.

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.

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 site. We may from time to time in the future expand our marketing efforts by employing additional technical sales 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.

Since our reorganization in 1996, we have experienced substantial revenue growth. In the future we intend to introduce new products for proteomics and ADMET research that support emerging and potentially large markets. In order to support the anticipated growth of these new products, we may expand our product development and sales and marketing activities. In the event we pursue activities which increase our product development and sales and marketing expenses, operating results will be adversely affected if revenues do not increase proportionately. If revenues are below expectations, our business, operating results and financial condition are likely to be materially and adversely affected. Net income may be disproportionately affected by a reduction in revenues as a relatively smaller amount of our expenses vary with changes in our revenues. As a result, we believe that period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indications of future performance.

SIX MONTHS ENDED JUNE 30, 2000 COMPARED TO SIX MONTHS ENDED JUNE 30, 1999

REVENUES. Revenues increased \$2.9 million, or 25%, to \$14.5 million in 2000 from \$11.5 million in 1999. Excluding the impact of changes in foreign currency exchange rates, revenues based on 1999 rates would have been approximately \$14.7 million in 2000. Approximately \$1.5 million of the \$2.9 million increase, or 52%, was attributable to the full period effect of revenues from the acquisition of our Biochrom subsidiary in March 1999. The balance of the increase was attributable to \$1.7 million of revenue from product line acquisitions made in the second half of 1999 partially offset by the cyclical nature of catalog sales.

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COST OF GOODS SOLD. Cost of goods sold increased \$1.8 million, or 32%, to \$7.5 million in 2000 from \$5.7 million in 1999. The increase in cost of goods sold as a percentage of revenues was due to slightly higher cost of goods sold on acquired product lines and for our Biochrom subsidiary acquired in March 1999. Our Biochrom subsidiary experiences lower revenues and correspondingly lower general and administration and sales and marketing expenses relative to cost of goods sold as a consequence of marketing its products primarily through a distributor.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administrative expense decreased \$525,000, or 19%, to \$2.2 million in 2000 from \$2.7 million in 1999. The decrease was due primarily to compensation expense on stock options of \$937,000 in 1999. Excluding these charges, general and administrative expenses increased \$448,000 in 2000 compared to 1999 due primarily to the full period effect of Biochrom as well as increased support for operations.

SALES AND MARKETING EXPENSE. Sales and marketing expense increased \$251,000, or 20%, to \$1.5 million in 2000 from \$1.3 million in 1999. The increase was primarily due to expenses of acquisitions. As a percentage of revenues, marketing and sales expense was 10% in 2000 and 11% in 1999. This declining percentage reflects spreading expense over a larger base of revenues. 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.

RESEARCH AND DEVELOPMENT EXPENSE. Research and development spending increased \$337,000, or 73%, to \$799,000 in 2000 from \$461,000 in 1999. The increase in research and development expense resulted from expenses of acquisitions, 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 6% in 2000 and 4% in 1999. This increasing percentage reflects expanded efforts on ADMET testing products.

AMORTIZATION OF GOODWILL. Amortization of goodwill was \$260,000 in 2000 and \$139,000 in 1999. The increase is the result of amortizing additional goodwill incurred in connection with our acquisitions in 2000.

OTHER EXPENSE, NET. Other expense, net, was \$68.2 million in 2000 compared to \$7.9 million in 1999. Other expense, net, included a non-cash charge for common stock warrant interest expense of \$67.5 million in 2000 and \$7.4 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 represents 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 this offering, the warrants will be exercised for common stock and the right to be paid cash will terminate. The liability previously recorded will become part of common stock and additional-paid-in capital, and no additional liability will be incurred with respect to these warrants. Net interest expense increased \$120,000, or 43%, to \$400,000 in 2000 from \$279,000 in 1999. The increase resulted primarily from higher debt balances in 2000, which were incurred to finance acquisitions.

EFFECTIVE TAX RATES. Our effective tax rates have been established at 38% for 2000 and 33% for 1999 excluding the impact for common stock warrant interest expense, which is not deductible for income tax purposes.

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

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 primarily to the full year of revenues from the products acquired from Medical Systems in June 1998, increased sales resulting from our expanded direct marketing efforts, and to a lesser extent 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 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.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administration expense increased \$5.1 million, or 221%, to \$7.4 million in 1999 from \$2.3 million in 1998. Biochrom accounted for \$1.1 million, or 22%, 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 and the compensation expense, 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 increased to 28% 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 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 1999. The increase resulted primarily from higher debt balances in 1999, which were incurred to finance acquisitions.

EFFECTIVE TAX RATES. Our effective tax rates have been established at 33% for 1999 and 35% for 1998. The decrease in the rate is principally due to lower foreign jurisdiction statutory income tax rates, specifically the result of the acquisition of Biochrom.

REVENUES. Revenues increased \$690,000, or 6%, to \$12.2 million in 1998, from \$11.5 million in 1997. The increase was due to the introduction of new products from the acquisition of Medical Systems in June 1998, which accounted for \$510,000 of the increase, as well as growth in sales of existing products.

COST OF GOODS SOLD. Cost of goods sold increased approximately \$224,000, or 4%, to \$5.4 million in 1998 from \$5.1 million in 1997. As a percentage of revenues, cost of goods sold decreased to 44% in 1998 from 45% in 1997. The decrease was due to spreading manufacturing overhead across increased production relating to the products acquired with the purchase of Medical Systems.

GENERAL AND ADMINISTRATIVE EXPENSE. General and administrative expense remained constant at \$2.3 million from 1997 to 1998. As a percentage of revenues, general and administrative expense decreased to 19% in 1998 from 20% in 1997. The decrease in general and administrative expense as a percentage of revenues was primarily due to spreading general and administrative costs over a greater revenue base.

SALES AND MARKETING EXPENSE. Sales and marketing expense increased \$49,000, or 3%, to \$1.7 million in 1998 from \$1.7 million in 1997. As a percentage of revenues, sales and marketing expense decreased to 14% in 1998 from 15% in 1997. The decrease in sales and marketing expense as a percentage of revenues was primarily due to spreading sales and marketing costs over a greater revenue base.

RESEARCH AND DEVELOPMENT EXPENSE. Research and development spending increased \$118,000, or 57%, to \$325,000 in 1998 from \$206,000 in 1997. The increase in spending represented investments in product development and enhancement of the existing family of products. As a percentage of revenues, research and development expense increased to 3% in 1998 from 2% in 1997.

AMORTIZATION OF GOODWILL. Amortization of goodwill consisted of a charge of \$28,000 in 1998 resulting from the acquisition of Medical Systems. There was no corresponding charge in 1997.

OTHER EXPENSES, NET. Other expenses, net were \$1.6 million in 1998 compared to \$330,000 in 1997. The increase was due primarily to a charge of \$1.4 million for common stock warrant interest expense.

EFFECTIVE TAX RATES. Our effective tax rates have been established at 92% for 1998 and 36% for 1997. Excluding the impact for common stock warrant interest expense, the effective income tax rate was established at 35% for 1998.

### LIQUIDITY AND CAPITAL RESOURCES

Historically, we have financed our business through cash provided by operating activities, the issuance of common and preferred stock, and bank borrowings. Our liquidity requirements have arisen primarily from net cash used in investing activities, including funding of acquisitions, payments on outstanding indebtedness, research and development expenditures, and capital expenditures. As of June 30, 2000, we had cash of \$2.1 million. Since our reorganization in March 1996, we have raised \$11.5 million, consisting of \$2.5 million of preferred and common stock and \$9.0 million of debt. As of June 30, 2000, we had \$4.8 million in debt under a bank term loan, \$678,000 million in subordinated debt and \$2.5 million outstanding under a \$3.8 million revolving credit facility.

Our operating activities generated cash of \$1.2 million in the first six months of 2000, \$2.9 million in 1999, \$1.8 million in 1998 and \$1.1 million in 1997. 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.

Our investing activities used cash of \$1.3 million in the first six months of 2000, \$8.5 million in 1999, \$1.4 million in 1998 and \$653,000 in 1997. Cash has been used in the following technology and business acquisitions:

- \$493,000 for Biotronik's amino acid analysis systems business in May 2000,
- \$390,000 for the NaviCyte diffusion chamber systems product line in November 1999,
- \$568,000 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 provided cash of \$18,000 for the first six months of 2000 and \$7.3 million in 1999, and used cash of \$105,000 in 1998 and \$874,000 in 1997. Financing cash flows consisted of borrowings under a revolving credit facility, long-term debt and the issuance of preferred stock. As of June 30, 2000, we had approximately \$1.3 million available under our revolving credit facility, subject to our ability to maintain compliance with all of the covenants contained in our revolving credit agreement. We were in compliance with all covenants as of June 30, 2000.

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 offering, we intend to use a portion of the proceeds to redeem our series A redeemable preferred stock in the amount of \$1.5 million, and to repay the bank term loan, the subordinated debt and the revolving credit facility.

Based on our operating plans, we expect that proceeds from this offering, available cash, cash generated from operations, and cash available from our revolving credit facility will be sufficient to finance operations and capital expenditures for at least two years from the date of this prospectus. However, we may use a substantial portion of the proceeds from this offering to accelerate product development, expand our sales and marketing activities or consummate acquisitions. Therefore, we may need to raise additional capital, which may be dilutive to existing stockholders. The 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. In the first half of 2000 and in 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 \$280,000 in the first six months of 2000.

Historically, our realized foreign exchange gains and losses have not been material. Accordingly, 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 \$2.3 million as of June 30, 2000 and \$1.9 million as of June 30, 1999. We include in backlog only those orders for which we have received valid purchase orders. Our backlog as of any particular date may not be representative of actual sales for any succeeding period. We expect to ship substantially all of the June 30, 2000 backlog by December 31, 2000

#### 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 will be adopted on January 1, 2001. We believe the adoption of this statement will not have a significant impact on our financial position, results of operations or cash flows.

## SUBSEQUENT EVENT

In July 2000, we purchased substantially all the assets of AmiKa Corporation, a developer of products for proteomics and genomics research. Cash consideration including transaction expenses was \$3.0 million. The acquisition will be accounted for by the purchase method of accounting.

## QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest rate risk and foreign currency rate risk are the primary sources of market risk to our operations. As of June 30, 2000, we had aggregate variable rate long-term debt of \$4.0 million and revolving credit facility debt of \$2.5 million. A 10% change in interest rates would change the annual interest expense on our long-term debt by approximately \$40,000 and on our revolving credit facility by \$25,000.

#### OVERVIEW

We are a leading 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 screening bottlenecks in drug discovery.

To address these two critical bottlenecks in protein purification and ADMET screening, we recently 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 and ScanTox in vitro toxicology screening instruments.

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, as well as precision infusion pumps, organ testing systems and cell ventilators used in ADMET screening.

#### 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. We have completed five 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.

#### INDUSTRY OVERVIEW

The life sciences research industry is undergoing fundamental change and growth resulting principally from the explosive growth in gene discovery and the demand for greater efficiency in the drug discovery process. Industry experts estimate that in 2000, the life sciences research industry will spend more than \$50 billion on drug discovery research and development. The goal of drug discovery is to find compounds that will bind specifically to a given target without significantly affecting any other molecules in the body. Traditionally, chemists have laboriously synthesized new compounds with potential therapeutic activity one at a time or painstakingly isolated them from natural resources. Today, combinatorial chemistry techniques are used to greatly increase the supply and diversity of such compounds. Libraries of hundreds of thousands, or even millions, of compounds are now available for testing in biological assays against targets.

Until recently, life sciences researchers had identified only a few hundred targets against which to test these compounds. Driven by large-scale DNA sequencing projects, such as the Human Genome Project, life sciences researchers expect to identify tens of thousands of new genes as they decipher the genomes of both humans and disease-causing organisms. When a gene, which is a segment of DNA, is expressed, a copy of the gene sequence is carried in messenger RNA, or mRNA, which is used to direct the manufacture of a protein. Although genes, DNA, mRNA and proteins are all targets for

drug discovery, proteins are by far the most common. Proteins are the molecular machines of the cell that are responsible for performing the majority of cellular functions. Once proteins are identified and validated as potential targets, they need to be screened against hundreds of thousands, if not millions, of compounds in a process known as primary screening.

Drug discovery is a time-consuming and costly process. In the pre-genomics era, the compound development, primary screening and clinical trials stages were bottlenecks in this process. The successes of genomics, combinatorial chemistry and high throughput screening in recent years have alleviated the bottlenecks at the compound development and primary screening stages. However, these bottlenecks have been replaced by bottlenecks at the target validation, assay development and absorption, distribution, metabolism, elimination and toxicology, or ADMET, testing stages. The revolution in genomics is expected to increase the number of targets from 500 to 10,000, which will consequently greatly increase the need for protein purification and analysis. The increase in the number of compounds in libraries from tens of thousands to millions together with the increase in the number of targets is greatly increasing the number of leads requiring ADMET screening.

#### THE DRUG DISCOVERY PROCESS

The drug discovery process consists of several steps, which are illustrated below

The diagram that illustrates the drug discovery process is initially split into two parallel tracks which merge into a single track as the diagram moves to the right. The upper track of the diagram is titled "Compound Development" and includes an arrow titled "Compound Libraries." Below the arrow are the words "Combinatorial Chemistry." The lower track of the diagram is titled "Target Discovery" and includes two arrows. The first arrow is titled "Target Identification." Below this arrow is the word "Genomics." The next arrow to the right is titled "Target Validation." Below this arrow is the word "Proteomics." Following the "Compound Libraries" arrow on the upper track and the "Target Validation" arrow on the lower track, the two tracks of the diagram combine and include arrows to illustrate the remaining stages and key bottlenecks in the drug discovery process. The individual arrows from left to right include an arrow titled "Assay Development" followed by an arrow titled "High Throughput Screening." These two arrows in the diagram appear under the title "Primary Screening. To the right of the "High Throughput Screening" arrow is an arrow titled "Lead Optimization" followed by an arrow titled "ADMET Screening." two arrows in the diagram appear under the title "Secondary Screening." To the right of the "ADMET Screening" arrow is an arrow titled "Clinical Trials," the final arrow in the process flow diagram.

TARGET IDENTIFICATION involves isolating a particular molecule, typically a protein, and evaluating the role that it plays in the body to determine whether it might be a viable target for further investigation. Today, this activity is most often initiated by genomics studies, including DNA sequencing, RNA analysis and genetic mapping.

TARGET VALIDATION involves demonstrating that affecting the function of a particular target has a positive effect on the course of a disease. Target validation employs a variety of methods including RNA analysis, protein analysis and cell biology. Target validation is a more time-consuming process than target identification.

PRIMARY SCREENING involves the large-scale testing of collections of chemical compounds, known as compound libraries, against validated targets. These libraries are tested using high throughput assays. The goal is to find individual compounds that bind to and inhibit or activate a particular target, commonly referred to as a hit. An assay, in the context of screening compounds against a new target, refers to a test a researcher must develop for measuring whether particular compounds in a library interact with the target in a certain manner. An assay must be developed for each target to be screened. The major pharmaceutical companies are moving towards screening up to 100 targets annually with libraries of up to one million compounds each.

SECONDARY SCREENING involves the refinement of hits into leads that can be used in clinical trials. This step consists of lead optimization and ADMET testing. Lead optimization involves conducting successive rounds of chemical alterations and biological tests to find compounds similar to the original compound identified in primary screening which have improved drug properties over the initial compound, particularly efficacy. ADMET testing involves the conducting of various tests on compounds

to ensure that they are safe and have good pharmacological properties such as high adsorption into the blood from the digestive tract and good distribution to the site of the target molecule in the body. This stage also involves the testing of compounds to determine therapeutic activity in animal models of disease and to ensure that the compounds can be manufactured with consistent quality.

CLINICAL TRIALS involve the testing of pharmaceutical compounds in humans to demonstrate their safety and efficacy. Because clinical trials are by far the most expensive part of drug discovery, and undesirable ADMET properties are the most common reasons for failure, pharmaceutical and biotechnology companies can achieve substantial cost savings by identifying drug candidates with poor ADMET properties as early in the drug discovery process as possible. Drugs with successful clinical trials are almost always commercialized.

#### PROTEOMICS

Proteomics involves the large-scale purification, identification and analysis of proteins. Proteins are manufactured in the body's cells according to the code contained in DNA and are the molecular machines of the cell that are responsible for performing the majority of cellular functions. Proteins are the most common targets in the field of drug discovery because proteins tend to be far more accessible to drugs than either DNA or mRNA which are located in the nucleus of the cell.

Every protein that is identified as a potential target must be analyzed. The trend in protein analysis currently is moving towards the use of mass spectrometry, which is the fastest and most accurate technique for protein analysis. Because mass spectrometers are highly sensitive, they require the use of pure samples in order to properly analyze the protein. Thus, protein purification, the removal of reagents such as salts, detergents and buffers, is essential to target discovery.

In the last few years the revolution in genomics and the completion of the Human Genome Project has vastly increased the number of known targets. Before the Human Genome Project there were only approximately 500 known targets. Some experts believe that the sequencing of the human genome will ultimately lead to the identification of 50,000 to 100,000 genes and over 1,000,000 proteins. Many scientists expect that this will in turn lead to the identification of up to 10,000 targets. Each of these targets, many of which will be proteins, will need to be purified and analyzed many times prior to becoming a validated target for primary screening. As a result of the recent and projected increases in the number of known drug targets, purifying protein samples has been and will continue to be a significant bottleneck in the drug discovery process.

### ADMET SCREENING

The goal of ADMET screening is to identify compounds that have toxic side effects or undesirable pharmacological properties. These compounds are then either eliminated or further chemically modified and re-screened. While ADMET screening is traditionally conducted late in the drug discovery process, early application of ADMET screening can be highly beneficial. This is because more than half of the 90% of lead compounds which fail in the costly clinical trial stage of drug discovery fail due to poor pharmacological properties. These important pharmacological properties consist of absorption, distribution, metabolism and elimination which, together with toxicology, are described below:

ABSORPTION. Absorption describes the ability of a drug to pass through the wall of the digestive tract and enter the blood stream. Absorption is an important property of an effective drug because adequate absorption allows a drug to be administered orally rather than by direct injection into the blood. If a lead candidate cannot be absorbed easily from the digestive tract into the blood, its commercial viability will be adversely impacted even if it effectively acts against the target.

DISTRIBUTION. Distribution describes the amount of a drug that different tissues in the body take in from the blood. Distribution of the drug to the tissue containing the target molecule is necessary for the drug to have the desired effect. Moreover, undesirable side effects may occur if the drug is distributed to tissues other than the one containing the target molecule. Effective distribution requires the drug to be transported around the body and released into the tissue containing the target molecule at an appropriate rate. The flow of blood alone is often an effective distribution method. However, while the binding of a drug to blood proteins can increase the proper distribution of a drug, it can cause toxic problems if the bond formed is too strong.

METABOLISM. Metabolism describes the chemical changes that the body makes to a drug. This is an important property of an effective drug for three reasons. First, some drugs must be metabolized in order to become effective. Second, some drugs may have no toxic side effects, but the byproducts of their metabolism, known as metabolites, may be toxic. Third, metabolism usually makes drugs more soluble in water, which in turn makes it easier for the body to eliminate them in the urine.

ELIMINATION. Elimination describes the process by which the body expels a drug. If the blood absorbs a drug, it will be primarily eliminated in the urine either in its native or metabolized forms. Elimination is important because toxicity is primarily a matter of concentration—even common compounds such as aspirin and caffeine are toxic at high enough concentrations. If the body does not eliminate a drug, the drug's concentration will build up with every dose taken, eventually reaching toxic levels.

TOXICOLOGY. Toxicology describes the adverse effects a drug has on the body. These range from nausea to death. All drugs must be shown to be safe to the satisfaction of regulatory authorities prior to commercialization. Toxicology consists of tests designed to determine the likelihood that a drug will cause death or the growth of tumors, disrupt normal reproductive function or the immune system or mutate DNA.

For every 1,000 hits identified through primary screening, only about ten survive secondary screening and make it into clinical trials, the final stage of drug discovery. Of those ten, only one, on average, survive the regulatory process to be commercialized as a new drug.

CURRENT TECHNOLOGIES FOR PROTEIN PURIFICATION AND ADMET SCREENING

PROTEIN PURIFICATION. Protein purification is an essential step in proteomics. Researchers must remove any salts, buffers, detergents and cellular debris prior to analyzing a protein sample. Current technologies for protein purification include packed bed columns and dialysis. In order to isolate a specific protein, two-dimensional gel electrophoresis, or 2DGE, is typically used in advance of running a sample through a packed bed column or dialysis. Two-dimensional gel electrophoresis isolates different types of proteins in a two-stage process using electric currents passed through gels. Each protein migrates to a specific location in the gel. The protein can then be separated from the gel residue using packed bed columns or dialysis.

PACKED BED COLUMNS are small disposable plastic tubes containing chromatography media. A protein sample is typically pipetted into the top of the column, which is then placed in a centrifuge or vacuum manifold to draw the sample through the media. These columns will remove salts, detergents, buffers and 2DGE gel residue, but may retain some of the protein in the media.

DIALYSIS involves the use of a porous membrane which allows small molecules such as salts, detergents, buffers and 2DGE gel residue to pass through but blocks larger molecules such as proteins from passing through. Dialysis involves pipetting the protein sample into a device which consists of a chamber with the porous membrane covering one otherwise open end. The chamber

is then placed in a large volume of pure water and stirred for a period of time, which may be minutes or hours.

ADMET SCREENING. ADMET testing at the secondary screening stage has traditionally relied almost exclusively on live animal testing instead of tools. The most common animals used in drug discovery studies are laboratory rats and mice. As a drug compound moves closer to human clinical trials, the United States Food and Drug Administration requires that studies be performed using larger animals, such as rabbits and dogs.

## LIMITATIONS OF CURRENT TECHNOLOGIES

PROTEIN PURIFICATION. Current technologies for protein purification in proteomics have the following limitations:

- LOW PRODUCTIVITY. Neither packed bed columns nor dialyzers are easily capable of automated sample handling. Using packed bed columns, either alone or in connection with two-dimensional gel electrophoresis, requires centrifugation or the use of a vacuum to move the sample through the purification media. This means the sample must be physically moved to the centrifuge or vacuum pump, left to run--typically for several minutes--then removed, washed and the protein eluted.
- LOSS OF PROTEIN SAMPLE. Packed bed columns consume a portion of the sample leading to sample loss. The amount of sample lost in the purification process may only be microliters. This is not a significant problem if several milliliters of sample are available, as is common in DNA purification. However, if only a few microliters of sample are available, as is common in protein purification, the loss of even one microliter may be a large percentage of the total. In addition, protein samples are typically expensive and thus sample loss must be minimized.

ADMET SCREENING. Current technologies for ADMET screening have the following limitations:

- HIGH COST. Animal assays are costly because all animals have to be housed and cared for under strict government regulations often in clean room environments and with a significant staff to care for the animals. A standard 14-day range finding study performed using laboratory rats costs approximately \$75,000, and a two-year carcinogenicity study carried out with laboratory rats costs approximately \$1 million. A later stage 90-day study carried out using dogs typically costs almost twice as much as the same test performed using laboratory rats.
- LABOR INTENSITY. By their nature, animal assays cannot be automated and thus require the time of highly skilled research scientists, such as surgeons and pathologists.
- ETHICAL CONSIDERATIONS. Even though researchers must use the lowest number of the least sentient animals to achieve the scientifically needed information, avoid pain and consider alternatives to the use of live animals, the large number of animals used still creates ethical considerations.

# OUR SOLUTIONS

We overcome the limitations of current technologies by providing innovative, enabling tools for protein purification and ADMET screening.

# PROTEIN PURIFICATION

Our protein purification technologies are designed to be quick to use and to reduce sample loss.

- HIGHER PRODUCTIVITY. Our purification pipette tips are quicker to use than packed bed columns because a centrifugation or vacuuming step is not necessary. This avoids both the moving of the

sample to and from the centrifuge or vacuum pump and the run time in the centrifuge or vacuum pump. We believe our protein purification pipette tips are the only pipette tips capable of being fitted to standard pipetting workstations and thus being used for automated protein purification. This automation increases our customers' productivity. In addition, our 96 well plate versions of dialyzers and spin columns can be used directly in automated equipment, again increasing our customers' productivity.

- REDUCED SAMPLE LOSS. Our miniaturization of dialyzers and spin columns reduces sample loss in the membrane or column material. Our purification pipette tips contain smaller volumes of material than packed bed columns and thus less sample is retained in the material.

#### ADMET SCREENING

Our ADMET screening technologies employ novel approaches to obtaining ADMET data while reducing the use of large numbers of live animals.

- LOWER COST. Most of our ADMET screening products use organs, tissue or blood proteins rather than live animals. In particular, our in vitro toxicology assay uses the lenses of cows' eyes obtained as a by-product of the beef industry, and our 96 well plate for serum protein binding uses blood proteins in vitro rather than in the bloodstream of live laboratory animals.
- IMPROVED AUTOMATION. Our in vitro toxicology assay can be run in a few minutes of instrument time and a few hours of elapsed time. By contrast, basic toxicology tests in animals typically take days of elapsed time and more advanced tests take weeks or months. Our 96 well plate for serum protein binding can be run on automated liquid handling equipment.
- REDUCED ANIMAL USAGE. Our in vitro toxicology assay uses cow eye lenses instead of live animals to detect toxic effects of compounds. Our drug absorption chamber uses cultured human colon cells instead of animal intestinal tissue to simulate the absorption of a drug into the blood from the digestive tract. Our 96 well plate for serum protein binding tests the binding ability of compounds on extracted blood proteins instead of infusing the compounds into the bloodstreams of live test animals.

## 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

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 recently introduced several new innovative products designed to reduce the cost and time associated with protein purification and ADMET screening in drug discovery. We have already begun to realize revenue from the sales of our products, including purification pipette tips, spin columns, dialyzers, in vitro toxicology assays and equilibrium dialysis plates. We intend to rapidly increase the market acceptance of these 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 our customers are eager to acquire 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 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 APB, providing us with access to APB'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, provides us with a competitive advantage in bringing new products to market quickly and cost effectively.

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 which 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 three 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 broad array of products includes the following:

PRODUCT CATEGORY	PRODUCT	DESCRIPTION	NUMBER OF PRODUCTS	YEAR OF INTRODUCTION FOR PRODUCT CATEGORY
PROTEOMICS Protein Purification	Purification Pipette Tips	Disposable pipette tips - coated with purification media - loaded with purification media	50	1999 (coated) Est. Q4 2000 (loaded)
	Macro Spin Columns	Disposable tubes containing purification media	20	1998
	Ultra Micro Spin Columns	Disposable tubes containing purification media	20	1998
	Dialyzers	Membrane capped chambers - reusable - disposable - 96 well	45	1996 and prior
	Equilibrium Dialyzers	Membrane separating two chambers - disposable - 96 well	9	1996-1999
Protein Analysis	Molecular Biology Spectrophotometers	Range of spectrophotometers	6	1970s (initial) 2000 (latest)
	DNA/RNA/Protein Calculators	Spectrophotometers with application software	2	1993 (initial) 2000 (latest)
	96 Well Plate Readers	Range of automated readers - absorbance - luminescence - fluorescence	3	Est. Q4 2000 (absorbance) Est. 2001 (luminescence) Est. 2001 (fluorescence)
	Amino Acid Analysis Systems	Ninhydrin-based amino acid detection systems	2	1970s (initial) 2000 (latest)
ADMET SCREENING Absorption	NaviCyte Diffusion Chambers	Simulated digestive tract/ blood stream interfaces	6	1995
Distribution	Equilibrium Dialysis Plate	Membrane separating two chambers	9	1996-1999
Metabolism/ Elimination	Organ Testing Systems	Chambers with stimulators, perfusion and recording devices	8	1970s-1999
Toxicology	ScanTox Assay	In vitro toxicology assay	1	2000
	Precision Infusion Pumps	Microprocessor controlled syringe pumps		1952 (mechanical) 1986 (microprocessor) 1998 (latest)

PROTEOMICS PRODUCTS--PROTEIN PURIFICATION

PREPTIP 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 rapid protein purification because it avoids the step of using a centrifuge or vacuum manifold. 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.

## PURETIP DNA PURIFICATION PIPETTE TIPS

PureTip pipette tip uses a pipette tip that is similar to the PrepTip pipette tip, but is loaded with a gel rather than coated. This is well suited for performing DNA purification. PureTip pipette tips are more adaptable to automation than spin columns because they fit onto automated pipetting workstations. We expect to launch the PureTip pipette tip later this year.

#### 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

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.

# 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 and that we are a leader in this product line. These products are manufactured by our Biochrom subsidiary and sold primarily through Amersham Pharmacia Biotech.

# 96 WELL PLATE READERS

96 well plate readers are widely used for high throughput screening assays in the drug discovery process. They use light to detect chemical interactions. We plan to introduce a range of these products

beginning with absorbance readers in the fourth quarter of 2000 and luminescence and fluorescence readers in 2001 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

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.

## 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 have 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. Its advantages include:

 higher relevance to whole body toxicology than a cell-based assay, without the complicated support and measurement apparatus needed for other organs such as hearts or lungs,

- higher sensitivity and reproducibility than live animal assays,
- higher sensitivity than other tissue assays, and
- easier operation than other animal or tissue assays because the data is collected and analyzed automatically.

## 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 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 anesthestised 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  $\[$ 

#### 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. 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 manufactured products described above, we buy and resell through our catalog products made by other manufacturers. These distributed products accounted for approximately 18% of our revenues for the six months ended June 30, 2000. These distributed products enable us to provide our customers with a single source for their experimental needs. 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 without our extensive distribution and marketing channel.

## 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 40% of our revenue for the six months ended June 30, 2000, and 44% of our revenue 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 revenue 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 through our worldwide subsidiaries. Our manufactured products accounted for approximately 82% of our revenues for the six months ended June 30, 2000. The complete catalog is also available as a CD-ROM and can be accessed on our website, www.harvardbioscience.com. Our leading positions in many of our manufactured products create traffic to the catalog and web site which enables cross-selling and facilitates the introduction of new products. In addition to the comprehensive catalog, we create and mail abridged catalogs which 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 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 Amersham Pharmacia Biotech. After the initial three-year term which expires in February 2002, this agreement is subject to annual renewal.

# 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 \$206,000 in 1997, \$325,000 in 1998 and \$1.2 million in 1999. 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 four 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 manufacturing of spectrophotometers and amino acid analysis systems takes place in Cambridge, 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 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 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 which 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.

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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. In addition, we hold exclusive licenses for the technologies used in our ScanTox in vitro toxicology products, our NaviCyte drug absorption products and our PureTip pipette tip products.

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 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 September 15, 2000, we had 122 full-time employees and 5 part-time employees, 35 of whom resided in the United States, 73 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.

## FACILITIES

Our four 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, and
- a leased 9,000 square foot facility in March-Hugstetten, Germany.

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

### LEGAL PROCEEDINGS

From time to time, we may be involved in various claims and legal proceedings arising in the ordinary course of business. We are not currently a party to any 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.

## MANAGEMENT

## EXECUTIVE OFFICERS AND DIRECTORS

The following table shows information about our executive officers and directors as of September 15, 2000.

NAME	AGE	POSITION
Chane Graziano	61	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	55	Managing Director, Biochrom Ltd
Susan Luscinski	44	Vice President of Finance and Administration
Christopher W. Dick	46	Director
Richard C. Klaffky, Jr	53	Director

Messrs. Dick and Klaffky are the members of our compensation committee.

Mr. Klaffky is the sole member of our audit committee. Two additional independent directors will be added to the audit committee in connection with this offering.

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.

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 gas chromatographs, from 1987 until January 1995.

SUSAN LUSCINKSI 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.

CHRISTOPHER W. DICK has served as a director of Harvard Bioscience since March 1996. Mr. Dick has served as Managing Director of Ascent Venture Management, Inc., a private equity firm, since March 1999. Mr. Dick has served as a Managing Member or General Partner of Ascent Venture Partners, L.P. fund and Ascent Venture Partners II, L.P. fund since 1999. Prior to joining Ascent Venture Management, Inc., Mr. Dick served as General Partner of Pioneer Capital Corporation, a private equity management firm, from 1991 until March 1999. Mr. Dick is a graduate of Cornell University and holds a M.B.A. degree from Babson College.

RICHARD C. KLAFFKY, JR. has served as a director of Harvard Bioscience since March 1996. Since 1987, Mr. Klaffky has served as President of FINEC Corp., the corporate general partner of two private equity partnerships, First New England Capital L.P. and First New England Capital 2 L.P., based in Hartford, Connecticut. Mr. Klaffky also serves as a director of Centrum Industries, a manufacturing company in the metal forming, material handling and motor production industries. Mr. Klaffky is a graduate of Brown University and holds a M.B.A. degree from Columbia University.

#### BOARD COMPOSITION

Following the closing of this offering, our board of directors will be divided into three classes, each of whose members will serve for a staggered three-year term. Our board of directors will consist of two Class I directors, whose term of office will continue until the 2001 annual meeting of stockholders, two Class II directors, whose term of office will continue until the 2002 annual meeting of stockholders, and two Class III directors, whose term of office will continue until the 2003 annual meeting of stockholders. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring.

## BOARD COMMITTEES

Effective upon the closing of this offering, our board of directors will reconstitute the audit committee and compensation committee.

AUDIT COMMITTEE. The members of the audit committee will be responsible for recommending to the board of directors the engagement of our outside auditors and reviewing our accounting controls and the results and scope of audits and other services provided by our auditors. Within 90 days following the completion of this offering, the audit committee will consist of three directors. Such individuals have not been selected as of the date of this prospectus. All of the members of the audit committee will be independent directors unless the board of directors determines that exceptional and limited circumstances exist which warrant the inclusion of one non-independent director on the audit committee and that the inclusion of one non-independent director is in the best interests of us and our stockholders.

COMPENSATION COMMITTEE. The members of the compensation committee, a majority of whom will be independent directors, will be responsible for approving or recommending to the board of directors the amount and type of consideration to be paid to senior management, administering our stock option plans and establishing and reviewing general policies relating to compensation and benefits of employees.

## DIRECTOR COMPENSATION

We reimburse our non-employee directors for their expenses incurred in connection with attending board and committee meetings but do not provide cash compensation for their services as board or committee members. Directors are eligible to participate in our 2000 Stock Option and Incentive Plan. Each of our non-employee directors will receive a one-time option grant of 10,000 shares vesting annually over four years upon joining the board and an annual option grant of 2,500 shares vesting annually over four years on the date of each annual meeting of stockholders following the closing of this offering.

## EXECUTIVE COMPENSATION

The following table sets forth the total compensation paid or accrued in the fiscal year ended December 31, 1999 to our Chief Executive Officer and the three other executive officers whose aggregate compensation exceeded \$100,000.

#### SUMMARY COMPENSATION TABLE

	ANNUAL COM	MPENSATION	LONG-TERM COMPENSATION	
NAME AND POSITION	SALARY	BONUS	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED	ALL OTHER COMPENSATION
Chane Graziano	\$219,000	\$232,000	23,250	\$19,592(1)
David Green President	175,000	186,000	23,250	15,507(2)
Mark A. Norige Chief Operating Officer	108,000	35,000		5,447(3)
Susan M. Luscinski	95,000	47,500		4,832(3)

<sup>(1)</sup> Includes 7,357 in automobile lease payments and 7,520 in contributions by us to Mr. Graziano's 401(k) account.

OPTION GRANTS IN LAST FISCAL YEAR AND OPTION VALUES AT FISCAL YEAR END

The following table provides information regarding stock options granted to the named executive officers during the fiscal year ended December 31, 1999.

# OPTION GRANTS IN FISCAL YEAR 1999

		NUMBER OF SECURITIES	INDIVIDUAL GRANTS PERCENT OF TOTAL OPTIONS			VALUE AT ANNUAL STOCK	REALIZABLE ASSUMED RATE OF PRICE IATION	
	DATE OF	UNDERLYING OPTIONS	GRANTED TO EMPLOYEES IN	EXERCISE PRICE	EXPIRATION	FOR OPTIO	· - /	
NAME 	GRANT	GRANTED (1)	FISCAL YEAR(2)	PER SHARE	DATE	5% 	10%	-
Chane Graziano	3/2/1999	23,250	50%	\$20.6186	3/2/2009	\$301,481	\$764,012	
David Green	3/2/1999	23,250	50%	20.6186	3/2/2009	301,481	764,012	

<sup>(1)</sup> The options vest upon the sale of all or substantially all of our assets or capital stock for a price per share of common stock of at least \$41.23, or an initial public offering of our common stock for a price per share of at least \$41.23 and gross proceeds to us of at least \$15.0 million.

<sup>(2)</sup> Includes \$7,687 in automobile lease payments and \$7,165 in contributions by us to Mr. Green's 401(k) account.

<sup>(3)</sup> Represents contributions by us to the executive officers' 401(k) accounts.

- (2) Based on an aggregate of 46,500 options granted in fiscal 1999.
- (3) The amounts shown as potential realizable value illustrate what might be realized upon exercise immediately prior to expiration of the option term using the 5% and 10% appreciation rates compounded annually as established in regulations of the Securities and Exchange Commission.

The following table sets forth the potential realizable value of the options granted to the listed executive officers using our assumed initial public offering price of \$ per share:

NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED

-----

POTENTIAL REALIZABLE
VALUE AT ASSUMED
ANNUAL RATES OF
STOCK PRICE
APPRECIATION
FOR OPTION TERM

5% 10%

-----

 Chane Graziano
 23,250

 David Green
 23,250

The potential realizable value is not intended to predict future appreciation of the price of our common stock. The values shown do not consider non-transferability, vesting or termination of the options upon termination of the employee's employment relationship with us.

## FISCAL YEAR-END OPTION VALUES

The following table sets forth information concerning the number and value of unexercised options to purchase common stock held as of December 31, 1999 by the executive officers listed in the Summary Compensation Table. There was no public trading market for our common stock as of December 31, 1999. Accordingly, the values of the unexercised in-the-money options have been calculated on the basis of the estimated fair value of our common stock at December 31, 1999 of \$72.25, less the applicable exercise price multiplied by the number of shares which may be acquired on exercise. None of the executive officers listed in the Summary Compensation Table exercised any stock options in fiscal 1999.

AGGREGATE OPTION AMOUNTS AND FISCAL YEAR-END OPTION VALUES

	UNDERLYING	SECURITIES UNEXERCISED ISCAL YEAR-END	VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT FISCAL YEAR-END		
NAME 	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE	-
Chane Graziano	39,767	28,931	\$2,872,746	\$1,610,825	
David Green	39,767	28,931	2,872,746	1,610,825	
Mark A. Norige	2,840	2,841	204,366	204,438	
Susan M. Luscinski	4,260	1,421	307,742	102,653	

# BENEFIT PLANS

2000 STOCK OPTION AND INCENTIVE PLAN. Our board of directors will adopt the 2000 Stock Option and Incentive Plan, subject to stockholder approval. The 2000 Stock Option and Incentive Plan will be submitted to our stockholders for approval in October 2000. The 2000 Stock Option and Incentive Plan allows for the issuance of up to 50,000 shares of common stock plus an additional amount equal to % of any net increase in the total number of shares of common stock outstanding after this offering. Our compensation committee will administer the 2000 Stock Option and Incentive Plan.

Under the 2000 Stock Option and Incentive Plan, our compensation committee may:

- grant incentive stock options,

- grant non-gualified stock options.
- grant stock appreciation rights.
- issue or sell common stock with vesting or other restrictions, or without restrictions,
- grant rights to receive common stock in the future with or without vesting,
- grant common stock upon the attainment of specified performance goals, and
- grant dividend rights in respect of common stock.

These grants and issuances may be made to our officers, employees, directors, consultants, advisors and other key persons.

Our compensation committee has the right, in its discretion, to select the individuals eligible to receive awards, determine the terms and conditions of the awards granted, accelerate the vesting schedule of any award and generally administer and interpret the plan.

The exercise price of options granted under the 2000 Stock Option and Incentive Plan is determined by our compensation committee. Under present law, incentive stock options and options intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code of 1986 may not be granted at an exercise price less than the fair market value of the common stock on the date of grant, or less than 110% of the fair market value in the case of incentive stock options granted to optionees holding more than 10% of the voting power.

Non-qualified stock options may be granted at prices which are less than the fair market value of the underlying shares on the date granted. Options are typically subject to vesting schedules, terminate 10 years from the date of grant and may be exercised for specified periods after the termination of the optionee's employment or other service relationship with us. Upon the exercise of options, the option exercise price must be paid in full either in cash or by certified or bank check or other instrument acceptable to the committee or, in the sole discretion of the committee, by delivery of shares of common stock that have been owned by the optionee free of restrictions for at least six months.

The 2000 Stock Option and Incentive Plan and all awards issued under the plan will terminate upon a merger, reorganization or consolidation, the sale of all or substantially all of our assets or all of our outstanding capital stock or a liquidation or other similar transaction, unless Harvard Bioscience and the other parties to such transactions have agreed otherwise. All participants under the 2000 Stock Option and Incentive Plan will be permitted to exercise for a period of 30 days before any such termination all awards held by them which are then exercisable or will become exercisable upon the closing of the transaction.

EMPLOYEE STOCK PURCHASE PLAN. The Employee Stock Purchase Plan will be adopted by our board of directors in October 2000 subject to stockholder approval. The Employee Stock Purchase Plan will be submitted to stockholders in October 2000. Up to 25,000 shares of our common stock may be issued under the Employee Stock Purchase Plan. The Employee Stock Purchase Plan is administered by our compensation committee.

The first offering under the Employee Stock Purchase Plan will commence on January 1, 2001 and end on June 30, 2001. Subsequent offerings will commence on each January 1 and July 1 thereafter and will have a duration of six months. Generally, all employees who are customarily employed for more than 20 hours per week as of the first day of the applicable offering period are eligible to participate in the Employee Stock Purchase Plan. Any employee who owns or is deemed to own shares of stock representing in excess of 5% of the combined voting power of all classes of our stock may not participate in the Employee Stock Purchase Plan.

During each offering, an employee may purchase shares under the Employee Stock Purchase Plan by authorizing payroll deductions of up to 10% of his cash compensation during the offering period. The maximum number of shares which may be purchased by any participating employee during any offering period is limited to 1,000 shares (as adjusted by the compensation committee from time to time). Unless the employee has previously withdrawn from the offering, his accumulated payroll deductions will be used to purchase shares of our common stock on the last business day of the period at a price equal to 85% of the fair market value of our common stock on the first or last day of the offering period, whichever is lower. Under applicable tax rules, an employee may purchase no more than \$25,000 worth of our common stock in any calendar year under the Employee Stock Purchase Plan. We have not issued any shares to date under the Employee Stock Purchase Plan.

1996 STOCK OPTION AND GRANT PLAN. Our 1996 Stock Option and Grant Plan was initially approved by our board of directors and was approved by our stockholders in March 1996. Our 1996 Stock Option and Grant Plan provides for the issuance of 206,620 shares of our common stock. As of September 15, 2000, options to purchase 150,831 shares of our common stock were outstanding under our 1996 Stock Option and Grant Plan. Options granted under our 1996 Stock Option and Grant Plan generally vest over four years and terminate on the tenth anniversary of the date of grant. We will not make any additional grants under our 1996 Stock Option and Grant Plan after the completion of this offering.

## EMPLOYMENT ARRANGEMENTS

We anticipate entering into employment agreements with each of Messrs. Graziano, Green and Warren. Each proposed agreement is for a period of two years, other than Mr. Warren's agreement which is for one year. Each agreement automatically extends for one additional year on the anniversary date unless either party has given notice that it does not wish to extend the agreement. Each agreement provides for the payment of base salary and incentive compensation and for the provision of certain fringe benefits to the Executive. The agreements require our executive officers to refrain from competing with us and from soliciting our employees for a period of 12 months following termination for any reason. Each agreement also provides for certain payments and benefits for an executive officer should his or her employment with us be terminated because of death or disability, by the executive for good reason or by us without cause, as further defined in the agreements. In general, in the case of a termination by the executive officer for good reason, or by us without cause, the executive officer will receive up to two years' salary and bonus in the cases of Messrs. Graziano and Green and one year's salary and bonus in the case of Mr. Warren, an extension of benefits for one year and an acceleration of vesting for stock options and restricted stock which otherwise would vest during the next twelve months. Upon a change of control, as defined in the agreements, the executive officer is eligible for payment of up to three years' salary and bonus in the cases of Messrs. Graziano and Green and one-and-a-half year's salary and bonus in the case of Mr. Warren, an extension of benefits for one year and an acceleration of vesting for all outstanding stock options and restricted stock.

# COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Messrs. Dick and Klaffky are the members of our compensation committee. Neither Mr. Dick nor Mr. Klaffky is an executive officer of our company or has received any compensation from us within the last three years other than in his capacity as a director.

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## RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

## STOCK REDEMPTIONS AND LOAN REPAYMENTS WITH STOCKHOLDERS

In March 1996, in connection with the acquisition of our business by a group led by our current management team, we issued redeemable preferred stock for an aggregate purchase price of \$1.5 million and subordinated debentures with an aggregate principal amount of \$1.0 million to our investors. The redeemable preferred stock pays cumulative dividends at the rate of \$0.26 per share quarterly in arrears and the subordinated debentures bear interest at an annual rate of 13% payable quarterly in arrears. The terms of the redeemable preferred stock and the subordinated debentures require us to redeem or repay these instruments upon the completion of this offering. A portion of the proceeds of this offering will be used to retire the redeemable preferred stock and the subordinated debentures. The redemption of the preferred stock and the retirement of the subordinated debentures will result in payments of approximately \$167,000 to Chane Graziano, our Chief Executive Officer and a member of our board of directors, \$500,000 to Ascent Venture Partners, L.P., \$1.0 million to Ascent Venture Partners II, L.P. and \$500,000 to First New England Capital, L.P. Christopher W. Dick, a member of our board of directors, is a Managing Director of Ascent Venture Management, Inc., the general partner of Ascent Venture Partners, L.P., and Ascent Management SBIC Corp., the general partner of Ascent Venture Partners II, L.P., and Richard C. Klaffky, Jr., a member of our board of directors, is the President of FINEC Corp., the general partner of First New England Capital, L.P.

## TRANSACTIONS WITH AN AFFILIATE OF AN EXECUTIVE OFFICER

In March 1996, we acquired our business from a company now known as Harvard Clinical Technology Inc. Following this acquisition, we entered into several transition-related transactions with Harvard Clinical. In 1997, we sold Harvard Clinical several items of furniture, fixtures, appliances and equipment, leased Harvard Clinical office space, provided transition support services and assumed Harvard Clinical's obligations to pay specified professional fees in exchange for 77,584 shares of our common stock held by a principal stockholder of Harvard Clinical at an agreed upon value of \$2.19 per share. The assets purchased by Harvard Clinical had an aggregate purchase price of \$122,000, which reflected their estimated fair market value as determined by Mr. Graziano, our Chief Executive Officer. We originally purchased these assets as part of the March 1996 acquisition of our business. Diane Green, who is an officer, director and stockholder of Harvard Clinical, is the spouse of David Green, our President and a member of our board of directors.

## PRINCIPAL AND SELLING STOCKHOLDERS

The following table sets forth information regarding the beneficial ownership of Harvard Bioscience common stock as of September 15, 2000 and on an as adjusted basis to reflect the sale of the common stock offered hereby by:

- all persons known by us to own beneficially 5% or more of the common stock,
- each of our directors,
- the executive officers listed in the summary compensation table,
- the stockholder selling shares in this offering, and
- all of our directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the Securities and Exchange Commission and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and includes any shares as to which the individual or entity has the right to acquire beneficial ownership within 60 days after September 15, 2000 through the exercise of any warrant, stock option or other right. The inclusion in this prospectus of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. Unless otherwise indicated, the address of all listed stockholders is c/o Harvard Bioscience, Inc., 84 October Hill Road, Holliston, MA 01746-1371.

	BENEFICIAL OWNERSHIP PRIOR TO OFFERING(1)		CHAREC MO	BENEFICIAL OWNERSHIP AFTER OFFERING(1)	
NAME OF BENEFICIAL OWNER	SHARES	PERCENT	SHARES TO BE SOLD	SHARES	PERCENT
Christopher W. Dick(2)					
Chane Graziano(3)	243,935	28.2%		243,935	
Ascent Venture Partners II, L.P.(4)	199,272	24.3%		199,272	
David Green(5)	162,223	18.7%	3,000	159,223	
Ascent Venture Partners, L.P.(6)	128,736	15.7%		128,736	
First New England Capital, L.P.(7)	99,636	12.2%		99,636	
Richard C. Klaffky(8)	99,636	12.2%		99,636	
NEGF, II, L.P.(9) One Boston Place Suite 2100 Boston, MA 02108	48,500	5.9%		48,500	
Susan M. Luscinski	5,681	*		5,681	
Mark A. Norige	4,260	*		4,260	
All executive officers and directors, as a group (6 persons)(10)	843,743	92.6%		840,743	

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 $<sup>^{\</sup>star}$  Represents less than 1% of the outstanding shares of common stock.

- (1) All percentages assume the underwriters do not elect to exercise the over-allotment option to purchase an additional shares of common stock. The number of shares of common stock set forth herein includes shares to be issued upon completion of this offering pursuant to the conversion of all outstanding shares of our series B convertible preferred stock into shares of common stock and the exercise of all outstanding warrants to purchase shares of our common stock.
- (2) Consists solely of the shares described in notes (4) and (6) below, of which Mr. Dick may be considered the beneficial owner. Mr. Dick disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein.
- (3) Includes 45,974 shares subject to options exercisable within 60 days of September 15, 2000 and 65,500 shares held by two trusts for the benefit of Mr. Graziano's children, of which Mr. Graziano is a trustee.
- (4) Ascent Management SBIC Corp. is the general partner of Ascent Venture Management II, L.P., which is the general partner of Ascent Venture Partners II, L.P., which exercises sole voting and investment power with respect to all of the shares held of record by Ascent Venture Partners II, L.P. Mr. Dick, a member of our board of directors, is the Managing Director of Ascent Management SBIC Corp. Mr. Dick disclaims any beneficial ownership of the shares held by Ascent Venture Partners II, L.P., except to the extent of his pecuniary interest therein.
- (5) Includes 45,974 shares subject to options exercisable within 60 days of September 15, 2000.
- (6) Ascent Venture Management, Inc. is the general partner of Ascent Venture Partners, L.P., which exercises sole voting and investment power with respect to all of the shares held of record by Ascent Venture Partners, L.P. Mr. Dick, a member of our board of directors, is the Managing Director of Ascent Venture Management, Inc. Mr. Dick disclaims any beneficial ownership of the shares held by Ascent Venture Partners, L.P., except to the extent of his pecuniary interest therein.
- (7) FINEC Corp. is the general partner of First New England Capital, L.P., which exercises sole voting and investment power with respect to all of the shares held of record by First New England Capital, L.P. Mr. Klaffky, a member of our board of directors, is the President of FINEC Corp. Mr. Klaffky disclaims any beneficial ownership of the shares held by First New England Capital, L.P., except to the extent of his pecuniary interest therein.
- (8) Consists solely of the shares described in note (7) above, of which Mr. Klaffky may be considered the beneficial owner. Mr. Klaffky disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein.
- (9) NEGF Ventures, Inc. is the general partner of New England Partners, II, L.P., which is the general partner of NEGF II, L.P. NEGF Ventures, Inc. exercises sole voting and investment power with respect to all of the shares held of record by NEGF II, L.P.
- (10) Includes 91,948 shares subject to options exercisable within 60 days of September 15, 2000.

## DESCRIPTION OF CAPITAL STOCK

Following this offering, our authorized capital stock will consist of 80,000,000 shares of common stock and 5,000,000 shares of undesignated preferred stock, issuable in one or more series designated by our board of directors. No other class of capital stock will be authorized. The following information relates only to our certificate of incorporation and by-laws, as they will exist after this offering.

#### COMMON STOCK

VOTING RIGHTS. The holders of our common stock have one vote per share. Holders of our common stock are not entitled to vote cumulatively for the election of directors. Generally, all matters to be voted on by stockholders must be approved by a majority, or, in the case of election of directors, by a plurality, of the votes cast at a meeting at which a quorum is present, voting together as a single class, subject to any voting rights granted to holders of any then outstanding preferred stock.

DIVIDENDS. Holders of common stock will share ratably in any dividends declared by our board of directors, subject to the preferential rights of any preferred stock then outstanding. Dividends consisting of shares of common stock may be paid to holders of shares of common stock.

OTHER RIGHTS. Upon our liquidation, dissolution or winding up, all holders of common stock are entitled to share ratably in any assets available for distribution to holders of shares of common stock. No shares of common stock are subject to redemption or have preemptive rights to purchase additional shares of common stock.

#### PREFERRED STOCK

Our certificate of incorporation provides that 5,000,000 shares of preferred stock may be issued from time to time in one or more series. Our board of directors is authorized to fix the voting rights, if any, designations, powers, preferences, qualifications, limitations and restrictions thereof, applicable to the shares of each series. Our board of directors may, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of the common stock and could have anti-takeover effects, including preferred stock or rights to acquire preferred stock in connection with implementing a shareholder rights plan. We have no present plans to issue any shares of preferred stock. The ability of our board of directors to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control with respect to our company or the removal of existing management.

## WARRANTS

As of September 15, 2000, we had outstanding warrants to purchase 431,756 shares of common stock at an exercise price of \$0.01 per share. The warrants will expire on March 15, 2003. These warrants will be exercised in connection with this offering.

# REGISTRATION RIGHTS

The holders of 280,998 shares of our common stock, 120,560 shares of our common stock issuable upon the exercise of outstanding stock options, 48,500 shares of our common stock issuable upon conversion of our series B convertible preferred stock and 431,756 shares of our common stock issuable upon the exercise of warrants are entitled to rights with respect to registration of these shares under the Securities Act of 1933. These rights are provided under the terms of a securityholders agreement between us and certain of the holders of registrable securities. Under these registration rights, holders of registrable securities holding 30% or more of the then outstanding registrable securities held by all holders of registrable securities may require on two occasions that we register their shares for public resale. In addition, certain holders of registrable securities may require that we register their shares for

public resale on Form S-3 or similar short-form registration, if we are eligible to use Form S-3 or similar short form registration, and the value of the securities to be registered is at least \$2,000,000. If we elect to register any of our shares of common stock for any public offering, the holders of registrable securities are entitled to include shares of common stock in the registration. However, we may reduce the number of shares proposed to be registered in view of market conditions. We will pay all expenses in connection with any registration, other than underwriting discounts and commissions.

#### INDEMNIFICATION MATTERS

Prior to the offering, we will have entered into indemnification agreements with each of our directors. The form of indemnification agreement provides that we will indemnify our directors for expenses incurred because of their status as a director to the fullest extent permitted by Delaware law, our certificate of incorporation and our by-laws.

Our certificate of incorporation contains a provision permitted by Delaware law that generally eliminates the personal liability of directors for monetary damages for breaches of their fiduciary duty, including breaches involving negligence or gross negligence in business combinations, unless the director has breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or a knowing violation of law, paid a dividend or approved a stock repurchase in violation of the Delaware General Corporation Law or obtained in improper personal benefit. This provision does not alter a director's liability under the federal securities laws and does not affect the availability of equitable remedies, such as an injunction or rescission, for breach of fiduciary duty. Our by-laws provide that directors and officers shall be, and in the discretion of our board of directors, non-officer employees may be, indemnified by us to the fullest extent authorized by Delaware law, as it now exists or may in the future be amended, against all expenses and liabilities reasonably incurred in connection with service for or on behalf of us. Our by-laws also provide for the advancement of expenses to directors and, in the discretion of our board of directors, to officers and non-officer employees. In addition, our by-laws provide that the right of directors and officers indemnification shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any by-law, agreement, vote of stockholders or otherwise. We also have directors' and officers' insurance against certain liabilities. We believe that the indemnification agreements, together with the limitation of liability and indemnification provisions of our certificate of incorporation and by-laws and directors' and officers' insurance will assist us in attracting and retaining qualified individuals to serve as our directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be provided to directors, officers or persons controlling us as described above, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. At present, there is no pending material litigation or proceeding involving any of our directors, officers, employees or agents in which indemnification will be required or permitted.

PROVISIONS OF OUR CERTIFICATE OF INCORPORATION AND BY-LAWS THAT MAY HAVE ANTI-TAKEOVER EFFECTS

Certain provisions of our certificate of incorporation and by-laws described below, as well as the ability of our board of directors to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof, may be deemed to have an anti-takeover effect and may discourage takeover attempts not first approved by our board of directors, including takeovers which particular stockholders may deem to be in their best interests. These provisions also could have the effect of discouraging open market purchases of our common stock because they may be considered disadvantageous by a stockholder who desires subsequent to such purchases to participate in a business combination transaction with us or to elect a new director to our

Our certificate of incorporation provides that any action required or permitted to be taken by our stockholders at an annual or special meeting of stockholders must be effected at a duly called meeting and may not be taken or effected by a written consent of stockholders.

## SPECIAL MEETINGS OF STOCKHOLDERS

Our certificate of incorporation and by-laws provide that a special meeting of stockholders may be called only by our board of directors. Our by-laws provide that only those matters included in the notice of the special meeting may be considered or acted upon at that special meeting unless otherwise provided by law.

#### ADVANCE NOTICE OF DIRECTOR NOMINATIONS AND STOCKHOLDER PROPOSALS

Our by-laws include advance notice and informational requirements and time limitations on any director nomination or any new proposal which a stockholder wishes to make at an annual meeting of stockholders. For the first annual meeting following the completion of this offering, a stockholder's notice of a director nomination or proposal will be timely if delivered to our secretary at our principal executive offices not later than the close of business on the later of the 75th day prior to the scheduled date of such annual meeting or the 10th day following the day on which public announcement of the date of such annual meeting is made by us.

## AMENDMENT OF THE CERTIFICATE OF INCORPORATION

As required by Delaware law, any amendment to our certificate of incorporation must first be approved by a majority of our board of directors and, if required by law, thereafter approved by a majority of the outstanding shares entitled to vote with respect to such amendment, except that any amendment to the provisions relating to stockholder action by written consent, directors, limitation of liability and the amendment of our certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote with respect to such amendment.

#### AMENDMENT OF BY-LAWS

Our certificate of incorporation and by-laws provide that our by-laws may be amended or repealed by our board of directors or by the stockholders. Such action by the board of directors requires the affirmative vote of a majority of the directors then in office. Such action by the stockholders requires the affirmative vote of at least 75% of the shares present in person or represented by proxy at an annual meeting of stockholders or a special meeting called for such purpose unless our board of directors recommends that the stockholders approve such amendment or repeal at such meeting, in which case such amendment or repeal only requires the affirmative vote of a majority of the shares present in person or represented by proxy at the meeting.

# STATUTORY BUSINESS COMBINATION PROVISION

Following the offering, we will be subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly-held Delaware corporation from consummating a "business combination," except under certain circumstances, with an "interested stockholder" for a period of three years after the date such person became an "interested stockholder" unless:

- before such person became an interested stockholder, the board of directors of the corporation approved the transaction in which the interested stockholder became an interested stockholder or approved the business combination;

- upon the closing of the transaction that resulted in the interested stockholder becoming such, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding shares held by directors who are also officers of the corporation and shares held by employee stock plans; or
- following the transaction in which such person became an interested stockholder, the business combination is approved by the board of directors of the corporation and authorized at a meeting of stockholders by the affirmative vote of the holders of at least two-thirds of the outstanding voting stock of the corporation not owned by the interested stockholder.

The term "interested stockholder" generally is defined as a person who, together with affiliates and associates, owns, or, within the prior three years, owned, 15% or more of a corporation's outstanding voting stock. The term "business combination" includes mergers, consolidations, asset sales involving 10% or more of a corporation's assets and other similar transactions resulting in a financial benefit to an interested stockholder. Section 203 makes it more difficult for an "interested stockholder" to effect various business combinations with a corporation for a three-year period. A Delaware corporation may "opt out" of Section 203 with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or by-laws resulting from an amendment approved by holders of at least a majority of the outstanding voting stock. Neither our certificate of incorporation nor our by-laws contain any such exclusion.

## TRADING ON THE NASDAQ NATIONAL MARKET SYSTEM

We have applied to have our common stock approved for quotation on the Nasdaq National Market under the symbol "HBIO."

## NO PREEMPTIVE RIGHTS

No holder of any class of our stock has any preemptive right to purchase any of our securities.

#### TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for our common stock will be

## SHARES ELIGIBLE FOR FUTURE SALE

Upon consummation of the offering, we will have outstanding shares of common stock or shares if the underwriters' over-allotment option is exercised in full, in each case excluding shares underlying outstanding options. Of these shares, all of the shares sold in this offering (shares or shares if the underwriters' over-allotment option is exercised in full)

will be freely tradeable without restriction or further registration under the Securities Act except for any shares purchased by an "affiliate," which will be subject to the limitations of Rule 144 of the Securities Act. As defined in Rule 144, an "affiliate" of an issuer is a person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with the issuer. The remaining outstanding shares of common stock will be "restricted securities" as defined in Rule 144 and may not be resold in the absence of registration under the Securities Act or pursuant to an exemption from such registration, including exemptions provided by Rule 144.

In addition, our executive officers, directors, and existing stockholders, who own all of the shares of our capital stock outstanding prior to this offering, have signed lock-up agreements in which they have agreed not to offer, sell, contract to sell or otherwise dispose of any common stock or any securities convertible into or exchangeable for common stock for a period of 180 days after the date of this prospectus without the prior written consent of Thomas Weisel Partners LLC. Immediately following this offering, the shares subject to the lock-up agreements will represent approximately % of the then outstanding shares of common stock ( % if the underwriters' over-allotment option is exercised in full). While the underwriters have indicated no present intention to waive these restrictions, were they to do so, up to approximately an additional shares of our common stock could be available for sale during the period following the offering, which could harm our stock price or make it more difficult to sell our shares. Historically, factors that have led underwriters to waive lock-up restrictions on a case by case basis include bona fide gifts to charitable institutions and other small waivers which underwriters reasonably believe will have minimal effect on the trading price of the common stock of the applicable company.

#### RULE 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, a person who has beneficially owned restricted shares for at least one year, including persons who are affiliates, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the then outstanding shares of our common stock, approximately shares immediately after this offering; or
- the reported average weekly trading volume of our common stock during the four calendar weeks preceding a sale by such person.

Sales under Rule 144 are also subject to manner-of-sale provisions, notice requirements and the availability of current public information.

# RULE 144(K)

Under Rule 144(k), a person who has not been one of our affiliates during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, is free to sell such shares without regard to the volume, manner-of-sale or certain other limitations contained in Rule 144. Upon completion of this offering, holders of shares of our common stock will be eligible to freely sell those shares under Rule 144(k). However, all of these shares will be subject to the 180-day lock-up agreements described above.

Prior to this offering, there has been no public market for our common stock and we can make no predictions about the effect, if any, that market sales of shares or the availability of shares for sale will have on the market price of our common stock prevailing from time to time. Future sales of substantial

amounts of our common stock in the public market, or the perception that such sales may occur, may cause the market prices of our common stock to decline.

## REGISTRATION RIGHTS

After the 180-day period following the closing of this offering, the holders of 761,254 shares of our common stock and 120,560 shares of our common stock issuable upon the exercise of outstanding stock options will have rights which require us to register their shares for sale. See "Description of Capital Stock—Registration Rights."

## OPTIONS

As of September 15, 2000, options to purchase 150,831 shares of our common stock were outstanding. At some time following the effectiveness of the offering chosen by the board of directors in its discretion, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of our common stock reserved for issuance under our 2000 Stock Option and Incentive Plan, our Employee Stock Purchase Plan and our 1996 Stock Option and Grant Plan. The filing of this registration statement will allow these shares, other than those held by members of management who are deemed to be affiliates, to be eligible for resale without restriction, subject to the lock-up period related to this offering, or further registration upon issuance to participants. After the effective date of the registration statement on Form S-8 and, if applicable, the expiration of the lock-up period related to this offering, shares purchased upon exercise of options granted pursuant to these plans, generally will be available for resale in the public market by non-affiliates without restriction. Sales by our affiliates of shares registered on this registration statement are subject to all of the Rule 144 restrictions except for the one-year minimum holding period requirement.

In addition to possibly being able to sell option shares without restriction under a Form S-8 registration statement when effective, persons other than our affiliates are allowed under Rule 701 of the Securities Act to sell shares of our common stock issued upon exercise of stock options beginning 90 days after the date of this prospectus, subject only to the manner of sale provisions of Rule 144 and to the lock-up period related to this offering. Our affiliates may also begin selling option shares beginning 90 days after the date of this prospectus but are subject to all of the Rule 144 restrictions except for the one-year holding period requirement and to the 180-day lock-up period related to this offering.

## UNDERWRITING

## GENERAL

Subject to the terms and conditions set forth in an agreement among the underwriters and us, each of the underwriters named below, through their representatives, Thomas Weisel Partners LLC and ING Barings LLC, have severally agreed to purchase from us the aggregate number of shares of common stock set forth opposite its name below:

UNDERWRITERS	NUMBER OF SHARES
Thomas Weisel Partners LLC	
Total	

Of the shares to be purchased by the underwriters, shares will be purchased from us and shares will be purchased from the selling stockholder.

The underwriting agreement provides that the obligations of the several underwriters are subject to various conditions. The nature of the underwriters' obligations commits them to purchase and pay for all of the shares of common stock listed above if any are purchased.

The underwriting agreement provides that we and the selling stockholder will indemnify the underwriters against liabilities specified in the underwriting agreement under the Securities Act or will contribute to payments that the underwriters may be required to make relating to these liabilities.

Thomas Weisel Partners LLC expects to deliver the shares of common stock to purchasers on  $\,$  , 2000.

#### OVER-ALLOTMENT OPTION

We have granted a 30-day over-allotment option to the underwriters to purchase up to a total of additional shares of our common stock from us at the initial public offering price, less the underwriting discounts and commissions payable by us, as set forth on the cover page of this prospectus. If the underwriters exercise this option in whole or in part, then each of the underwriters will be separately committed, subject to conditions described in the underwriting agreement, to purchase the additional shares of our common stock in proportion to their respective commitments set forth in the table above.

# DETERMINATION OF OFFERING PRICE

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price will include:

- the valuation multiples of publicly-traded companies that the representatives believe are comparable to us,
- our financial information,
- our history and prospects and the outlook for our industry,
- an assessment of our management, our past and present operations, and the prospects for, and timing of, our future revenues,  $\,$
- the present state of our development and the progress of our business plan, and

- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

We cannot assure you that an active or orderly trading market will develop for our common stock or that our common stock will trade in the public markets subsequent to this offering at or above the initial offering price.

## COMMISSIONS AND DISCOUNTS

The underwriters propose to offer the shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus, and at this price less a concession not in excess of \$ per share of common stock to other dealers specified in a master agreement among underwriters who are members of the National Association of Securities Dealers, Inc. The underwriters may allow, and the other dealers specified may reallow, concessions, not in excess of \$ per share of common stock to these other dealers. After this offering, the offering price, concessions and other selling terms may be changed by the underwriters. Our common stock is offered subject to receipt and acceptance by the underwriters and to other conditions, including the right to reject orders in whole or in part.

The following table summarizes the compensation to be paid to the underwriters by us and the expenses payable by us:

		TOTAL		
	PER SHARE	WITHOUT OVER-ALLOTMENT	WITH OVER-ALLOTMENT	
Public offering price	\$	\$	\$	
Proceeds, before expenses, to the selling stockholder				

#### INDEMNIFICATION OF THE UNDERWRITERS

We and the selling stockholder will indemnify the underwriters against some civil liabilities, including liabilities under the Securities Act and liabilities arising from breaches of our representations and warranties contained in the underwriting agreement. If we are unable to provide this indemnification, we will contribute to payments the underwriters may be required to make in respect of those liabilities.

# RESERVED SHARES

The underwriters, at our request, have reserved for sale at the initial public offering price up to shares of common stock to be sold in this offering for sale to our employees and other persons designated by us. The number of shares available for sale to the general public will be reduced to the extent that any reserved shares are purchased. Any reserved shares not purchased in this manner will be offered by the underwriters on the same basis as the other shares offered in this offering.

# NO SALES OF SIMILAR SECURITIES

Our directors, officers, selling stockholder and other stockholders holding all of the outstanding shares of our capital stock prior to this offering have agreed or have a contractual obligation to agree, subject to specified exceptions, not to offer, sell, agree to sell, directly or indirectly, or otherwise dispose of any shares of common stock or any securities convertible into or exchangeable for shares of common stock without the prior written consent of Thomas Weisel Partners LLC for a period of 180 days after the date of this prospectus.

We have agreed that for a period of 180 days after the date of this prospectus we will not, without the prior written consent of Thomas Weisel Partners LLC, offer, sell, or otherwise dispose of any shares of common stock, except for the shares of common stock offered in the offering and the shares of common stock issuable upon exercise of outstanding options and warrants on the date of this prospectus.

## INFORMATION REGARDING THOMAS WEISEL PARTNERS LLC

Thomas Weisel Partners LLC, one of the representatives of the underwriters, was organized and registered as a broker-dealer in December 1998. Since December 1998, Thomas Weisel Partners LLC has been named as a lead or co-manager on 177 filed public offerings of equity securities, of which 141 have been completed, and has acted as a syndicate member in an additional 117 public offerings of equity securities. Thomas Weisel Partners LLC does not have any material relationship with us or any of our officers, directors or other controlling persons, except with respect to its contractual relationship with us pursuant to the underwriting agreement entered into in connection with this offering.

## NASDAO NATIONAL MARKET LISTING

We have applied to have our common stock approved for quotation on the Nasdaq National Market under the symbol "HBIO."

## DISCRETIONARY ACCOUNTS

The underwriters do not expect sales of shares of common stock offered by this prospectus to any accounts over which they exercise discretionary authority to exceed five percent of the shares offered.

#### SHORT SALES, STABILIZING TRANSACTIONS AND PENALTY BIDS

In order to facilitate this offering, persons participating in this offering may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after this offering. Specifically, the underwriters may engage in the following activities in accordance with the rules of the U.S. Securities and Exchange Commission.

SHORT SALES. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares from the issuer in the offering. The underwriters may close out any covered short position by either exercising their option to purchase shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. "Naked" short sales are any sales in excess of such over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering.

STABILIZING TRANSACTIONS. The underwriters may make bids for or purchases of the shares for the purpose of pegging, fixing or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.

PENALTY BIDS. If the underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from the underwriters and selling group members who sold those shares as part of this offering. Stabilization and syndicate covering transactions may cause the price of the shares to be higher than it would be in the absence of

these transactions. The imposition of a penalty bid might also have an effect on the price of the shares if it discourages resales of the shares.

The transactions above may occur on the Nasdaq National Market or otherwise. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the shares. If these transactions are commenced, they may be discontinued without notice at any time.

#### LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Goodwin, Procter & Hoar LLP, Boston, Massachusetts. Various legal matters related to the sale of the common stock offered hereby will be passed upon for the underwriters by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts.

#### EXPERTS

The consolidated financial statements of Harvard Apparatus, Inc. and subsidiaries as of December 31, 1998 and 1999, and for each of the years ended December 31, 1997, 1998 and 1999, have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent certified public accountants, appearing elsewhere herein, and the authority of said firm as experts in auditing and accounting.

The audited consolidated financial statements of Biochrom Ltd as of December 31, 1997 and 1998, and for each of the years ended December 31, 1997 and 1998, have been included herein and in the registration statement in reliance upon the report of PricewaterhouseCoopers, independent chartered accountants, appearing elsewhere herein, and the authority of said firm as experts in auditing and accounting.

# WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission, or SEC, a registration statement on Form S-1 (including the exhibits and schedules thereto) under the Securities Act and the rules and regulations thereunder, for the registration of the common stock offered hereby. This prospectus is part of the registration statement. This prospectus does not contain all the information included in the registration statement because we have omitted certain parts of the registration statement as permitted by the SEC rules and regulations. For further information about us and our common stock, you should refer to the registration statement. Statements contained in this prospectus as to any contract, agreement or other document referred to are not necessarily complete. Where the contract or other document is an exhibit to the registration statement, each statement is qualified by the provisions of that exhibit.

You can inspect and copy the registration statement at the public reference facility maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, and at the SEC's regional offices at Seven World Trade Center, 13th Floor, New York, New York 10048 and 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. You may call the SEC at 1-800-732-0330 for further information about the operation of the public reference rooms. Copies of all or any portion of the registration statement can be obtained from the Public Reference Section of the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. In addition, the registration statement is publicly available through the SEC's site on the Internet's World Wide Web, located at http://www.sec.gov.

We will also file annual, quarterly and current reports, proxy statements and other information with the SEC. You can also request copies of these documents, for a copying fee, by writing to the SEC. We intend to furnish to our stockholders annual reports containing audited financial statements for each fiscal year.

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The Board of Directors
Harvard Apparatus, Inc.:

We have audited the accompanying consolidated balance sheets of Harvard Apparatus, Inc. and subsidiaries (the "Company") as of December 31, 1999 and 1998, 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, 1999. 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 Apparatus, Inc. and subsidiaries at December 31, 1999 and 1998, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 1999, in conformity with generally accepted accounting principles generally accepted in the United States of America.

February 25, 2000

# CONSOLIDATED BALANCE SHEETS

	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 2000
			(UNAUDITED)
ASSETS (NOTES 6 A	AND 7)		
Current assets:			
Cash and cash equivalents Trade accounts receivable, net of reserve for uncollectible accounts of \$61,004 and \$87,642 at	\$ 956,771	\$ 2,396,053	\$ 2,145,201
December 31, 1998 and 1999, respectively, and \$88,602 at June 30, 2000	1,659,766	4,191,850	3,875,503
Other receivables and other assets	49,716	201,946	194,479
Inventories (note 4)	1,656,318	2,849,670	3,319,291
Catalog costs	450,087	66,829	257,694
Prepaid expenses (note 17)	202,916	593,348	655,678
Deferred tax asset (note 13)	96,736	987,853	984,624
Total current assets	5,072,310	11,287,549	11,432,470
Property, plant and equipment, net (notes 5 and 10)	969,905	1,559,922	1,472,188
Other assets:			
Catalog costs, less current portion	163,497	165,419	501,000
Deferred tax asset (note 13)	,	384,148	389,703
(note 3)	925,973	6,583,354	6,436,231
Other assets (notes 3 and 12)	60,626	580,829	402,901
Total other assets	1,150,096	7,713,750	7,729,835
	\$7,192,311 =======	\$20,561,221 =======	\$20,634,493

See accompanying notes to consolidated financial statements.

# HARVARD APPARATUS, INC. AND SUBSIDIARIES

# CONSOLIDATED BALANCE SHEETS

	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 2000
			(UNAUDITED)
Current liabilities: Short-term debt (note 6) Current installments of long-term debt (note 7) Trade accounts payable Accrued income taxes payable (note 13) Accrued expenses (note 18) Other liabilities	\$1,050,000 190,389 751,338 162,726 586,289 101,271	\$ 2,200,000 794,173 1,880,246 957,834 1,399,523 237,811	\$ 2,450,000 969,246 1,890,917 990,839 960,062 358,917
Total current liabilities	2,842,013	7,469,587	7,619,981
Long-term debt, less current installments (note 7) Deferred income tax liability (note 13)	638,466 33,943	5,072,941	4,531,947
Total long-term liabilities	672,409	5,072,941	4,531,947
Commitments and contingencies (notes 8, 9, 10, 11, and 19)			
Preferred stock preference in liquidation, 600,000 shares (note 8)  Redeemable series "A" 469,300 shares issued and outstanding	1,500,000  1,500,352	1,500,000 1,000,000 31,194,371	1,500,000 1,000,000 98,721,009
Total redeemable preferred stock and common stock warrants	3,000,352	33,694,371	101,221,009
Stockholders' equity (deficit) (notes 9 and 14): Common stock, par value \$.01 per share, 1,300,000 shares authorized; 520,518 shares issued and outstanding at December 31, 1998 and 1999, 575,907 shares issued and outstanding at June 30, 2000	5,205 (34,720)   1,374,797 (667,745)	5,205 (54,690) 3,283,164  (28,241,612) (667,745)	
Total stockholders' equity (deficit)	677,537	(25,675,678)	(92,738,444)
	\$7,192,311 =======	\$ 20,561,221 =======	\$ 20,634,493 =======

See accompanying notes to financial statements.

	YEARS ENDED			SIX-MONT	
	DECEMBER 31, 1997	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 1999	JUNE 30, 2000
				(UNAU	DITED)
Revenues (notes 15 and	\$11 ACA 157	ė12 1E4 02E	606 177 014	¢11 E22 162	614 457 602
20) Cost of goods sold	\$11,464,157 5,127,709	\$12,154,025 5,351,271	\$26,177,814 13,546,933	\$11,533,163 5,661,184	\$14,457,603 7,488,077
Gross profit	6,336,448	6,802,754	12,630,881	5,871,979	6,969,526
General and administrative expense (note 14)	2,338,423	2,317,021	7,429,728	2,703,644	2,178,441
expense	1,672,388 206,497	1,721,606 324,792	2,448,505 1,187,584	1,254,622 461,429	1,505,512 798,581
(note 3)		27,661	368,235	139,338	260,093
Operating income	2,119,140	2,411,674	1,196,829	1,312,946	2,226,899
Other (expense) income:					
Foreign currency (loss) gain Common stock warrant interest expense	(96,549)	21,418	(47,982)	(168,830)	(280,036)
(note 9)	(116,574)	(1,379,460)	(29,694,019)	(7,402,457)	(67,526,638)
Interest expense Interest income Amortization of deferred	(238,669) 16,176	(221,932) 12,567	(679,122) 22,767	(287,198) 7,775	(422,751) 23,242
financing costs	106,013	 10,067	(63,442) (17,468)	(25,266) (12,578)	(37,898) 10,070
Other expense, net	(329,603)	(1,557,340)	(30,479,266)	(7,888,554)	(68,234,011)
(Loss) income before income taxes	1,789,537	854,334	(29,282,437)	(6,575,608)	(66,007,112)
<pre>Income taxes (note 13)</pre>	682 <b>,</b> 329	783 <b>,</b> 192	137,480	260,633	579 <b>,</b> 132
Net (loss) income	\$ 1,107,208 ======	71,142	(29,419,917)	(6,836,241)	(66,586,244)
(Loss) income per share (note 16):					
Basic	\$ 2.62	\$ (0.18)	\$ (104.00) ======	\$ (24.28)	\$ (210.66)
Diluted	\$ 1.27	\$ (0.18)	\$ (104.00)	\$ (24.28)	\$ (210.66)
Weighted average common shares:					
Basic	375 <b>,</b> 773	284,050 ======	284,050 ======	284,050	316,488
Diluted	867,339	284,050 ======	284,050	284,050	316,488

See accompanying notes to consolidated financial statements.

# HARVARD APPARATUS, 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	RETAINED EARNINGS (ACCUMULATED DEFICIT)	TREASURY STOCK	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
Balance, December 31, 1996	\$5,205	\$ 71,183	\$	\$	\$ 439,781	\$	\$ 516 <b>,</b> 169
Preferred stock dividends					(121,668)		(121,668)
Purchase of treasury stock						(667,745)	(667,745)
Comprehensive income (loss): Net income					1,107,208		1,107,208
Translation adjustments		(97,444)			· · ·		(97,444)
Total comprehensive							
income							1,009,764
Balance, December 31, 1997	5,205	(26,261)			1,425,321	(667,745)	736,520
Preferred stock dividends					(121,666)		(121,666)
Comprehensive income (loss):							
Net income					71,142		71,142
Translation adjustments		(8,459)					(8,459)
Total comprehensive income							62,683
Balance, December 31, 1998	5,205	(34,720)			1,374,797	(667,745)	677 <b>,</b> 537
Preferred stock dividends					(121,666)		(121,666)
Preferred stock issuance costs					(74,826)		(74,826)
Stock compensation							
expense			3,283,164				3,283,164
Net loss					(29,419,917)		(29,419,917)
Translation adjustments		(19,970)					(19,970)
Total comprehensive income (loss)							(29,439,887)
Balance, December 31, 1999	5,205	(54,690)	3,283,164		(28,241,612)	(667,745)	(25,675,678)
Preferred stock dividends					(83,996)		(83,996)
Issuance of common stock	554			1,215			1,769
Stock compensation							
expense			16,245				16,245
Net loss					(66,586,244)		(66,586,244)
Translation adjustments		(410,540)					(410,540)
Total comprehensive income (loss)							(66,996,784)
, 111,							
Balance, June 30, 2000 (unaudited)	\$5 <b>,</b> 759	\$(465,230)	\$3,299,409	\$1,215	\$(94,911,852)	\$(667,745)	\$(92,738,444)
	=====	=======	========	=====	========	=======	========

See accompanying notes to consolidated financial statements.

		YEARS ENDED		SIX-MONTH	IS ENDED
	DECEMBER 31, 1997	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 1999	JUNE 30, 2000
				(UNAUL	ITED)
Cash flows from operating activities: Net (loss) income Adjustments to reconcile net (loss) income to net cash provided by operating	\$1,107,208	\$ 71,142	\$(29,419,917)	\$(6,836,241)	\$(66,586,244)
activities: Common stock warrant interest expense	116,574 	1,379,460	29,694,019 3,283,164	7,402,457 937,138	67,526,638 16,245
DepreciationAmortization of catalog	127,555	154,776	331,822	149,358	186,347
Loss (gain) on sale of fixed	328,713	525,600	493,428	318,541	106,336
assets.  Provision for bad debts  Amortization of goodwill  Amortization of deferred	(33,980) 14,321 	(4,075) (41,388) 27,661	7,584 26,877 368,235	1,926 139,338	1,884 260,093
financing costs  Deferred income taxes  Changes in operating assets and liabilities, net of effects of business acquisition:	(106,321)	(16,277)	63,442 (1,310,325)	25,266 (382,767)	37,898 (9,379
(Increase) decrease in accounts receivable (Increase) decrease in	(193,547)	46,214	(2,282,344)	(1,901,502)	141,512
other receivables (Increase) decrease in	(2,741)	57,711	(113,949)	(146,939)	(12,586)
inventories  Increase in prepaid  expenses and other	58 <b>,</b> 631	80,430	215,152	16,388	(435,154)
assets(Increase) decrease in	(19,306)	(5,514)	(260,285)	(220,835)	(84,173)
other assets Increase (decrease) in	112,716	(184,534)	(202,460)	(162,460)	54,106
<pre>trade accounts payable Increase (decrease) in   accrued income taxes</pre>	(211,303)	(115,065)	541,065	662 <b>,</b> 286	90,018
payableIncrease (decrease) in	27,247	(191,013)	797,633	350,250	197,161
accrued expenses Increase (decrease) in	(178,965)	19,874	666,637	228,813	(406,450
other liabilities	(30,881)	1,388	26,663 	72,884 	92 <b>,</b> 612
Net cash provided by operating activities	1,115,921	1,806,390	2,926,441	653,901 	1,176,864
Cash flows from investing activities:					
Additions to property, plant and equipment	(389,543) (429,207)	(87,405) (250,183)	(332,474) (121,644)	(202,072) (15,170)	(173,585) (644,130)
Proceeds from sales of fixed assets	165,528	8,173	34,566		
Acquisition of businesses, net of cash acquired		(1,090,553)	(8,126,656)	(6,856,632)	(492,797
Net cash used in investing activities	(653 <b>,</b> 222)	(1,419,968)	(8,546,208)	(7,073,874)	(1,310,512)
Cash flows from financing activities: Net increase (decrease) in					
Short-term debt  Net increase (decrease) in		300,000	1,753,928	1,495,181	
long-term debt  Dividends paid  Net proceeds from issuance of	(263,050) (218,668)	(283,433) (121,666)	4,435,409 (121,666)		(389,430) (60,667)
preferred stock Treasury stock purchase Issuance of common stock	(667,745) 	  	925 <b>,</b> 174  	925,174  	 1,769
Net cash provided by (used in) financing activities	(874,463)	(105,099)	6,992,845	7,296,041	17,576
Defeat of analysis water about	30,573	(31,505)	66,204	(39,189)	(134,780)
Effect of exchange rate changes on cash					
	(381,191)	249,818	1,439,282	836,879	(250,852)

period	\$ 706,953	\$ 956,771 =======	\$ 2,396,053 =======	\$ 1,793,650	\$ 2,145,201
Supplemental disclosures of cash flow information:					
Cash paid for interest	\$ 227,747	\$ 241,002	\$ 671,452	\$ 223,765	\$ 401,334
	========	========	=========	========	========
Cash paid for income taxes	\$ 761,251	\$ 1,128,929	\$ 686,675	\$ 327,781	\$ 321,375
	========	========	=========	========	========

See accompanying notes to consolidated financial statements.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1999 AND 1998

#### (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"). 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.

The Company manufactures and distributes 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 Apparatus, Inc. and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

#### (B) INTERIM CONSOLIDATED FINANCIAL STATEMENTS

The interim consolidated financial statements as of June 30, 2000, and for the six months ended June 30, 2000 and June 30, 1999 are unaudited. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the financial position and results of operations have been included in such unaudited consolidated financial statements. The results of operations for the six months ended June 30, 2000 are not necessarily indicative of the results to be expected for the entire year.

#### (C) 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.

#### (D) 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.

#### (E) 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

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

#### (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

#### (F) CATALOG COSTS

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

#### (G) INCOME TAXES

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.

#### (H) 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 in other comprehensive income.

#### (I) 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.

#### (J) USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires the use of management's estimates. Such estimates include the

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

## (2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) determination and establishment of certain accruals and provisions, including those for inventory obsolescence, catalog cost amortization and reserves for bad debts. Actual results could differ from those estimates.

#### (K) REVENUE RECOGNITION

The Company recognizes revenue from product sales at the time of shipment.

#### (L) 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 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.

(M) 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.

#### (N) 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 will be adopted on January 1, 2001. Its impact on the consolidated financial statements is still being evaluated, but is not expected to be material.

#### (O) 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

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) short maturities of those instruments. The carrying value of the Company's debt approximates its fair value because of the short maturities and/or interest rates which are comparable to those available to the Company on similar terms.

#### (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 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 Cappillaries 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 \$568,000 was paid for the assets, 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 \$89,000 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.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

#### (3) ACQUISITION OF BUSINESSES (CONTINUED)

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 1997 (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		
	1997	DECEMBER 31, 1998	
	(UNAU	DITED)	
Pro forma revenues	\$25,749,465 ======	\$23,942,973	
Pro forma net earnings (loss)		\$ (120,186) =======	
Pro forma basic net earnings (loss) per share: Basic	\$ 3.30	. , ,	
Diluted	\$ 1.48	\$ (0.85)	
Pro forma weighted average common shares:			
Basic		284,050	
Diluted	915 389	284,050	
	915,569	•	

#### (4) INVENTORIES

Inventories consist of the following:

	DECEMBER 31,	DECEMBER 31,	JUNE 30,
	1998	1999	2000
			(UNAUDITED)
Finished goods	\$ 686,555	\$ 857,202	\$1,080,789
	335,150	359,505	458,594
	634,613	1,632,963	1,779,908
	\$1,656,318	\$2,849,670	\$3,319,291

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 1999 AND 1998

#### (5) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following:

	DECEMBER 31,	DECEMBER 31,	JUNE 30,
	1998	1999	2000
			(UNAUDITED)
Land and buildings	\$ 654,172	\$ 636,250	\$ 597,640
	126,891	726,933	795,408
	103,218	378,400	388,816
	234,882	326,978	336,583
	190,354	123,113	124,005
Less accumulated depreciation	1,309,517	2,191,674	2,242,451
	(339,612)	(631,752)	(770,263)
	\$ 969,905	\$1,559,922	\$1,472,188

#### (6) SHORT-TERM DEBT

At December 31, 1999 and 1998, short-term debt consisted of an amount outstanding under a bank line of credit that is 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 is payable monthly, in arrears, at the related bank's "base rate" plus 1% (9.5% and 8.75% at December 31, 1999 and 1998, respectively). Borrowings under the line of credit are limited to an available amount determined by an accounts receivable and inventory based formula, \$3,750,000 and \$2,000,000 at December 31, 1999 and 1998, respectively. This line of credit matured on January 29, 2000 and was subsequently extended until 2002. At December 31, 1999 and 1998, borrowings under the line of credit were \$2,200,000 and \$700,000, respectively.

At December 31, 1998, short-term debt also included a note from the same bank in the amount of \$350,000 with interest payable monthly, in arrears at the bank's "base rate" plus 1.5% (9.25%). This debt was rolled into long-term debt on March 2, 1999 as part of the financing arrangement to acquire Biochrom in March 1999, (see notes 3 and 7).

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 1999 AND 1998

#### (7) LONG-TERM DEBT

Long-term debt consists of the following:

	DECEMBER 31,	DECEMBER 31,	JUNE 30,
	1998	1999	2000
			(UNAUDITED)
Subordinated debentures, at 13%, payable in quarterly installments through March 15, 2003	\$787,500	\$ 727,500	\$ 677,500
		5,125,000	4,812,502
	41,355	14,614	11,191
Less current installments	828,855 (190,389)  \$638,466	5,867,114 (794,173)  \$5,072,941	5,501,193 (969,246) \$ 4,531,947

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). Principal and interest are being paid in quarterly installments, with the final payment due in January 2002. The interest rate is determined by one of the banks base rate plus 1%, (9.5% at December 31, 1999). The loans are secured by substantially all of the Company's assets. The loan agreements contain covenants relating to net income, debt service coverage and cash flow coverage. At December 31, 1999, the Company was in compliance with all of its covenants.

Financing costs of \$221,074 were incurred in 1999. These costs were capitalized and are being amortized over the term of the loans. Amortization expense was \$63,442 in 1999.

Aggregate annual principal payments on all long-term debt, excluding capital lease obligations, for the next five years and thereafter at December 31, 1999 are as follows:

2000	\$ /8/,502
2001	1,137,502
2002	3,699,996
2003	227,500
Thereafter	
	\$5,852,500

#### (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 (note 3). The net proceeds from this issuance were \$925,174. The Company's Series B convertible redeemable preferred stock has a dividend preference over the Series A preferred stock, and as a result, no dividends shall be paid in respect of shares of Series A preferred stock unless all accrued dividends that become payable in respect of Series B preferred stock have been paid. The Series B redeemable convertible preferred stock is convertible at

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

(8) CONVERTIBLE AND REDEEMABLE PREFERRED STOCK (CONTINUED) the option of the holder, at any time, into shares of common stock of the Company at an initial conversion rate of one share 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.

Redeemable preferred Series A stock pays quarterly cumulative dividends in arrears at a rate of approximately \$.26 per share. On March 3, 2000, convertible and redeemable preferred "B" stock starts to accrue dividends at a rate of \$1.44 that will be payable a year in arrears on March 3, 2001, and thereafter quarterly in arrears.

In the event of any liquidation of the Company, the holders of the Company's redeemable preferred stock are entitled to be paid from the assets available for distribution to holders of the Company's capital stock \$2,500,000, plus any related dividends that are accrued but unpaid at such time, prior to other stock distributions.

Mandatory redemption requirements for the preferred stock are as follows:

	SERIES "A"	SERIES "B"
March 15, 2002	\$ 500,000	\$ 333,320
March 15, 2003	500,000	333,320
March 15, 2004	500,000	333,320
	\$1,500,000	\$1,000,000
	========	

#### (9) COMMON STOCK WARRANTS

At December 31, 1999 and 1998, there were outstanding 431,756 warrants, which enable the holders to purchase a like amount of the Company's common stock for \$.01 per share. The warrants were issued in connection with the issuance of Series A redeemable preferred stock (306,774 warrants) and subordinated debentures (124,982 warrants) that occurred on March 15, 1996.

Commencing on March 15, 2002, the holders of the warrants may at any time require 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 be 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 1999, 1998, 1997, and for the six months ended June 30, 2000 and 1999, \$29,694,019, \$1,379,460, \$116,574, \$67,526,638 and \$7,402,457, respectively, has been recorded as interest expense 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. Future changes in the fair value of common stock warrants will also be recorded as interest expense.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1999 AND 1998

#### (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, 1999 and 1998 was \$14,532 and \$40,795, respectively, which is net of \$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 1999, 1998 and 1997 was approximately \$484,000, \$134,000 and \$151,262, respectively.

Future minimum lease payments for both capital and operating leases, with initial or remaining terms in excess of one year at December 31, 1999, are as follows:

	CAPITAL LEASES	OPERATING LEASES
2000	\$ 7,879 7,234 1,157	\$ 590,094 586,004 495,156 451,629 2,275,964
Net minimum lease payments	16,270	\$4,398,847
Less amount representing interest	1,656	
Present value of net minimum lease payments	\$14,614	

#### (11) RELATED PARTY TRANSACTIONS

The Company pays an annual consulting fee to a former stockholder who serves on its board of directors and, by written agreement, provides no less than five days of consulting services each month. The agreement expires 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 occurs before that date. The related consulting expense amounted to \$258,437, \$262,040 and \$268,030 for the years ended December 31, 1999, 1998 and 1997, 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. During the years ended December 31, 1999, 1998 and 1997, the Company contributed approximately \$67,000, \$41,000 and \$27,000, 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.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

(12) EMPLOYEE BENEFIT PLANS (CONTINUED)

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

Components	of	net	periodic	benefit	cost:
Service	2001	-			

Service cost	\$ 288,640
Interest cost	250,437
Expected return on plan assets	(364,684)
Net amortization gain	6,965
Net periodic benefit cost	\$ 181,358
	========

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

hanaa	in	honofi+	obligation:	

Balance at beginning of year. Acquisitions. Service cost. Interest cost. Participants' contributions. Actuarial gain. Net amortization gain.	\$1,215,000 4,848,552 288,640 250,437 60,745 (824,672) 9,299
Balance at end of year	5,848,001
Change in fair value of plan assets: Balance at beginning of year. Acquisitions. Actual return on plan assets. Participants' contributions. Employer contributions. Benefits paid.	1,158,138 5,231,470 440,606 60,745 180,985 9,299
Balance at end of year	7,081,243
Funded status:	
Plan assets greater than benefit obligation Unrecognized gain	1,233,242 (881,299)
Prepaid pension expense in consolidated balance sheet	

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

#### (12) EMPLOYEE BENEFIT PLANS (CONTINUED)

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

#### Weighted average assumptions:

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

#### (13) INCOME TAXES

The significant components of the Company's deferred tax assets and liabilities at December 31, 1999 and 1998 are as follows:

		1999 
Deferred tax assets: Accounts receivable	111,676 28,182 (14,940)	129,097 34,417 1,196,068 37,679
Total deferred tax assets	,	1,437,789
Deferred tax liabilities: Catalog costs Pension fund asset Property, plant and equipment Other.	24,524 15,051	 18,461 42,632
Total deferred tax liabilities	62,125	65,788
Net deferred tax assets	\$ 62,793	\$1,372,001

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. Based upon the level of historical taxable income and projections for future taxable income over the periods during which deferred tax assets are deductible, management believes it is more likely than not that the Company will realize the benefits of these deductible differences.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

#### (13) INCOME TAXES (CONTINUED)

Income tax expense is based on the following pre-tax income (loss) for the years ended December 31, 1999, 1998 and 1997:

	1997	1998	1999
DomesticForeign		\$115,418 738,916	
	\$1,789,537	\$854,334 ======	\$(29,282,437)

Income tax expense (benefit) for the years ended December 31, 1999, 1998 and 1997 consisted of:

	1997	1998	1999
Current income tax expense:			
Federal and state	\$ 584,239	\$579,152	\$ 403,149
Foreign	208,103	214,112	1,043,539
	792,342	793,264	1,446,688
Defermed income too (benefit) assesses			
Deferred income tax (benefit) expense: Federal and state	(56 939)	(19,380)	(1,239,119)
Foreign		9,308	
	(110,013)	(10,072)	(1,309,208)
Total income tax expense	\$ 682,329	\$783 <b>,</b> 192	\$ 137,480

Income tax expense for the years ended December 31, 1999, 1998 and 1997 differed from the amount computed by applying the U.S. federal income tax rate of 34% to pretax income as a result of the following:

	1997	1998	1999
Computed "expected" income tax (benefit) expense	\$608,443	\$290,474	\$ (9,956,029)
resulting from:			
Foreign tax rate and regulation			
differential	(3,625)	(27,811)	35,804
State income taxes, net of federal income tax benefit	73,757	86,068	(7,473)
Interest expense (common stock warrants)	39,564	469,002	10,095,966
Foreign Subsidiary Corporation tax			
benefit		(27,804)	
Other	9,220	(6 <b>,</b> 737)	(2,027)
Decrease in deferred tax valuation			
allowance	(45,030)		
Total	\$682,329	\$783,192	\$ 137,480
		=======	=========

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 1999 AND 1998

#### (13) INCOME TAXES (CONTINUED)

Undistributed earnings of the Company's foreign subsidiaries amounted to approximately \$3,185,000 and \$1,565,000 at December 31, 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 (subject to an adjustment for foreign tax credits) and withholding taxes in the various foreign countries.

#### (14) STOCK OPTION PLAN

The Company has adopted a stock option plan (the "Plan") pursuant to which the Company's Board of Directors may grant stock options to employees. The Plan authorizes grants of options to purchase up to 206,620 shares of authorized but unissued stock.

For years ended December 31, 1999 and 1998, 56,810 and 56,810 "Incentive Stock Options," and 91,948 and 45,448 "Non-qualified Stock Options" had been granted to employees, respectively. 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 only become vested if, prior to the end of the year 2000: a sale of substantially all of the Company's assets or capital stock occurs; an initial public offering of the Company's common stock at a net price of not less than \$28 per share; or the fair market value of the Company's common stock is otherwise determined to be, on a fully diluted basis, not less than \$28 per common share. For options granted under the non-qualified plan during 1999, the options are 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 \$41.23 or (ii) an initial public offering of the Company's stock with a price per share of not less than \$41.23 and gross proceeds to the Company of at least \$15 million.

The following is a summary of stock option activity.

	EMPLOYEE STOCK OPTIONS		
	OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE	
Balance at December 31, 1996	96,577 5,681	\$ 0.01 0.29	
Balance at December 31, 1997 Options granted	102,258	0.03	
Balance at December 31, 1998 Options granted	102,258 46,500	0.03 20.62	
Balance at December 31, 1999	148,758	\$ 6.46 =====	

During 1999, 1998 and 1997, there were no other additional options exercised, canceled, expired or forfeited, or changes in any option terms, including exercise prices.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1999 AND 1998

#### (14) STOCK OPTION PLAN (CONTINUED)

The weighted-average fair value of options granted during fiscal 1999 and 1997 was \$20.62 and \$0.29, respectively. No options were granted during 1998.

The following is a summary of information relating to stock options outstanding at December 31, 1999:

		OP'	TIONS OUTSTANDING		OPTIONS EXER	CISABLE	
E	RANGE OF EXERCISE PRICE	NUMBER OUTSTANDING AT DECEMBER 31, 1999	WEIGHTED- AVERAGE REMAINING CONTRACTUAL LIFE	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE AT DECEMBER 31, 1999	WEIGHTED AVERAGE EXERCISE PRICE	-
\$	0.01-\$ 0.29 0.30-\$20.62	102,258 46,500	6.2 years 9.2 years	\$ 0.03 20.62	41,186	\$0.03 	
\$	0.01-\$20.62	148,758	7.2 years	\$ 6.46	41,186	\$0.03	

The Company applies APB Opinion No. 25 in accounting for the Plan. APB No. 25 requires no recognition of compensation expense for the Company's "Incentive Stock Option" awards, because as of the date of grant the exercise price was equal to the estimated fair market value of the Company's common stock and the number of options granted was fixed. The Company's "Non-qualified Stock Option" awards are considered variable awards as the number of shares to be acquired by the employees is indeterminable at the date of grant. Accordingly, in 1999 and for the six months ended June 30, 1999 the Company has recognized compensation expense of \$3,283,164 and \$937,138, respectively on the non-qualified Stock Options granted prior to 1999. At December 31, 1999, all non-qualified stock options granted prior to 1999 were fully vested. Additional compensation expense will be recognized for the 1999 non-qualified stock options in the event that the options become fully vested. 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			BER 31, 998		MBER 31, 1999
Net income (loss) as reported	\$1,107,			1,142		,419,917)
Pro forma net income (loss)	\$1,106,	988	\$7 ==	0,922		,922,672)
Basic net income (loss) per share	\$ 2	2.62		(0.18)	\$ ====	(104.00)
Pro forma basic net income (loss) per share	\$ 2	2.62		(0.18)	\$	(95.21)
Diluted net income (loss) per share	\$ 1	1.27		(0.18)	\$	(104.00)
Diluted pro forma net income (loss) per share	\$ 1	1.27	\$	(0.18)	\$ ====	(95.21)

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

#### DECEMBER 31, 1999 AND 1998

#### (14) STOCK OPTION PLAN (CONTINUED)

The fair value of each option grant for the Company's plans is estimated on the date of the grant using the Black-Scholes option pricing model, with the following weighted average assumptions used for grants in 1999 and 1997. There were no grants of options in 1998.

	1997	1999
Risk free interest rates	7 years	
Expected volatilities		0% 0%

#### (15) SEGMENT AND RELATED INFORMATION

The Company operates in one significant business segment.

Revenues by geographic area consists of the following:

	YEARS ENDED			SIX MONTHS ENDED		
	DECEMBER 31, 1997	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 1999	JUNE 30, 2000	
				(UNAU)	DITED)	
United States	\$ 5,853,551 5,610,606	\$ 7,347,907 4,806,118	\$ 8,169,470 18,008,344	\$ 4,190,141 7,343,022	\$ 4,257,666 10,199,937	
	\$11,464,157	\$12,154,025	\$26,177,814 =======	\$11,533,163	\$14,457,603	

Long lived assets by geographic area consists of the following:

	DECEMBER 31,	DECEMBER 31,	JUNE 30,
	1998	1999	2000
			(UNAUDITED)
United States	\$260,977	\$ 307,286	\$ 288,834
	708,928	1,252,636	1,183,354
	\$969,905	\$1,559,922	\$1,472,188

### (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

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 1999 AND 1998

(16) INCOME (LOSS) PER SHARE (CONTINUED) 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			HS ENDED
	DECEMBER 31, 1997	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 1999	2000 JUNE 30,
				(UNAUI	
Net income (loss) as reported	\$1,107,208	\$ 71,142	\$(29,419,917)	\$(6,836,241)	\$(66,586,244)
Less preferred stock dividends	(121,668)	(121,666)	(121,666)	(60,333)	
Net income (loss) available to common shareholders Effect of dilutive securities:	985,540	(50,524)	(29,541,583)		
Common stock warrants	116,574				
Net income (loss), assuming dilution	\$1,102,114	\$ (50,524)	\$(29,541,583)		
Weighted average common shares outstanding during the					
year Effect of dilutive securities:	375,773	284,050	284,050	284,050	316,488
Common stock warrants Common stock options			 		
	,	284,050		284,050	316,488

For the years ended December 31, 1999 and 1998, and for the six months ended June 30, 2000 and June 30, 1999, common equivalent shares of 577,276, 491,566, 552,849 and 523,544, respectively, resulting from stock options and warrants were not included in the computation of diluted earnings per share because to do so would have been antidilutive.

#### (17) PREPAID EXPENSES

Prepaid expenses consist of:

	DECEMBER 31,	DECEMBER 31,	JUNE 30,
	1998	1999	2000
			(UNAUDITED)
Prepaid consulting services (note 11) Other	\$	\$	\$155,658
	202,916	593,348	500,020
	\$202,916 ======	\$593,348 ======	\$655 <b>,</b> 678

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

DECEMBER 31, 1999 AND 1998

#### (18) ACCRUED EXPENSES

Accrued expenses consist of:

	DECEMBER 31, 1998	DECEMBER 31, 1999	JUNE 30, 2000
			(UNAUDITED)
Accrued compensation and payroll Accrued interest Accrued legal and professional fees Other	\$392,066 8,062 128,812 57,349	\$ 736,021 158,101 251,926 253,475	\$309,383 114,566 149,599 386,514
	\$586 <b>,</b> 289	\$1,399,523	\$960 <b>,</b> 062
	=======	========	=======

#### (19) 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.

#### (20) CONCENTRATION OF CREDIT RISK

One commercial customer accounted for 44% of revenues for the year ended December 31, 1999 and 40% and 38% for the six months ended June 30, 2000 and 1999, respectively. At June 30, 2000 and December 31, 1999, one customer accounted for 42% and 48% of accounts receivable, respectively.

#### (21) SUBSEQUENT EVENT (UNAUDITED)

On July 14, 2000, the Company acquired substantially all of the assets of AmiKa Corporation, for cash consideration of \$3 million. The acquisition will be accounted for by the purchase method of accounting.

### PHARMACIA & UPJOHN (CAMBRIDGE) LIMITED FORMERLY PHARMACIA PIOTECH (PIOCHDOM) IIMITED

### PHARMACIA BIOTECH (BIOCHROM) LIMITED REPORT OF THE DIRECTORS

#### FOR THE YEAR ENDED 31ST DECEMBER 1998

The Directors present their report and the audited financial statements for the year ended 31st December 1998.

#### TRADING RESULTS FOR THE YEAR AND OUTLOOK

The trading results for the year are set out on page F-29 of the accounts. The year was satisfactory.

Following the Company's disposal of the majority of its net assets on the 26th February 1999, (note 23), the Company will cease to trade.

#### PRINCIPAL ACTIVITIES

During the year the Company developed, manufactured and marketed scientific instruments and associated chemicals.

#### DIRECTORS

The Directors throughout the year were as listed below. None of the Directors holds any beneficial interest in the share capital of the Company.

W.B.	Brown	 Managing	Resigned	01/03/99
J.G.	Lee		Joined	23/12/98
K.T.	Krzywicki		Joined	23/12/98

#### YEAR 2000 AND EUROPEAN MONETARY UNION

As the Company ceased to trade on the 26th February 1999 the directors are satisfied that there are no risks associated with the impact of the Year 2000 date change or European Monetary Union.

#### RESEARCH AND DEVELOPMENT

It is the Company's policy to carry out research and development to develop products in the fields of spectrophotometry and amino acid analysis. Our objective is the rapid creation of products utilising Biochrom's strengths in electronic, software, optical and mechanical design plus production skills.

Expenditure on research and development is set out in the profit and loss accounts on page F-29.

#### CLOSE COMPANY PROVISIONS

As far as the Directors are aware the close company provisions of the Income and Corporation Taxes Act 1988 as amended do not apply to the Company. There has been no change in this respect since the end of the financial year.

#### POST BALANCE SHEET EVENT

Effective 26th February 1999, the Company sold the majority of its net assets to Biochrom Limited.

(See note 23).

### PHARMACIA & UPJOHN (CAMBRIDGE) LIMITED FORMERLY PHARMACIA BIOTECH (BIOCHROM) LIMITED

PHARMACIA BIOTECH (BIOCHROM) LIMITEI

REPORT OF THE DIRECTORS

FOR THE YEAR ENDED 31ST DECEMBER 1998

#### AUDITORS

Our auditors, Coopers & Lybrand, merged with Price Waterhouse on 1 July 1998, following which Coopers & Lybrand resigned and the directors appointed the new firm, PricewaterhouseCoopers, as auditors.

A resolution to reappoint PricewaterhouseCoopers as auditors to the company will be proposed at the annual general meeting.

BY ORDER OF THE BOARD

J.G. LEE DIRECTOR

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FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

YEAR ENDED 31ST DECEMBER 1998

#### STATEMENT OF DIRECTORS' RESPONSIBILITIES

Company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these financial statements, the directors are required to:

- \* Select suitable accounting policies and then apply them consistently;
- \* Make judgements and estimates that are reasonable and prudent;
- \* State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- $^{\star}$  Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the company and to enable them to ensure that the financial statements comply with the Companies Act 1985. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

BY ORDER OF THE BOARD

/s/ J.G. Lee	Director
9 April 1999 	Date

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REPORT OF THE AUDITORS TO THE MEMBERS OF PHARMACIA & UPJOHN (CAMBRIDGE) LIMITED

#### FORMERLY

PHARMACIA BIOTECH (BIOCHROM) LIMITED

REPORT OF INDEPENDENT ACCOUNTANTS

To the Directors of Pharmacia & Upjohn (Cambridge) Limited:

In our opinion, the accompanying balance sheet, profit and loss account and statement of cash flows present fairly, in all material respects, the financial position of Pharmacia & Upjohn (Cambridge) Limited as at 31 December 1997 and 1998 and the profit and loss accounts and cash flows for the years ended 31 December 1997 and 1998 in conformity with generally accepted accounting principles in the United Kingdom, which differ in certain respects from those accepted in the United States (see note 24 to the financial statements).

These financial statements are the responsibility of Pharmacia & Upjohn (Cambridge) Limited's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

#### PRICEWATERHOUSECOOPERS

Chartered Accountants and Registered Auditors Cambridge, England February 26, 1998 (year ended December 31, 1997) and April 9, 1999 (year ended December 31, 1998), except for Note 24, which is as of September 15, 2000.

# PHARMACIA & UPJOHN (CAMBRIDGE) LIMITED FORMERLY PHARMACIA BIOTECH (BIOCHROM) LIMITED PROFIT AND LOSS ACCOUNT YEAR ENDED 31ST DECEMBER 1998

		19	98		1997
	NOTES	L	L	L	L
TURNOVER	2		7,101,776 (5,160,296)		8,699,944 (6,252,278)
GROSS PROFIT  Distribution costs  Administration costs  Research and Development costs		(457,939) (604,918) (395,569)	1,941,480	(421,254) (493,374) (418,000)	2,447,666
Other operating income	4	(1,458,426) 48,808		(1,332,628) 61,019	
NET OPERATING EXPENSES			(1,409,618)		(1,271,609)
OPERATING PROFIT	3 5		531,862 83,095		1,176,057 114,392
PROFIT ON ORDINARY ACTIVITIES BEFORE TAXATION Tax on profit on ordinary activities	6		614,957 (194,935)		1,290,449 (444,323)
PROFIT FOR THE YEAR			420,022		846,126 (2,349,827)
PROFIT (LOSS) RETAINED FOR THE YEAR			L420,022		L(1,503,701)

Reserves statement see note 15

All activities are discontinued (note 23).

The company has no recognised gains and losses other than those included in the profits above, and therefore no separate statement of total recognised gains and losses has been presented.

There is no difference between the profit on ordinary activities before taxation and the retained profit for the year stated above and historical cost equivalents.

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

BALANCE SHEET

31ST DECEMBER 1998

			1998		1997
	NOTES	L	L	L	L
FIXED ASSETS					
Tangible assets	9		415,900		455,504
CURRENT ASSETS					
Stock		636,556		706,141	
Debtors  Cash at bank and in hand	11	1,603,559		1,537,499	
cash at bank and in hand		1,545,230		1,026,766	
		3,785,345		3,270,406	
CREDITORS: Amounts falling due within one	1.0	000 747		004 704	
year	12	888 <b>,</b> 747		804,784	
NET CURRENT ASSETS			2,896,598		2,465,622
TOTAL ASSETS LESS CURRENT LIABILITIES			L3,312,498		L2,921,126
PROVISIONS FOR LIABILITIES AND CHARGES	13		46,350		75,000
NET ASSETS			L3,266,148		L2,846,126
CAPITAL AND RESERVES					
Called up share capital	14		2,000,000		2,000,000
Profit and loss account	15		1,266,148		846,126
EQUITY SHAREHOLDERS' FUNDS	16		L3,266,148		L2,846,126
			=========		==========

The financial statements on pages F-29 to F-43 were approved by the Board of Directors on 9 April 1999 and were signed on its behalf by:

/s/ J.G. Lee
- ----- Director
9 April 1999
- ----- Date

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FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### CASH FLOW STATEMENT FOR THE YEAR ENDED 31ST DECEMBER 1998

See note 19	1998	1997
	L	L
Operating Activities Net cash in flow from operating activities	742,243	1,355,841
RETURNS ON INVESTMENTS AND SERVICING OF FINANCE Interest received	81,764	118,918
TAXATION UK Corporation Tax paid		(576,323) (587,457)
	(160,915)	(1,163,780)
CAPITAL EXPENDITURE AND FINANCIAL INVESTMENT Purchase of tangible fixed assets		
		(123,616)
Equity Dividends Paid Net		(2,349,827)
INCREASE/(DECREASE) IN CASH IN THE PERIOD	518,464	

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS

#### YEAR ENDED 31ST DECEMBER 1998

#### 1. ACCOUNTING POLICIES

#### (a) BASIS OF ACCOUNTING

Although it is intended that the Company shall cease to trade following the sale of its net assets on the 26th February 1999 (note 23), the accounts have been prepared on the going concern basis. This is because in the directors' opinion there is no material difference between the recoverable amounts of the assets and liabilities and their values in the balance sheet. The accounts have been prepared on the historical cost basis and in accordance with applicable Accounting Standards in the United Kingdom. A summary of the more important accounting policies which have been applied consistently is set out below:

#### (b) DEPRECIATION OF TANGIBLE FIXED ASSETS

The cost of fixed assets is their purchase cost, together with any incidental costs of acquisition.

Depreciation is calculated using the straight line method to write off the fixed assets over their estimated useful lives as follows:-

Leasehold improvements	 7 years
Plant, machinery, equipment and tooling	 3-7 years
Computer equipment	 5 years

#### (c) DEFERRED TAXATION

Provision is made using the liability method for the tax effect of all material timing differences between profits computed for taxation purposes and those stated in the accounts, except insofar as the timing differences are expected to continue for the foreseeable future.

#### (d) FOREIGN CURRENCY

Assets and liabilities in foreign currencies are translated to sterling at the rates of exchange ruling at the end of the financial year. Exchange differences resulting from changes in foreign currency rates are written off to the profit and loss account.

#### (e) RESEARCH AND DEVELOPMENT EXPENDITURE

Expenditure on research and development is written off to the profit and loss account during the year in which it is incurred.

#### (f) OPERATING LEASES

Costs in respect of operating leases are charged on a straight line basis in arriving at the operating profit.

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

NOTES TO THE ACCOUNTS

YEAR ENDED 31ST DECEMBER 1998

#### 1. ACCOUNTING POLICIES (CONTINUED)

#### (g) STOCKS AND WORK IN PROGRESS

Stocks are stated at the lower of cost and net realisable value. Cost in this context includes all attributable costs in getting each item to its present location and condition and, for finished goods and work in progress, a proportion of attributable overheads based on a normal level of activity. Net realisable value is the price at which stock can be sold in the normal course of business after allowing for the costs of realisation, and where appropriate, the costs of conversion from their existing state to a finished condition. Provision is made for obsolete, slow moving and defective stocks.

#### (h) PENSION COSTS

The Company operates a funded defined benefit pension scheme which is contracted out of the state scheme. The fund is valued every three years by a professionally qualified independent actuary, the rates of contribution payable being determined by the actuary. Pension costs are accounted for on the basis of charging the expected cost of providing pensions over the period during which the company benefits from the employees' services. The effects of variations from regular cost are spread over the expected average remaining service lives of members of the scheme.

#### 2. TURNOVER

Turnover represents the invoiced value of goods and services supplied during the year, less trade discounts and trade commissions, excluding Value Added Tax.

Turnover arises from the principal activity of the Company and was derived from the following geographical areas by destination:

	1998	1997
	L	L
Europe	4,519,415	5,280,673
Asia and Australasia	831,277	978,144
The Americas	1,693,897	2,301,527
Middle East and Africa	57,187	139,600
Turnover is all UK by origin	7,101,776	8,699,944

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS

#### YEAR ENDED 31ST DECEMBER 1998

#### 3. OPERATING PROFIT

	1998	1997
Operating profit has been arrived at after charging:- Auditors remunerationaudit servicesnon audit services  Operating lease rentals:- Machinery, equipment and vehicles Premises Depreciation.	L 22,030 13,325 51,753 231,333 190,915	15,175 58,987 227,000
4. OTHER OPERATING INCOME		
Miscellaneous income	1998 L 48,808	
5. INTEREST RECEIVABLE		
On bank current account cash balance	L 83,095 L83,095	
United Kingdom corporation tax at 31%  Current Under provision in respect of prior years;  Current	1998  L  193,000  1,935  L194,935	L444,323

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS

#### YEAR ENDED 31ST DECEMBER 1998

#### 7. EMPLOYEES

	1998	1997
The average number of employees, (including the executive Director) was made up as follows:  Manufacturing, production and development Distribution	NO. 48 7 5	NO. 48 8 5
	60 =====	61 L
Staff costs, including full time working Directors amounted to: Salaries and bonuses	1,308,728 105,959 127,348 	107,986 118,317 L1,594,492
8. DIRECTORS` EMOLUMENTS		
	1998	1997
Emoluments of Directors of Pharmacia & Upjohn (Cambridge) Limited	L	L
FeesOther emolumentssalary, bonus and benefits in kind	73,705	68,244
	73,705	68,244

Retirement benefits are accruing to one Director under a defined benefit scheme (1997:one).

#### FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

#### YEAR ENDED 31ST DECEMBER 1998

#### 9. TANGIBLE FIXED ASSETS

	COMPUTER EQUIPMENT	LEASEHOLD BUILDING IMPROVEMENTS	PLANT MACHINERY EQUIPMENT & TOOLING	TOTAL
	L	L	L	L
COST At 1st January 1998 Disposals during year Additions	428,534 (45,949) 42,429	227 <b>,</b> 692  	(12,929) 108,882	1,919,596 (58,878) 151,311
At 31st December 1998	425,014		1,359,323	2,012,029
DEPRECIATION At 1st January 1998 Disposals during year Charge for the year	323,582 (45,949) 43,780	6,475	(12,929) 140,660	1,464,092 (58,878) 190,915
At 31st December 1998	321,413	209,651	1,065,065	1,596,129
NET BOOK VALUE At 31st December 1998 At 31st December 1997	103,601	18,041 ====== 24,516 ======	294 <b>,</b> 258	
10. STOCK				

	1998	1997
	L	L
Components, materials and supplies	528,408 32,002 76,146	636,259 3,053 66,829
	L636,556	L706,141

The Directors do not believe that the current replacement cost of stock is materially different from its historical cost.

#### FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

#### YEAR ENDED 31ST DECEMBER 1998

#### 11. DEBTORS

	1998	1997
	L	L
Advance Corporation Tax Recoverable	307,437 1,093,118 4,145 198,859	306,187 1,038,502 2,814 189,996
	L1,603,559	L1,537,499
12. CREDITORSAMOUNTS FALLING DUE WITHIN ONE YEAR		

	1998	1997
	L	L
Trade creditors Other creditors Other taxation and social security Corporation tax	484,770 181,806 29,171 193,000	526,387 86,986 33,681 157,730
	888,747	L804,784

#### 13.(A) PROVISIONS FOR LIABILITIES AND CHARGES

	1998	1997
	T,	T.
	_	
Pension fund liability	46,350	

Following the net asset sale dated 26th February 1999 a pension fund liability may crystalise when the Company's pension fund transfers scheme assets to Biochrom Limited's new pension scheme in 1999.

	1998	1997
	L	L
Building lease dilapidation provision		75,000

The dilapidation provision was released to the Profit and Loss account in the light of the surrender without penalty of the building lease on the sale of net assets of the Company described in note 23.

#### FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

YEAR ENDED 31ST DECEMBER 1998

#### 13.(B) DEFERRED TAXATION

The provision for deferred taxation, and the full potential asset, are made up as follows:-

	1998		1997		
	FULL POTENTIAL		FULL POTENTIAL (ASSET)/LIABILITY	PROVISION MADE	
	L	L	L	L	
Accelerated capital allowances	(45,713) (738)		(13,001)	 	
	L(46,451)	L		L	
14. CALLED UP SHARE CAPITAL					
		1998	1997		
AUTHORISED					
Ordinary shares of L1 each			000 L2,000		
ALLOTTED, CALLED UP AND FULLY PAID Ordinary shares of L1 each			000 L2,000		
15. STATEMENT OF RESERVES					
		1998			
		L	L		
At 1st January 1998		846, 420,	126 2,349 022 (1,503	,827 ,701)	
At 31st December 1998		1,266,			
16. RECONCILIATION OF MOVEMENTS IN SHAREHOLD	DERS' FUNDS				
		1998			
		L	L		
Profit for the yearAppropriation, net dividend on ordinary shar	es	420,	(2,349		
Net addition/(reduction) to shareholders' fu Opening shareholders' funds	ınds	420,	022 (1,503 126 4,349 148 2,846	,701) ,827 ,126	

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

YEAR ENDED 31ST DECEMBER 1998

#### 17. CAPITAL COMMITMENTS

	L	L
Future capital expenditure contracted, but not provided for:		
18. CONTINGENT LIABILITIES AND FINANCIAL COMMITMENTS		
	1998	1997
	L	L
Amount of performance bonds.	944	944
Guarantee given to H.M. Customs & Excise in respect of import duty & VAT	120,000	120,000
	L120,944	L120,944

1997

1998

- a) The Directors do not expect liabilities to arise from the performance bonds issued.
- b) The company has entered into a composite accounting agreement with Barclays Bank PLC., along with other members of the Pharmacia & Upjohn Limited group. As a member of the Pharmacia & Upjohn Limited group cash pool, the company has a contingent liability of L10 million (1997 L10 million) in respect of overdrafts of the other members in the group cash pool.
- c) At 31st December 1998, the Company had financial commitments in respect of operating leases for vehicles, equipment and premises, terminating in 1999 and thereafter. The total amount payable in the next year under these leases is as follows:-

	1998		1997	
	LAND AND BUILDINGS	OTHER	LAND AND BUILDINGS	OTHER
	L	L	L	L
Leases expiring between				
Less than one year	170,250	3,870		2,894
One to two years		2,497	227,000	4,992
Two and five years inclusive		42,048		34,356
		- 40 445		- 40 040
	L170,250	L48,415	L227,000	L42,242

FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

#### YEAR ENDED 31ST DECEMBER 1998

#### 19. CASH FLOW STATEMENT

(a) Reconciliation of operating profit to net cash inflow from operating activities:

	1998	1997
	L	L
Operating profit	531,862 190,915	1,176,057 212,740
(Gain) on sale of tangible fixed assets		(215)
Decrease/(Increase) in stocks	69,585	59,566
(Increase) in debtors	(63,479)	(63,377)
Increase/(Decrease) in creditors	13,360	(28,930)
Net cash inflow from operating activities	L742,243	L1,355,841

(b) Analysis of changes in net funds and movement during the year

	1998	1997
	L	L
Balance at 1st January 1998 Net cash inflow/(outflow)	1,026,766 518,464	3,189,230 (2,162,464)
Balance at 31st December 1998	L1,545,230	L1,026,766

(c) Analysis of the balances of cash shown in the balance sheet

	1998	1997	CHANGE IN YEAR
	L	L	L
Cash at bank and in hand	1,545,230	1,026,766	518,464

#### 20. PENSION OBLIGATIONS

The Company participates in a pension fund operated by Pharmacia Biotech UK, a branch office of Pharmacia Biotech Europe GmbH (previously Pharmacia Limited) providing benefits based on final pensionable pay. The assets of the fund are held separately from those of the Company being invested with investment managers in a managed fund.

#### FORMERLY

#### PHARMACIA BIOTECH (BIOCHROM) LIMITED

#### NOTES TO THE ACCOUNTS (CONTINUED)

#### YEAR ENDED 31ST DECEMBER 1998

#### 20. PENSION OBLIGATIONS (CONTINUED)

The total pension cost for the company is set out in note 7. The pension cost is assessed in accordance with the advice of an independent qualified actuary using the projected unit method. The most recent actuarial valuation adopted by the Trustees of the Pharmacia Limited Staff Superannuation Fund was as at 1 January 1997. The assumptions which had the most significant effect on the results of the valuation were those relating to:

- a) the future rate of investment return on the fund;
- b) the future rate at which members' salaries would increase;
- c) the rate of withdrawal from service.

It was assumed that the long term rate of investment return would be at an average of 9% per annum and the rate of future salary increases would be at 7.5% per annum. The rate of withdrawal from service was selected at a rate slightly less than the rate experienced over the inter-valuation period.

The most recent actuarial valuation adopted by the Trustees showed that the market value of the fund's assets was L5,564,000 and that the actuarial value of those assets represented 112% of the benefits that had accrued to members, after allowing for expected future increases in basic salary.

The existing pension fund was formed in 1986 by the amalgamation of the Pharmacia Biotech Limited and Pharmacia LKB Biochrom Limited schemes. Following the net asset sale on 26 February 1999 (note 23), all Pharmacia Biotech active members (staff formerly employed by Pharmacia Biotech Limited) will transfer into the Nycomed Amersham Scheme. The remaining "Biochrom" active members will have the choice to transfer into the new Biochrom Limited pension scheme. All current and deferred members will remain in the Pharmacia Biotech UK Pension Fund which will be administered by Pharmacia & Upjohn at Milton Keynes.

#### 21. RELATED PARTY TRANSACTIONS

As a wholly owned subsidiary, whose results are included in the consolidated financial statements of Pharmacia & Upjohn, Inc. (see note 22), the company is exempt from the requirement to disclose details of transactions with other group companies.

The Director regards Amersham Pharmacia Biotech AB ("APB') as a related party by virtue of the fact that the company's ultimate parent undertaking Pharmacia & Upjohn Inc. holds a 45% interest in APB and that there are certain common directorships. Sales to APB group companies amounted to L6,608,485 and the company was owed L1,010,761 as at 31 December 1998 in relation to trading balances.

#### PHARMACIA & UPJOHN (CAMBRIDGE) LIMITED

FORMERLY

# PHARMACIA BIOTECH (BIOCHROM) LIMITED

NOTES TO THE ACCOUNTS (CONTINUED)

YEAR ENDED 31ST DECEMBER 1998

## 22. ULTIMATE AND IMMEDIATE PARENT UNDERTAKING

The directors regard Pharmacia & Upjohn, Inc, a company incorporated in the USA, as the ultimate parent and controlling undertaking. Copies of the ultimate parent's consolidated financial statements may be obtained from:

Pharmacia & Upjohn, Inc 7000 Portage Road, Kalamazoo Michigan 49001, USA

According to the register kept by the company, Pharmacia & Upjohn Limited, a company registered in England and Wales, has a 100% interest in the equity capital of the company at 31 December 1998.

#### 23. POST BALANCE SHEET EVENTS

On the 26th February 1999, the Company sold the majority of its net assets to Biochrom Limited for a consideration of US Dollars 6,362,574. Following this, the Company will cease to trade.

24. SUMMARY OF DIFFERENCES BETWEEN UK AND US GENERALLY ACCEPTED ACCOUNTING PRINCIPLES ("GAAP")

The company has prepared financial statements in accordance with UK GAAP. There are no reconciling differences between US and UK GAAP related to the equity shareholders' funds as of 31 December 1997 and 1998 and the net income for the years ended 31 December 1997 and 1998. As of 31 December 1997 and 1998 the following other differences exist:

#### DEFERRED TAXATION

Under UK GAAP, provision for deferred tax is only required to the extent that it is probable that a taxation liability or asset will crystallise, in the foreseeable future, as a result of timing differences between taxable profits and accounting profit, with provision made at the known tax rate.

Under US GAAP, full provision for deferred tax is required to the extent that accounting profit differs from taxable profit due to temporary differences. Provision is made at the tax rate in effect at the time the difference is likely to reverse. A valuation adjustment is made against deferred tax assets when it is more likely than not that a deferred tax asset will not be realised. As such, provision for the taxable losses carried forward of L46,451 would be provided with a valuation allowance for the full amount, resulting in no net impact on the profit and loss account or shareholders' equity, as of 31 December 1998. Provision for the taxable losses carried forward of L66,380 would be provided with a valuation allowance for the full amount, resulting in no net impact on the profit and loss account or shareholders' equity, as of 31 December 1997.

# CASH FLOW STATEMENTS

The cash flow statement is prepared in accordance with United Kingdom Financial Reporting Standard 1 "FRS 1 (Revised 1996)", whose objective and principles are similar to those set out in

FORMERLY

# PHARMACIA BIOTECH (BIOCHROM) LIMITED

NOTES TO THE ACCOUNTS (CONTINUED)

YEAR ENDED 31ST DECEMBER 1998

24. SUMMARY OF DIFFERENCES BETWEEN UK AND US GENERALLY ACCEPTED ACCOUNTING PRINCIPLES ("GAAP") (CONTINUED)

SFAS No.95, "Statement of Cash Flows". The principal differences between the standards relate to classification. Under FRS 1 (Revised 1996), the company presents its cash flows for (a) operating activities, (b) returns on investments and servicing of finance, (c) taxation, (d) capital expenditure and financial investment, (e) equity dividends paid, (f) management of liquid resources and (g) financing. SFAS No.95 requires only three categories of cash flow activity being (a) operating, (b) investing and (c) financing.

Cash flows from taxation and returns on investments and servicing of finance under FRS 1 (Revised 1996) would be included as operating activities under SFAS No.95, capital expenditure and financial investment would be included as investing activities, and equity dividends paid would be included as a financing activity under SFAS No.95. Under FRS 1 (Revised 1996) cash comprises cash in hand and deposits repayable on demand, less overdrafts repayable on demand, and liquid resources comprise current asset investments held as readily disposable stores of value. Under SFAS No.95 cash equivalents, comprising short-term highly liquid investments, generally with original maturities of three months or less, are grouped together with cash. Cash equivalents exclude overdrafts. There are no differences between cash as stated under UK GAAP and cash and cash equivalents as stated under US GAAP at 31 December 1997 and 1998.

Set out below, for illustrative purposes, is a summary of cash flows under US GAAP.

	YEAR ENDED 31 DECEMBER	
	1998	1997
	L'000	L'000
Net cash provided by operating activities  Net cash used in investing activities  Net cash used in financing activities	•	310,979 (123,616) (2,349,827)
Net increase/(decrease) in cash and cash equivalents  Cash and cash equivalents at beginning of period  Cash and cash equivalents at end of period	518,464 1,026,766 1,545,230	(2,612,464) 3,639,230
Supplement cash flow information:  Cash paid for interest	(160,915)	(1,163,780)

[LOGO]

Shares Common Stock

# THOMAS WEISEL PARTNERS LLC ING BARINGS

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Neither we nor any of the underwriters have authorized anyone to provide information different from that contained in this prospectus. When you make a decision about whether to invest in our common stock, you should not rely upon any information other than the information in this prospectus. Neither the delivery of this prospectus nor the sale of our common stock means that information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or solicitation of an offer to buy these shares of common stock in any circumstances under which the offer or solicitation is unlawful.

Until , 2000 (25 days after commencement of this offering), all dealers that buy, sell or trade these shares of common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is an addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

# PART II INFORMATION NOT REQUIRED IN PROSPECTUS

## ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the estimated expenses payable by us in connection with the offering (excluding underwriting discounts and commissions):

NATURE OF EXPENSE	AMOUNT
SEC Registration Fee	\$19,800
NASD Filing Fee	8,000
Nasdaq National Market Listing Fee	*
Accounting Fees and Expenses	*
Legal Fees and Expenses	*
Printing Expenses	*
Blue Sky Qualification Fees and Expenses	5,000
Transfer Agent's Fee	*
Miscellaneous	*
TOTAL	*

The amounts set forth above, except for the Securities and Exchange Commission, National Association of Securities Dealers, Inc. and Nasdaq National Market fees, are in each case estimated.

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\* To be completed by amendment.

## ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

In accordance with Section 145 of the Delaware General Corporation Law, Article VII of our certificate of incorporation provides that none of our directors will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our certificate of incorporation provides that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Article V of our by-laws provides for our indemnification of our officers and certain non-officer employees under certain circumstances against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement, reasonably incurred in connection with the defense or settlement of any threatened, pending or completed legal proceeding in which any such person is involved by reason of the fact that such person is or was an officer or employee of the registrant if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to our best interests, and, with respect to criminal actions or proceedings, if such person had no reasonable cause to believe his or her conduct was unlawful.

Prior to the offering, we will have entered into indemnification agreements with each of our directors. The form of indemnification agreement provides that we will indemnify our directors for expenses incurred because of their status as a director to the fullest extent permitted by Delaware law, our certificate of incorporation and our by-laws.

Set forth in chronological order below is information regarding the number of shares of capital stock issued by us since September 15, 1997. Also included is the consideration, if any, received by us for such shares. 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 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 issuances and option grants to our employees and directors were exempt from the registration requirements of said Act by reason of Section 4(2) of said Act or Rule 701 promulgated thereunder.

#### (a) ISSUANCE OF CAPITAL STOCK

- (i) In 1999, we issued an aggregate of 48,500 shares of our series B convertible preferred stock to Ascent Venture Partners, L.P. (formerly known as Pioneer Capital Corp.) and Citizens Capital, Inc. for an aggregate purchase price of \$1,000,000.
- (ii) In March 2000, we issued 55,389 shares of our common stock upon the exercise of previously granted stock options at an aggregate exercise price of \$1,792.14.

## (b) GRANTS OF STOCK OPTIONS

(i) As of September 15, 2000, options to purchase 150,831 shares of common stock were outstanding under our 1996 Stock Option and Grant Plan of which options to purchase 91,948 shares are exercisable within 60 days of such date. All such options were granted between March 1996 and September 2000 to our officers, directors, employees and consultants.

#### ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(A) EXHIBITS. The following is a complete list of exhibits filed or incorporated by reference as part of this Registration Statement.

- Form of Underwriting Agreement.
- \*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.
- \*3.1 Amended and Restated Certificate of Incorporation of the Registrant.
- \*3.2 Form of Second Amended and Restated Certificate of Incorporation of the Registrant.
- \*3.3 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 Ventures Limited Partnership, Pioneer Ventures Limited Partnership II, Pioneer Capital Corp., First New England Capital, L.P. and Citizens Capital, Inc. and Chane Graziano and David Green.
- \*5.1 Opinion of Goodwin, Procter & Hoar LLP as to the legality of the securities offered.
- \*10.1
- Harvard Apparatus, Inc. 1996 Stock Option and Grant Plan. Harvard Bioscience, Inc. 2000 Stock Option and Incentive \*10.2 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 dated between Harvard Bioscience and Chane Graziano.

\*10.6 Employment Agreement dated

between Harvard

Bioscience and David Green. \*10.7 Employment Agreement dated

between Harvard

- Bioscience and James L. Warren.
- \*21.1 Subsidiaries of the Registrant.
- Consent of Goodwin, Procter & Hoar LLP (included in Exhibit \*23.1 5.1 hereto).
- 23.2 Consent of KPMG LLP.
- 23.3 Consent of PricewaterhouseCoopers.
- 24.1 Powers of Attorney (included on page II-5).
- 27.1 Financial Data Schedule.

- \* To be filed by amendment to this registration statement.
- + Confidential treatment requested as to this exhibit.
  - (B) FINANCIAL STATEMENT SCHEDULES

All schedules have been omitted because they are not required or because the required information is given in the consolidated financial statements or notes to those statements.

#### TTEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule  $424\,(b)\,(1)$  or (4)or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial BONA FIDE offering thereof.

#### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Boston, on September 18, 2000

HARVARD BIOSCIENCE, INC.

By: /s/ CHANE GRAZIANO

Chane Graziano
CHIEF EXECUTIVE OFFICER

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of Chane Graziano and James Warren such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement (or to any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE 
/s/ CHANE GRAZIANO  Chane Graziano	Chief Executive Officer and Director (Principal Executive Officer)	September 18, 2000
/s/ JAMES WARREN  James Warren	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	September 18, 2000
/s/ DAVID GREEN  David Green	President and Director	September 18, 2000
/s/ CHRISTOPHER W. DICK Christopher W. Dick	Director	September 18, 2000
/s/ RICHARD C. KLAFFKY, JR. Richard C. Klaffky, Jr.	Director	September 18, 2000

EXHIBIT NO.	DESCRIPTION		
*1.1	Form of Underwriting Agreement.		
*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.		
*3.1	Amended and Restated Certificate of In Registrant.	ncorporation of the	
*3.2	Form of Second Amended and Restated Certificate of Incorporation of the Registrant.		
*3.3	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 Ventures Limited Partnership, Pioneer Ventures Limited Partnership II, Pioneer Capital Corp., First New England Capital, L.P. and Citizens Capital, Inc. and Chane Graziano and David Green.		
*5.1	Opinion of Goodwin, Procter & Hoar LLP as to the legality of the securities offered.		
*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 dated Bioscience and Chane Graziano.	between Harvard	
*10.6	Employment Agreement dated Bioscience and David Green.	between Harvard	
*10.7	Employment Agreement dated Bioscience and James L. Warren.	between Harvard	
*21.1	Subsidiaries of the Registrant.		
*23.1	Consent of Goodwin, Procter & Hoar LLM 5.1 hereto).	? (included in Exhibit	
23.2	Consent of KPMG LLP.		
23.3	Consent of PricewaterhouseCoopers.		
24.1	Powers of Attorney (included on page I	II-5).	
27.1	Financial Data Schedule.		

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 $<sup>\</sup>mbox{\scriptsize \star}$  To be filed by amendment to this registration statement.

 $<sup>\,\,</sup>$  + Confidential treatment requested as to this exhibit.

#### DISTRIBUTION AGREEMENT

THIS DISTRIBUTION AGREEMENT (this "Agreement"), made on the 2nd day of March, 1999, by and between Biochrom Limited, a company incorporated in England, having its registered office at Unit 22 Phase I Cambridge Science Park, Milton Road, Cambridge, CB4 4FJ, England ("Newco") and Amersham Pharmacia Biotech AB, a company incorporated in Sweden, having its registered office at Bjorkgatan 30, SE-751 84 Uppsala, Sweden.

## WITNESSETH:

WHEREAS, pursuant to that certain Asset Purchase Agreement by and between Newco and Pharmacia Biotech (Biochrom) Limited ("Biochrom"), Pharmacia & Upjohn, Inc. and Harvard Apparatus, Inc., dated March 2, 1999 (the "Purchase Agreement"), Newco is purchasing from Biochrom the business and substantially all of the assets of Biochrom (the "Acquisition");

WHEREAS, it is a condition to the closing of the Acquisition that AP Biotech enter into this Agreement with Newco and that this Agreement become effective upon the closing of the Acquisition;

WHEREAS, subsequent to the consummation of the Acquisition, Newco will be the manufacturer and seller of certain Products (as hereinafter defined) previously manufactured and/or sold by Biochrom and distributed by AP Biotech; and

WHEREAS, Newco and AP Biotech desire that AP Biotech distribute certain of the Products on the terms and subject to the conditions set forth in this Agreement

NOW, THEREFORE, in consideration of the above premises and of the mutual agreements and understandings set forth herein, the parties hereto hereby agree as follows:

SECTION 1. DEFINITIONS. (a) As used in this Agreement, the following terms shall have the following meanings:

"AAA Products" shall mean those products set forth in SCHEDULE 1(a) attached hereto.

"AP Biotech" shall mean Amersham Pharmacia Biotech AB and its affiliates. An affiliate shall consist of any entity that, directly or indirectly, is wholly-owned, or has not less than a majority of its voting power or economic interests owned, by Amersham Pharmacia Biotech Ltd.

"Closing Date" shall mean the date of the closing of the Acquisition.

"Current Products" shall mean all products sold or offered for sale by Biochrom to AP Biotech prior to the Closing Date (including without limitation, those products listed in

SCHEDULES 1(a) AND 1(b) attached hereto). The term "Current Products" shall not include any Modified Products, New Products or Excluded Market Products.

"Customer Information" shall mean, to the extent that such information is in the possession of AP Biotech, (A) information, including names, addresses, telephone and facsimile numbers and e-mail addresses, and purchase histories owned by or in the possession of AP Biotech for all customers (which customers shall include, but shall not be limited to, all subdistributors of AP Biotech which engage in the distribution of products manufactured and sold by Biochrom) of AP Biotech that have purchased Products (including any prior version of Products or discontinued Products) from AP Biotech or have been sent quotes for the prospective purchase of Products and (B) similar information for each end-user of the Products other than customers. Notwithstanding the foregoing, the Customer Information shall exclude all information regarding the prices at which Products were sold by AP Biotech to its customers.

"Daily Rate" shall mean, with respect to any Quarter or Year, the relevant Quarterly Minimum or Yearly Minimum, as the case may be, divided by the number of days contained within such Quarter or Year, respectively.

"Excluded Markets" shall mean markets other than the Market, including without limitation, companies, institutions, individuals or other entities involved in food and beverage applications, environmental applications, clinical applications outside the Life-Sciences area, industrial applications and quality control applications (other than quality control applications in the pharmaceutical, biotechnology or other Life-Sciences areas).

"Excluded Market Products" shall mean any products that are sold by Newco and are designed primarily for sale to the Excluded Markets.

"GBP" shall mean British Pounds.

"Insolvency Event" shall mean, in relation to either party, any one of the following:

- (1) a notice shall have been issued to convene a meeting for the purpose of passing a resolution to wind up that party or such a resolution shall have been passed other than a resolution for the solvent reconstruction or reorganization of that party or for the purpose of inclusion of any party of the share capital of that party in the Official List of the London Stock Exchange or an application by that party for registration as a public company in accordance with the requirements of the Companies Act 1985;
- (2) a resolution shall have been passed by the party's directors to seek a winding up or administration order or a petition for a winding up or administration order shall have been presented against that party or such an order shall have been made;

- (3) a receiver, administrative receiver, receiver and manager, interim receiver, custodian, sequestrator or similar officer is appointed in respect of that party or over a substantial part of its assets or any third party takes steps to appoint such an officer in respect of that party or an encumbrancer takes steps to enforce or enforces its security;
- (4) a proposal for a voluntary arrangement shall have been made in relation to that party under Part I Insolvency Act 1986;
- (5) a step or event shall have been taken or arisen outside the United Kingdom which is similar or analogous to any of the steps or events listed at (1) to (4) above;
- (6) that party takes any step (including starting negotiations) with a view to readjustment, rescheduling or deferral of any part of that party's indebtedness, or proposes or makes any general assignment, composition or arrangement with or for the benefit of all or some of the party's creditors or makes or suspends or threatens to suspend making payments to all or some of that party's creditors or the party submits to any type of voluntary arrangement; or
- (7) where that party is resident in the United Kingdom it is deemed to be unable to pay its debts within the meaning of Section 123 Insolvency

"Intellectual Property" shall have the meaning set forth in Section 13(a) hereof.

"International Region" shall mean the Territory except Japan and the United States of America.

"Letter of Instruction" shall mean the letter of instruction that Newco shall send to the Escrow Agent (as defined herein) in accordance with the provisions of Section 16(f) hereof, which letter shall direct the Escrow Agent to distribute the Escrowed Customer Information (as defined herein) to Newco or its designee (in the manner specified by Newco in such letter).

"License Agreements" shall mean the Trade Mark License Agreements which are attached hereto as SCHEDULE  $13\,(b)\,(i)$  and  $13\,(b)\,(ii)$ .

"Life Science" or "Life Sciences" shall mean and include biology, biochemistry, genetics, molecular biology, biotechnology and all other branches of science and technology related to the biological sciences.

"Market" shall mean only the following types of companies, institutions, facilities and other potential purchasers of products that fall within the categories listed below:

- (1) companies or other entities identified primarily as pharmaceutical or biotechnology companies, including companies or other entities engaged in research, development, scale-up, production or quality control of biopharmaceutical and other pharmaceutical or Life Science-related products and services, and divisions or departments of other companies or other entities engaged in any such activities;
- (2) research, teaching, advisory, administrative and hospital, clinical and other health care institutions and facilities, and departments of other institutions or entities engaged in research, teaching, advisory, administration, health care (including development of routine diagnostic methods), quality control and other activities related to Life Sciences, including without limitation governmental, academic, and medical institutions and facilities (all only as related to Life Sciences); and
- (3) with respect to Japan only, any companies, institutions, individuals or other entities: (i) within the categories listed in (1) and (2) above with respect to Current Products and New Products; and (ii) within the categories listed in the definition of Excluded Markets with respect only to Current Products; PROVIDED, HOWEVER, that in no event shall this clause (ii) be construed to mean that, outside of Japan, the term Market shall include the categories listed in the definition of Excluded Markets.

"Minimum" shall mean the Year One Minimum, the Year Two Minimum or the Year Three Minimum.

"Modified Excluded Market Products" shall mean products sold by Newco that may perform similar functions as Current Products or New Products but are differentiated from such Current Products or New Products: (i) by product and company trade names, and (ii) in the event such products have cases, by the color of their cases.

"Modified Market Products" shall mean products sold by Newco that may perform similar functions as Current Products or New Products but are differentiated from such Current Products or New Products: (i) by product and company trade names, and (ii) in the event such products have cases, by the shape and the color of their cases.

"Modified Products" shall mean all Modified Market Products and Modified Excluded Market Products.

"New Products" shall mean all products sold or offered for sale by Newco that: (i) were not sold or offered for sale by Biochrom to AP Biotech prior to the Closing Date and (ii) are designed primarily for sale to the Market.

"Products" shall mean all products sold by Newco, including Current Products, New Products, Modified Products and Excluded Market Products.

"Quarter" shall mean one of the four (4) successive three (3) calendar month periods of each calendar year. Accordingly, with respect to each calendar year: "First Quarter" shall mean the period from January 1 to March 31; "Second Quarter" shall mean the period from April 1 to June 30; "Third Quarter" shall mean the period from July 1 to September 30; and "Fourth Quarter" shall mean the period from October 1 to December 31. For purposes of this Agreement, the term "Quarter" shall also apply to the period from the Closing Date to March 31, 1999 and to the Year Three Tail Period.

"Region" shall mean any of the International Region, Japan or the United States of America.

"Relevant Material" shall mean all documents or other material in the possession or control of the furnishing party (as defined in Section 19(d) hereof) which are relevant to matters in dispute in the arbitration with the exception of communications to and from lawyers admitted to practice law or practicing law (whether or not employed by a party) for the purpose of obtaining and giving legal advice or communications which reflect attorney work product.

"Territory" shall mean: (i) with respect to all Products other than AAA Products, the entire world excluding: (A) Canada, (B) New Zealand and the neighboring territories of Fiji, South Pacific Islands, Samoa and Tonga, (C) South Africa and the neighboring territories of Namibia, Botswana, Swaziland, Lesotho, Zimbabwe, Malawi, Mauritius, Seychelles, Madagascar, Mozambique and Angola, and (D) Turkey, and: (ii) with respect to AAA Products, the entire world, excluding: (A) Canada, (B) New Zealand and the neighboring territories of Fiji, South Pacific Islands, Samoa and Tonga, (C) South Africa and the neighboring territories of Namibia, Botswana, Swaziland, Lesotho, Zimbabwe, Malawi, Mauritius, Seychelles, Madagascar, Mozambique and Angola, (D) Turkey, (E) the United States, and (F) Japan.

"USD" shall mean United States Dollars.

"Year" shall mean any of Year One, Year Two or Year Three.

"Year One" shall mean the period commencing on the Closing Date and ending on December 31, 1999.

"Year Two" shall mean the period commencing on January 1, 2000 and ending on December 31, 2000.

"Year Three" shall mean the period commencing on January 1, 2001 and ending on December 31, 2001.

"Year Three Tail Period" shall mean the period commencing on January 1, 2002 and ending on February 26, 2002.

"Yen" shall mean Japanese Yen.

(b) Notwithstanding anything contained in this Agreement to the contrary, the effective date of this Agreement shall be the Closing Date.

#### SECTION 1A. ESCROW DEPOSITS.

- (a) Within sixty (60) days following the Closing Date, (i) AP Biotech and Newco shall enter into the Escrow Agreement with Boston Safe Deposit & Trust Company (the "Escrow Agent") in the form attached hereto as EXHIBIT 1A(a) (the "Escrow Agreement") and (ii) on the date such Escrow Agreement is entered into, AP Biotech shall deposit the Customer Information with respect to the three (3) years prior to the Closing Date (such Customer Information to be both in paper form and contained on a floppy diskette) (the "Initial Customer Information"), with the Escrow Agent to be held in escrow pursuant to and in accordance with the terms of the Escrow Agreement;
- (b) Within thirty (30) days following June 30 and December 31 of each Year, AP Biotech shall deposit with the Escrow Agent the Customer Information with respect to the six month period immediately preceding each such date (or in the case of June 30 of Year One, with respect to the period between the Closing Date and June 30, 1999), such Customer Information to be both in paper form and contained on a floppy diskette (the "Semi-Annual Customer Information" and, together with the Initial Customer Information, the "Escrowed Customer Information").
- (c) Within ten (10) business days following the execution of the Escrow Agreement and the deposit by AP Biotech of the Initial Customer Information with the Escrow Agent in accordance with Section 1A(a) above, the Escrow Agent shall deliver to Newco copies of that number of pages of the Initial Customer Information which contains the names and information with respect to approximately, but not less than, twenty (20) customers, which pages shall be selected at random by the Escrow Agent (the "Initial Sample"). Newco shall have the right to contact those customers of AP Biotech contained in the Initial Sample to verify the accuracy of the Initial Customer Information. The parties acknowledge that the Initial Customer Information may include information regarding customers of AP Biotech that do not purchase Products from AP Biotech.

## SECTION 2. APPOINTMENT.

(a) (i) Newco hereby appoints AP Biotech, and AP Biotech hereby accepts the appointment, as the exclusive distributor, marketer and seller of Current Products and New Products for sales to the Market within the Territory on the terms and subject to the conditions set forth herein. Newco shall not appoint, enter into an agreement with or otherwise intentionally assist any other distributor, marketer, seller or sales representative with respect to any of the Current Products or New Products for sales to the Market within the Territory. Newco shall not make or promote any sales of Current Products or New Products to the

Market within the Territory directly to persons or entities other than AP Biotech or its authorized subdistributors. For the avoidance of doubt, the parties hereto acknowledge the principle of freedom of movement of goods within the European Union (and any other countries where such principle may apply). Newco shall not be liable where any Current Product or New Product is imported and/or resold by a third party distributor, marketer, seller or sales representative (other than in connection with an appointment by, an agreement with, or with the intentional assistance of Newco) into the Territory in accordance with such principle.

- (ii) AP Biotech shall be entitled to appoint one or more subdistributors in accordance with the terms of this Section 2(a)(ii). AP Biotech shall have agreements with all such subdistributors (the "Subdistribution Agreements"); PROVIDED, HOWEVER, that in no event shall any such Subdistribution Agreement impose any obligations upon Newco or otherwise contain terms and conditions that are inconsistent with the terms and conditions under this Agreement. Notwithstanding AP Biotech's entering into any such Subdistribution Agreement, AP Biotech shall remain solely responsible to Newco for any and all actions or inactions of its subdistributors in connection with any such Subdistribution Agreement, and AP Biotech shall not be relieved from responsibility for its obligations under this Agreement. Newco shall not be required to seek fulfillment of, or otherwise enforce, such obligations from or against any subdistributor or any party other than AP Biotech.
- (b) Notwithstanding the provisions set forth in Section 2(a) above, Newco shall be entitled to:
- (i) After Year One, sell AAA Products to the Market within the Territory on a non-exclusive basis with AP Biotech;
- (ii) Sell in Belgium and Luxembourg those products contemplated in the Exclusive Distribution Agreement, dated December 11, 1995, between Biochrom and Van der Heyden NV, for resale under the product names "UniSpec," "Ultrospec," "UviMaster," "UviMaster Plus" or "UviMaster PC" or such other product names which are not confusingly similar to the product names of the Current Products and New Products sold or offered for sale by Newco to AP Biotech for resale by AP Biotech to customers in Belgium and Luxembourg;
- (iii) In the event that prior to the termination of this Agreement, Newco delivers a written offer to AP Biotech offering for sale to AP Biotech a New Product (which offer shall specify that failure by AP Biotech to accept such offer will result in the loss by AP Biotech of its rights to distribute such New Product under the terms of this Agreement), together with a reasonable number of samples of, and information with respect to, such New Product to allow AP Biotech to assess such New Product, and AP Biotech does not, within sixty (60) days following the receipt of such written offer from Newco, accept Newco's offer in writing, which such writing shall express AP Biotech's desire to begin placing orders with Newco for such New Product and the estimated date upon which such orders will be placed, then, notwithstanding anything contained in this Agreement to the contrary, Newco may sell

such New Product to the Market within the Territory (or otherwise) to a third party distributor or directly to a customer, at its discretion.

- (c) The parties acknowledge that Newco may:
- (i) Sell outside the Territory those products contemplated in the agreements between Biochrom and each of: (A) Fisher Scientific Ltd., dated October 21, 1994; (B) SMM Instruments (Pty) Ltd., dated November 6, 1991; and (C) Science and Technology (NZ) Ltd., dated November 15, 1995;
- (ii) Sell Modified Excluded Market Products to any third party in the Excluded Markets; and
- (iii) Sell Modified Market Products to any third party in either the Market or the Excluded Markets within or outside the Territory.
- (iv) Sell chemicals, spare parts, consumables or accessories for use in connection with any Modified Market Products or Excluded Market Products.
- (d) Notwithstanding anything contained herein to the contrary, AP Biotech shall have no rights to sell Excluded Market Products or Modified Products.
- (e) AP Biotech shall at all times act as and be an independent contractor and not an employee or agent of Newco.

## SECTION 3. FORECASTS; ORDERS.

- (a) A forecast of anticipated purchases by major Product for the month of March 1999 is attached hereto as SCHEDULE 3(a)(i). No later than twenty (20) days prior to the beginning of each Quarter (beginning with the Second Quarter of Year One), AP Biotech will provide Newco with a forecast of anticipated purchases by major Product for such Quarter. The first such forecast (for the Second Quarter of Year One) is attached hereto as SCHEDULE 3(a)(i). In addition, no later than thirty (30) days prior to the commencement of Year Two and Year Three, AP Biotech will provide a Quarterly forecast for the upcoming Year by major Product. AP Biotech shall deliver to Newco such a forecast for Year One within seven (7) business days following the Closing Date.
- (b) Purchase orders for Current and New Products shall be placed through the AP Biotech electronic data interchange system, as the same exists from time to time (the "EDIS"). Newco shall have access to the EDIS consistent with past practice; PROVIDED, HOWEVER, that Newco's access to AP Biotech's communications network shall be limited to communications through the EDIS relating to AP Biotech's purchasing and selling the Products contemplated under this Agreement in accordance with the plan attached hereto as SCHEDULE 3(b). Each party shall pay one-half of any documented third party out-of-pocket costs reasonably incurred to

modify AP Biotech's communications network to limit Newco's access in accordance with this SCHEDULE 3(b) (the "AP Biotech EDIS Modification Charges"); provided, however, that in no event shall Newco's one-half portion of the AP Biotech EDIS Modification Charges exceed \$21,000 in the aggregate without the prior mutual agreement of the parties. If at any time while this Agreement is in effect, AP Biotech ceases providing Newco with access to the EDIS, AP Biotech shall refund to Newco the full amount of the AP Biotech EDIS Modification Charges paid by Newco in accordance with the previous sentence. AP Biotech shall keep Newco informed in writing of any anticipated changes in the EDIS in sufficient time to allow Newco to make any changes necessary to continue using the EDIS in an effective manner. In addition, each party shall pay one-half of any documented third party out-of-pocket costs reasonably incurred to modify Newco's communications network to limit AP Biotech's access (the "Newco EDIS Modification Charges"); PROVIDED, HOWEVER, that in no event shall AP Biotech's one-half portion of the Newco EDIS Modification Charges exceed 5,000  $\ensuremath{\mathsf{GBP}}$  in the aggregate without the prior written agreement of the parties. Furthermore, AP Biotech shall be responsible for training Newco's employees in the use of such modified EDIS. Each party shall pay one-half of any documented costs relating to such training; provided, however, that in no event shall Newco's one-half portion of such costs exceed \$2,500 in the aggregate without the prior written agreement of the parties. To the extent of any inconsistency in terms between the EDIS and this Agreement, the terms of this Agreement shall prevail.

- (c) Each purchase order shall specify: (i) the Current Products or New Products, including quantity of each, to be purchased by AP Biotech, (ii) instructions for delivery, and (iii) the delivery date therefor, subject to Section 6(b) hereof. In the event the parties agree for a purchase order to be placed through the EDIS in accordance with paragraph (b) above, no charge to Newco for the use of the EDIS shall be made.
- (d) The parties expressly agree that nothing contained in this Section 3 shall increase or decrease in any way the requirements for the minimum purchases of Products by AP Biotech as provided for in Section 7 of this Agreement.

#### SECTION 4. PRICES.

- (a) The prices for Current Products sold by Newco to AP Biotech during Year One shall be the prices set forth in SCHEDULES 1(a) and 1(b) attached hereto. The prices for such Products shall be stated in SCHEDULES 1(a) and 1(b) in GBP. Products delivered by Newco to AP Biotech shall be billed at the purchase price in effect for such Products at the time that the order therefor is placed if the delivery date is within thirty (30) days of the order date. If the delivery date is more than thirty (30) days from the order date then the price shall be that prevailing at the specified time of delivery.
- (b) Subsequent price lists for the Current Products and the New Products shall be prepared in accordance with the provisions of this Section 4 and issued by Newco at least three (3) months prior to the commencement of each Year.

- (c) For each of Year Two and Year Three, Newco may, in its sole discretion, increase the prices of Products sold to AP Biotech which are then in Newco's product line by up to four percent (4%). Price increases in excess of four percent (4%) may be made only by agreement with AP Biotech. Any price increase in excess of four percent (4%) will be negotiated in good faith by the parties.
  - (d) Intentionally Omitted.
- (e) Prior to Newco's establishing the prices for New Products to be sold by Newco to AP Biotech, Newco shall consult with AP Biotech and shall undertake the Price Comparison Process (as defined below) if made necessary by AP Biotech's presenting Price Evidence (as defined below); PROVIDED, HOWEVER, that after such consultation and after undertaking the Price Comparison Process (if necessary), Newco shall ultimately set such prices in its sole discretion. Newco will provide a recommended end-user selling price for each New Product such that New Products are priced competitively with the list price for products with similar features sold by other companies (the "Comparable Products"); PROVIDED, HOWEVER, that if AP Biotech presents meaningful written (as opposed to anecdotal) evidence (the "Price Evidence") to Newco that the average selling price to end-users of a particular Comparable Product is less than ninety percent (90%) of the list price of such Comparable Product, then the list price of such Comparable Product shall not be taken into account by Newco in determining whether the end-user selling prices of the New Products are priced competitively with the list prices of the Comparable Products (the foregoing proviso being herein referred to as the "Price Comparison Process"). The price at which Newco sells New Products to AP Biotech will be such recommended end user selling price less thirty-five percent (35%). The prices at which Products are sold by AP Biotech to its customers will be set by AP Biotech in its sole discretion.

#### SECTION 5. PAYMENT.

- (a) Payment of invoices shall be made in full by AP Biotech to Newco for all Products sold by Newco to AP Biotech no later than the date forty-five (45) days from the date of invoice.
- (b) No invoice shall be issued by Newco prior to the date of shipment of the relevant Products from Newco's production facility.
- (c) For each invoice with respect to which payment is not made by AP Biotech within the number of days specified in Section 5(a), interest shall be payable (as well after as before judgment) by AP Biotech to Newco on the invoice amount at a rate of one percent (1%) per month for the number of days elapsed.
- (d) All payments to be made by AP Biotech to Newco hereunder shall be made by wire transfer in immediately available funds to Newco's GBP bank account, which account is

set forth in SCHEDULE  $5\,(d)$  attached hereto, or to such other account as Newco shall specify in writing to AP Biotech.

- (e) No deduction is to be taken for returns or damage claims without a written credit memo from Newco for such amount, which credit memo shall not be unreasonably withheld.
- (f) All prices quoted for Products in accordance with the provisions of this Section 5 shall be exclusive of any value added taxes.

#### SECTION 6. SHIPPING AND DELIVERY.

- (a) The Products sold by Newco to AP Biotech shall be shipped ex works Newco's production facility located in Cambridge, England. The term "ex works" as used in this Section 6(a) refers to Incoterms 1990.
- (b) Newco shall ship the Products for which it has received an order in accordance with Section 3(b), Section 7(b) or Section 16(b)(ii)(B) hereof no later than the date three (3) business days prior to the specified date for delivery in the related purchase order, provided that such delivery date is not less than thirty (30) days from the date Newco receives such order, if the order is for spectrophotometers, and not less than ninety (90) days from the date Newco receives such order, if the order is for AAA Products. If the delivery date specified in the purchase order for spectrophotometers or AAA Products does not comply with the respective timing requirements for the delivery of such products detailed in the foregoing sentence, Newco may deem the delivery date for such purchase order to be thirty (30) days, in the case of spectrophotometers, and ninety (90) days, in the case of AAA Products, from the date Newco received such purchase order and deliver such Products in accordance with such schedule. AP Biotech shall be promptly notified in writing by Newco of any anticipated delays in delivery of any of the Products.
- (c) In the event a customer of AP Biotech cancels an order for a Product prior to shipment from Newco due to late delivery of that Product by Newco and Newco has been notified of such cancellation in writing, AP Biotech shall not be required to accept delivery of or pay for such Product. However, in the event that the Product has been shipped prior to receiving such written notice, AP Biotech shall be required to accept delivery of and pay for such Product.
- (d) Newco shall print its own catalog and lot numbers (if applicable) and expiration dates (if applicable) conspicuously on outer shipping cartons of all Products, as well as inner shelf packs and inner units of all multiple unit packed Products.
- (e) Newco shall ship dated Products in such time that no less than seventy-five percent (75%) of the manufactured shelf life will be remaining at the time of shipment from

Newco. Newco shall accept return, for full invoice credit plus shipping charges, of any dated Product shipped in breach of the provisions of this Section

(f) Claims for shortage or damage during shipment may only be made to the carrier.

# SECTION 7. MINIMUMS.

For purposes of this Section 7, the term "purchase" and the term "sale," or any similar terms, and any derivations of such terms, shall refer to the actual date of shipment of Products by Newco to AP Biotech or the actual date of shipment of products by Newco to customers other than AP Biotech, as applicable. Notwithstanding anything contained in this Section 7 to the contrary, AP Biotech shall have no rights to distribute, market or sell any Products other than the Current Products and New Products pursuant to the terms of this Agreement.

- (a) During each Year, AP Biotech undertakes to purchase from Newco a sufficient number of Products such that the aggregate purchase prices for such Products shall be at least equal to the following:
- (i) For Year One, \$12,535,000 (the "Year One Minimum"), reduced by (A) \$1,957,521 and (B) the USD value of all sales of Products made by Newco to customers other than AP Biotech during Year One.
- (ii) For Year Two, the Year One Minimum increased by the amount of the price increase for Year Two specified in Section 4(c), but not to exceed four percent (4%) (the "Year Two Minimum") less the USD value of all sales of Products made by Newco to customers other than AP Biotech during Year Two. If the USD value of AP Biotech's purchases of Products from Newco in Year One exceeds the Year One Minimum, then the Year Two Minimum shall be reduced by the amount by which such purchases exceed the Year One Minimum.
- (iii) For Year Three, the Year Two Minimum increased by the amount of the price increase for Year Three specified in Section 4(c), but not to exceed four percent (4%) (the "Year Three Minimum") less the USD value of all sales of Products made by Newco to customers other than AP Biotech during Year Three. If the USD value of AP Biotech's purchases of Products from Newco in Year Two exceeds the Year Two Minimum, then the Year Three Minimum shall be reduced by the amount by which such purchases exceed the Year Two Minimum.
- (b) The purchases of Products by AP Biotech from Newco for each of the Year One Minimum, the Year Two Minimum and the Year Three Minimum shall be distributed throughout the respective Years in the following manner: First Quarter: 23.5%, Second Quarter 24.0%, Third Quarter 25.0% and Fourth Quarter 27.5% (each of which shall hereinafter be referred to as a "Quarterly Minimum"); PROVIDED, HOWEVER, that, (i) with respect to the First Quarter of Year One, the Quarterly Minimum shall be equal to the product

- of (A) the Daily Rate that would otherwise be in effect for the First Quarter of Year One multiplied by (B) the number of days between the Closing Date and the end of the First Quarter and (ii) with respect to the Year Three Tail Period, the Quarterly Minimum shall be equal to the product of (X) the Daily Rate for the First Quarter of Year Three multiplied by (Y) the number of days contained in the Year Three Tail Period. If the USD value of purchases of AP Biotech in any Quarter plus the USD value of purchases by all customers of Newco other than AP Biotech in the same Quarter are less than the Quarterly Minimum for that Quarter then AP Biotech will, within thirty (30) days of the end of said Quarter, either: (i) place orders with Newco for Products in the amount of the shortfall, with shipment of such Products to take place in accordance with the time schedules set forth in Section 6(b) hereof; PROVIDED, HOWEVER, that the Products so ordered by AP Biotech shall be counted solely toward fulfillment of the Quarterly Minimum for the Quarter in which such shortfall occurred and in no event shall the shipment of such ordered Products in any following Quarter be counted toward the fulfillment of the Ouarterly Minimum in said following Quarter, or (ii) pay to Newco, by wire transfer in immediately available USD funds to Newco's account set forth in SCHEDULE 5(d) or such other account as Newco shall specify to AP Biotech in writing, an amount equal to thirty-five percent (35%) of the shortfall. If the USD value of AP Biotech's purchases of Products in any Quarter exceeds the Minimum for that Quarter, then the Quarterly Minimum for the following Quarter shall be reduced by the amount by which such purchases exceed the Quarterly Minimum for that Quarter.
- (c) Newco will provide a report to AP Biotech within ten (10) business days of the end of each month showing the actual sales of all Products made by Newco in that month, the cumulative amount of sales of all Products by Newco for the relevant Quarter through the end of such month, the amount of sales of all Products anticipated to be made by Newco to third parties during that Quarter, and the amount of the estimated additional purchases by AP Biotech needed to reach the Quarterly Minimum for that Quarter.
- (d) If the purchases by AP Biotech of Products from Newco exceed the Year One Minimum in Year One or the Year Two Minimum in Year Two or the Year Three Minimum in Year Three then AP Biotech will receive a credit against future payments to Newco equal to four percent (4%) of the invoice amount for the relevant Year in excess of the relevant Year Minimum.
- (e) Minimums payable by AP Biotech pursuant to Section  $7\,\mathrm{(a)}$  shall be subject to the following:
- (i) The Minimum for any Quarter and for the Year shall be reduced by the purchase price of (A) any order if such order is canceled by a customer prior to shipment from Newco due to late delivery of that Product by Newco and Newco has been notified of such cancellation in writing and (B) any Product that is returned by AP Biotech to Newco as contemplated by Section 6(e) and no replacement order is placed by AP Biotech for such Product.

- (ii) The Minimum for any Quarter and for the Year in which such Quarter occurs shall be reduced by the purchase price of any Products sold by Newco to AP Biotech in that Quarter or Year with respect to which Newco fails to fulfill its obligations under Section 11(b) hereto (A) in the case of AAA Products, within forty-five (45) days of receiving written notice from AP Biotech as provided for in Section 11(b) or (B) in the case of all Products other than AAA Products, within thirty (30) days of receiving written notice from AP Biotech as provided for in Section 11(b) (either of clause (A) or (B) being referred to herein as a "Section 11(b) Failure"). AP Biotech shall, within thirty (30) days following the end of the Quarter in which such Section 11(b) Failure occurs, notify Newco in writing that the Minimum for that Quarter and for the Year in which such Quarter occurs has been reduced in accordance with this Section 7(e)(ii); PROVIDED, that if AP Biotech does not so notify Newco in such thirty (30) day period, AP Biotech shall be deemed to have waived its rights to have such Minimums reduced under this Section 7(e)(ii) with respect to that specific Section 11(b) Failure.
- (iii) In the event that: (A) twenty-five percent (25%) or more of the units shipped of a Product breaches the warranty provided by Newco in Section 11(a) during any three (3) month period, (B) AP Biotech provides written notice to Newco of such breach, which such written notice shall reference this Section 7(e)(ii), and (C) AP Biotech ceases purchasing such Product upon the expiration of said three (3) month period, then the Quarterly Minimums shall be reduced by the purchase price of the amounts of such Products set forth in AP Biotech's forecasts for each Year required by Section 3(a) hereto for up to a maximum of two (2) full Quarters following the end of the Quarter in which such three (3) month period expires, unless prior to the expiration of such two (2) Quarter period, AP Biotech commences placing orders with Newco for such Product which it had previously ceased purchasing, in which case the Quarterly Minimum for the Quarter following the Quarter in which AP Biotech places such orders and for each Quarter thereafter shall be set at the level at which such Quarterly Minimum would have been set under this Section 7 had such a reduction pursuant to this Section 7(e)(iii) not occurred.
- (iv) In the event that the product currently known as "UltroSpec 3000+" (or such other substantially similar name to be determined by Newco) shall not be introduced and available for delivery to AP Biotech under this Agreement within the two hundred seventy (270) day period following the Closing Date, then the Year One Minimum shall be reduced by the amount of \$41,500 for each whole thirty (30) day period for which such availability is delayed beyond such two hundred seventy (270) day period.
- (v) In the event that the "GeneQuant Pro" shall not be introduced and available for delivery to AP Biotech under this Agreement within the ninety (90) day period following the Closing Date, then the Year One Minimum shall be reduced by the amount of \$83,000 for each whole thirty (30) day period for which such availability is delayed beyond such ninety (90) day period.
- (vi) In the event that two (2) additional New Products (other than the "UltroSpec 3000+", which shall be made available in accordance with Section  $8\,(\mathrm{e})$  hereof)

shall not be introduced and available for delivery to AP Biotech under this Agreement by the end of Year Two, then the Year Three Minimum shall be reduced by the amount of \$83,000 for each whole thirty (30) day period for which such availability is delayed beyond the end of Year Two.

- (v) In the event that: (A) an order by AP Biotech for a Product is placed for delivery in any Quarter, and (B) the time of delivery in the order is in accordance with Section 6(b) hereof, and (C) Newco delivers the Product during the subsequent Quarter, AP Biotech shall receive credit against the Minimum for the Quarter in which delivery was to be made pursuant to AP Biotech's order. AP Biotech shall not also receive credit against the Minimum for the Quarter in which delivery was in fact made.
- (f) For purposes of determining whether the Minimum has been met for any particular Quarter or Year, as the case may be, under this Section 7, all foreign exchange conversions to USD shall be performed at the average exchange rate for such Quarter or Year, as the case may be, determined by (i) in the case of any Quarter, calculating the quotient of (A) the sum of the exchange rates for the relevant currency on the last day of each month contained in such Quarter (as published in the Financial Times) divided by (B) three (3), and (ii) in the case of any Year, calculating the quotient of (A) the sum of the exchange rates for the relevant currency on the last day of each month contained in such Year (as published in the Financial Times) divided by (B) twelve (12).

#### SECTION 8. DUTIES OF NEWCO.

- (a) With respect to Current Products and New Products sold by Newco to AP Biotech in accordance with the terms of this Agreement, Newco shall, except as otherwise provided below, at its sole expense and consistent with past practices:
- (i) co-operate with AP Biotech in order to aid and assist AP Biotech in its sales and marketing program concerning the Current Products and New Products; PROVIDED, HOWEVER, that AP Biotech is solely responsible for all costs of marketing and sales efforts except those functions currently provided by Biochrom;
- (ii) provide to AP Biotech such number of demonstration models of the Current Products and New Products and parts therefor as they shall mutually agree, at prices equal to Newco's cost;
- (iii) provide sales, demonstration and support training which AP Biotech and Newco shall jointly deem necessary for AP Biotech's sales and service representatives in individual or other sessions at such location as AP Biotech shall reasonably request and Newco will provide instructors with training materials, schematic drawings for circuit boards, service manuals and products for demonstrations in connection with such training activities;

- (iv) update AP Biotech with all available information reasonably necessary or desirable for the effective marketing of the Current Products and New Products;
- (v) provide reasonable back-up technical support by e-mail, telephone and facsimile to AP Biotech's and its distributors' technical service and sales personnel in connection with the Current Products and New Products;
- (vi) participate as mutually agreed and in accordance with current practice in AP Biotech's promotional efforts by providing relevant copy and photography for advertising, direct mail and/or any other promotional effort in connection with the Current Products and New Products, the manner in which the materials are to be used to be mutually agreed upon by the parties; all costs and expenses for advertising, direct mail and/or any other promotional effort are solely to be borne by AP Biotech; and
- (vii) refer to AP Biotech all leads, inquiries and prospects actually received by Newco concerning potential customers and purchasers of the Current Products and New Products in the Market in the Territory.
- (b) Newco shall make available for purchase all necessary consumables, accessories and spare parts for the operation, repair and proper servicing of each of the Current Products and New Products to AP Biotech and each customer of AP Biotech for a period of seven (7) years following the date of delivery of the relevant Current Products and New Product.
- (c) Newco shall provide with each shipment of Current Products and New Products instruction/operating manuals concerning the Current Products and New Products consistent with current practices.
- (d) Newco shall comply with the terms of Section 11 hereof and shall manufacture and sell Current Products and New Products which conform to quality standards consistent with past practice.
- (e) Newco hereby agrees to make available for sale to AP Biotech before the date two hundred seventy (270) days from the Closing Date a New Product to be known as the "UltroSpec 3000+" (or such other substantially similar name to be determined by Newco). Notwithstanding anything contained herein to the contrary, the parties agree that the sole and exclusive remedy of AP Biotech for a breach by Newco of this Section 8(e) shall be the reduction in the Year One Minimum as provided for in Section 7(e)(iv) hereto.
- (f) Newco hereby agrees to make available for sale to AP Biotech before the date ninety (90) days from the Closing Date the New Product currently under development by Biochrom known as the "GeneQuant Pro." Notwithstanding anything contained herein to the contrary, the parties agree that the sole and exclusive remedy of AP Biotech for a breach by Newco of this Section 8(f) shall be the reduction in the Year One Minimum as provided for in Section 7(e)(v) hereto.

- (g) Newco will use commercially reasonable efforts to make available for sale to AP Biotech at least two additional New Products by the end of Year Two. Newco will consult with AP Biotech on the desired specifications of these New Products. Notwithstanding anything contained herein to the contrary, the parties agree that the sole and exclusive remedy of AP Biotech for a breach by Newco of this Section 8(e) shall be the reduction in the Year Three Minimum as provided for in Section 7(e)(vi) hereto.
- (h) Newco shall comply with all applicable export control laws and regulations relating to Newco's export of Products to AP Biotech pursuant to this Agreement and shall, consistent with past practices, provide information and documentation reasonably necessary or useful to assist AP Biotech in complying with its obligations under applicable export control laws.

### SECTION 9. DUTIES OF AP BIOTECH.

With respect to Current Products and New Products sold by Newco to AP Biotech in accordance with the terms of this Agreement, AP Biotech shall, at its sole expense and in all cases consistent with past practices:

- (a) maintain an adequate number of trained personnel for the performance of its duties hereunder;
- (b) include the Current Products and New Products in the Pharmacia Bio Directory Catalog or any substitute or successor catalog that exists from time to time and include selected Current Products and New Products in a reasonable number, but not less than two per Year of Pharmacia Bio Direct mailings and such other promotional support including, without limitation, showing such Products on AP Biotech's web site and telemarketing in connection with performance of its duties hereunder; PROVIDED, HOWEVER, that AP Biotech may, in its sole discretion, substitute alternative marketing programs of equivalent scope and effect. Any New Product or Product upgrade will be promoted with the level of support customarily given by AP Biotech to the launch of comparable new products and product upgrades respectively but in any event not less than one Pharmacia Bio Direct mailing per New Product or Product upgrade;
- (c) establish and maintain an inventory of the Current Products and New Products and spare parts appropriate to meet the needs of purchasers and end-users of such Products (including prior versions thereof) in the Territory; and
- (d) perform such maintenance, service and repair activities for Current Products and New Products as AP Biotech has customarily performed on-site at its customers' premises (as determined in accordance with past practice).

#### SECTION 10. INSURANCE.

From and after the Closing Date, for so long as this Agreement shall remain in effect and for two (2) years thereafter, Newco shall maintain product liability insurance coverage on an occurrence basis for all occurrences relating to the Products sold by Newco to AP Biotech with limits of liability not less than Two Million GBP ((pound)2,000,000) combined single limit for bodily injury and property damage. AP Biotech shall be named on the products liability policy of Newco as an additional insured. The certificate policy endorsement shall clearly state that "This is primary insurance without recourse to similar insurance maintained by Amersham Pharmacia Biotech AB, if any." Newco shall provide to AP Biotech a certificate evidencing coverage of such policy immediately upon receipt from insurer. The insurer providing such insurance policy may not be changed by Newco and such insurance shall not be materially changed by Newco without at least ninety (90) days' prior written notice to AP Biotech.

## SECTION 11. WARRANTY.

- (a) With respect to Current Products and New Products sold by Newco to AP Biotech under this Agreement, Newco warrants for a period of twelve (12) months from the date of sale of a Current Product or New Product by AP Biotech to a customer, or a period of fifteen (15) months from the date of sale of a Current Product or New Product by Newco to AP Biotech, whichever period expires first (the "Warranty Period"), that the Current Products and New Products will be free of defects in material and/or workmanship, and will conform to the published specifications set forth in literature, packaging, inserts, materials and/or other documentation prepared by Newco. Except as expressly stated in this Section 11(a), Newco makes no representation and gives no warranties, oral or written, express or implied, including without limitation implied warranties as to quality or fitness for a particular purpose regarding or in relation to the Products.
- (b) Newco shall, consistent with past practice, repair or replace all Current Products and New Products sold by Newco to AP Biotech, to the extent such Current Products and New Products breach the provisions of Section 11(a) hereof during the Warranty Period, as follows:
- (i) Newco shall, at its sole expense, and at Newco's option, either (A) repair on-site at the customer's premises all AAA Products for which AP Biotech has notified Newco in writing that the repair required is not of the type that has customarily been performed by AP Biotech (as determined in accordance with past practice) and therefore, AP Biotech is not required to perform such repair under Section 9(d) hereof; PROVIDED that each party shall pay one-half of any reasonable out-of-pocket travel and accommodation expenses associated with such on-site repair by Newco or (B) repair or replace such AAA Products at Newco's premises; and
- (ii) Newco shall, at its sole expense, repair or replace at Newco's premises, all Current Products and New Products (other than AAA Products) sold by Newco to  ${\tt AP}$

Biotech for which AP Biotech has notified Newco in writing that the repair required is not of the type that has customarily been performed by AP Biotech (as determined in accordance with past practice) and therefore, AP Biotech is not required to perform such repair under Section 9(d) hereof.

- (c) If non-customary warranty service (as determined in accordance with past practice) is performed (with respect to Current Products and New Products sold by Newco to AP Biotech) by AP Biotech at Newco's request, Newco shall credit to AP Biotech the cost of parts and labor at Newco's then current rates reasonably incurred in servicing such Current Products and New Products (or prior versions of such Products) owned by end users which fail during the Warranty Period.
- (d) In the event of the failure of a Current Product or New Product sold by Newco to AP Biotech after the Closing Date, or a recall of any of such Current Products or New Products whether by Newco or AP Biotech, in each case with the consent of Newco, or any government agency, Newco shall pay all the costs of a retrieval and/or recall of such Current Products and New Products owned by customers of AP Biotech.
- (e) Newco shall pay all costs for Newco-ordered changes and updates to the Current Products and New Products sold by Newco to AP Biotech in the hands of AP Biotech or any of its customers.
- (f) Newco represents and warrants that the marketing and sales of any New Products will not infringe any patent, copyright, trademark or other similar intellectual property rights enforceable within the Territory.

# SECTION 12. INDEMNIFICATION; LIMITED LIABILITY.

(a) Newco shall defend, indemnify and hold harmless AP Biotech and any officers, directors, agents, shareholders, legal representatives, employees, successors and assigns of AP Biotech (exclusive of any subdistributors not included within the defined term "AP Biotech") from and against any and all third party claims, actions, suits and judgments, and from and against any and all liabilities, losses, damages, costs, charges, attornevs' fees and other expenses of whatever nature and character (collectively "Third Party Damages") arising from or in connection with: (i) the manufacture by Newco of any Current Product or New Product, (ii) any breach by Newco of any of its obligations under this Agreement, or (iii) an allegation by a third party that the Current Products or New Products sold by Newco to AP Biotech in accordance with this Agreement infringe any other party's intellectual property rights (other than rights with respect to the Intellectual Property). Notwithstanding anything contained herein to the contrary, Newco shall not be required to provide indemnification with respect to any Third Party Damages to the extent that they result from the negligence, gross negligence or wilful misconduct of AP Biotech.

- (b) AP Biotech shall defend, indemnify and hold harmless Newco and any officers, directors, agents, shareholders, legal representatives, employees, successors and assigns of Newco from and against any and all Third Party Damages arising from or in connection with: (i) the distribution by AP Biotech of the Current Products or the New Products pursuant to the terms of this Agreement, (ii) any actions or inactions of any subdistributor appointed by AP Biotech under the terms of this Agreement in connection with any Subdistribution Agreement, or (iii) any breach by AP Biotech (or by any subdistributor appointed by AP Biotech under the terms of this Agreement) of any of its obligations under this Agreement. Notwithstanding anything contained herein to the contrary, AP Biotech shall not be required to provide indemnification with respect to any Third Party Damages to the extent that they result from the negligence, gross negligence or wilful misconduct of Newco.
- (c) Except as otherwise provided in Section 12(a) or 12(b) above, neither party shall be liable to the other party (or its affiliates) under this Section 12 with respect to any indirect, incidental, special, punitive or consequential damages, including but not limited to lost revenue or other commercial or economic loss, arising out of or relating to this Agreement.

#### SECTION 13. TRADEMARKS, ETC.

- (a) The trade name "Amersham" and all related and associated logos and trademarks with respect thereto are and shall remain the sole property of Amersham International plc (the "Amersham Name"). The trade name "Pharmacia Biotech" and all related and associated logos and trademarks with respect thereto are and shall remain the sole property of Pharmacia & Upjohn, Inc. (the "Pharmacia Biotech Name" and together with the Amersham Name, the "Intellectual Property").
- (b) Newco has entered into the License Agreements attached hereto as SCHEDULES 13(b)(ii) and 13(b)(ii) with respect to the Intellectual Property.

#### SECTION 14. CONFIDENTIALITY.

Each of Newco and AP Biotech agrees that it shall treat any and all information of a confidential nature relating to the Products or the manufacture, use, marketing or sale thereof, or the business plans or activities of the other party, which is designated as confidential ("Confidential Information") as confidential and shall not disclose any Confidential Information to any third party, other than legal, business and financial advisors who have a need to know, for any purpose whatsoever and not to make use of any such Confidential Information for any purpose other than the performance of its obligations under this Agreement without the prior written consent of the other party; PROVIDED, HOWEVER, that the limitation on disclosure set forth in this Section 14 shall not apply in the case of:

(a) information which, as of the date hereof, is published or otherwise generally available to the public;

- (b) information which after the date hereof becomes available to the public other than through an act or omission of Newco or AP Biotech, as the case may be, which is in violation of the provisions hereof;
- (d) information which is developed by the disclosing party independently of the relationship established by this Agreement; or
- (e) any information which the disclosing party is required to disclose by law (including the regulations of a stock exchange) or court order.

#### SECTION 15. CUSTOMER INFORMATION.

- (a) In consideration of entering into this Agreement, AP Biotech hereby grants to Newco the right to freely use a copy of the Escrowed Customer Information after the effective date of termination of this Agreement pursuant to Section 16 hereof; provided, however, that in the event that, pursuant to Sections 16(a) and 16(f) hereof and the terms of the Escrow Agreement, the Escrowed Customer Information is distributed by the Escrow Agent to Newco while this Agreement is still in effect, Newco shall have the right, prior to the effective date of termination of this Agreement, to contact a sampling of not more than twenty (20) customers of AP Biotech's customers to verify the accuracy of the Customer Information.
- (b) While this Agreement is in effect, Newco shall not directly, and shall not appoint, enter into an agreement with or otherwise assist a third party distributor, marketer, seller or sales representative to, use the Escrowed Customer Information to make sales of Modified Market Products to those customers of AP Biotech listed in the Escrowed Customer Information. Newco shall not be prohibited from making sales of Modified Market Products to a customer listed in the Escrowed Customer Information prior to the effective date of termination of this Agreement if Newco can demonstrate with documentary evidence that it made sales to, promoted the sale of, or quoted prices for, Products to such customer prior to Newco's receiving the Escrowed Customer Information from the Escrow Agent under the terms of this Agreement and the Escrow Agreement.

## SECTION 16. TERM; TERMINATION.

(a) After eighteen (18) months from the Closing Date, either party may terminate this Agreement without cause by providing eighteen (18) months' prior written notice of termination to the other party, which such termination shall be effective upon the expiration of such eighteen (18) month period. Notwithstanding anything contained herein to the contrary, in the event that AP Biotech provides Newco with such a notice of termination, within thirty (30) days following the effective date of such termination, AP Biotech shall deliver to Newco the Customer Information with respect to the period between the last date on which any Semi-

Annual Customer Information was deposited by AP Biotech with the Escrow Agent in accordance with the terms of Section 1A(b) hereof and the effective date of such termination.

- (b) (i) In the event of a material breach: (A) in the case of Newco, of its obligations pursuant to Section 2(a)(i), 4(a)-(d), 6(b), 8(a), 10, 12(a), or 15(b), and (B) in the case of AP Biotech, of its obligations pursuant to Section 3(a), 9, 12(b) or 17, which shall not be remedied within thirty (30) days of written notice of such breach from the non-breaching party (which notice shall specify the obligations under this Agreement that have been breached, including if the breach constitutes a Newco Sale Breach (as defined below)), the Agreement shall terminate effective upon the expiration of such thirty (30) day period.
- (ii) In the event of a breach by AP Biotech of its obligations pursuant to Section 1A(a), Section 1A(b), Section 5 with respect to any invoice or Section 7 with respect to any Quarter or Year, Newco may terminate this Agreement by providing written notice of termination to AP Biotech within thirty (30) days following such breach (which notice shall specify the obligations under this Agreement that have been breached by AP Biotech). The notice of termination shall become effective thirty (30) days after delivery of such notice to AP Biotech (the "Cure Period") unless, within the Cure Period:
- (A) with respect to a breach by AP Biotech of its obligations under Section 5 hereof, AP Biotech pays to Newco, by wire transfer in immediately available funds to Newco's accounts set forth in SCHEDULE 5(d) or such other accounts as Newco shall specify to AP Biotech in writing, (X) the invoice amounts for each invoice with respect to which payment was not made by AP Biotech within the number of days specified in Section 5(a) hereof, plus (Y) the amount of interest accrued on such invoice amounts in accordance with Section 5(c) hereof;
- (B) with respect to a breach by AP Biotech of its obligations under Section 7 hereof, AP Biotech either (X) places orders with Newco for Products in the amount of any shortfall not previously satisfied during the course of the Quarter or Year, with shipment of such Products to take place in accordance with the time schedules set forth in Section 6(b) hereof; PROVIDED, HOWEVER, that the Products so ordered by AP Biotech shall be counted solely toward fulfillment of the Quarterly or Yearly Minimum for the Quarter or Year in which such shortfall occurred and in no event shall the shipment of such ordered Products in any following Quarter or Year be counted toward the fulfillment of the Quarterly or Yearly Minimum in said following Quarter or Year, or (Y) pays to Newco, by wire transfer in immediately available funds to Newco's accounts set forth in SCHEDULE 5(d) or such other accounts as Newco shall specify to AP Biotech in writing, an amount equal to thirty-five percent (35%) of the shortfall; or
- (C) with respect to a breach by AP Biotech of its obligations under Section 1A(a) or Section 1A(b) hereof, AP Biotech (i) executes the Escrow Agreement and/or delivers the Initial Customer Information, as the case may be, in cure of a breach by AP Biotech of its obligations under Section 1A(a) hereof or (ii) delivers the Semi-Annual Customer

Information to the Escrow Agent in cure of a breach by AP Biotech of its obligations under Section 1A(b) hereof.

In the event that AP Biotech fails to cure the breach of its obligations under Section 5, Section 7, Section 1A(a) or Section 1A(b), as provided for in this Section 16(b)(ii) during the Cure Period, then this Agreement shall automatically terminate upon the expiration of the Cure Period. Notwithstanding anything contained herein to the contrary, upon such a termination pursuant to this Section 16(b)(ii), AP Biotech shall, within ten (10) business days following the termination, pay to Newco by wire transfer in immediately available funds to Newco's accounts set forth in SCHEDULE 5(d) or such other accounts as Newco shall specify to AP Biotech in writing, an aggregate amount equal to thirty-five percent (35%) of the Minimums for Year One, Year Two, Year Three and the Year Three Tail Period that would have been in effect under the terms of this Agreement that AP Biotech would otherwise have been required to satisfy pursuant to Section 7 hereof had Newco not so terminated this Agreement (the "Full Termination Minimum Amount"). If the delivery of such notice of termination occurs prior to the establishment of either the Year Two Minimum or the Year Three Minimum in accordance with Section 7 hereto, for purposes of calculating the Full Termination Minimum Amount, the Minimum for each such Year shall be calculated by increasing the previous Year's Minimum by four percent (4%).

- (c) A party shall have the right to terminate this Agreement by written notice to the other party upon the occurrence of an Insolvency Event with respect to the other party.
  - (d) INTENTIONALLY OMITTED.
- (e) (i) In the event that Newco shall have delivered a notice of termination of this Agreement to AP Biotech pursuant to Section 16(a) hereto and, at any time during the period of eighteen (18) months following the effective date of the notice of termination, Newco desires to locate and appoint a new distributor, effective upon the termination of this Agreement, for the Current Products and New Products to the Market in the Territory, AP Biotech shall have a right of first offer with respect to such appointment on the terms set forth in subsection (ii) below.
- (ii) Newco shall notify AP Biotech in writing of its desire to so locate and appoint a new distributor (the "New Distributor Notice") and shall offer AP Biotech a term sheet containing terms substantially similar to the terms Newco is considering offering to such new distributor (the "Term Sheet"). AP Biotech will have thirty (30) days from the date it receives the New Distributor Notice to accept such Term Sheet in writing (the "Acceptance Notice"). If AP Biotech accepts such Term Sheet within such thirty-day period, then the parties shall have thirty (30) days from the date Newco receives the Acceptance Notice to enter into a definitive distribution agreement which incorporates the principal terms of the Term Sheet. In the event that either (i) AP Biotech does not deliver the Acceptance Notice to Newco within thirty (30) days of receiving the New Distributor Notice or (ii) after delivery by AP Biotech of the Acceptance Notice to Newco, the parties do not execute a definitive distribution

agreement within thirty (30) days thereafter, Newco may appoint another distributor on terms that are, in the aggregate, not materially less favorable to Newco than those contained in the Term Sheet.

- (f) (A) Newco shall be permitted to deliver the Letter of Instruction to the Escrow Agent under the following circumstances: (i) in the case of a termination pursuant to either Section 16(a) or Section 16(c) hereof, as of the date upon which the notice of termination is physically delivered by the terminating party to the non-terminating party; and (ii) in the case of a termination pursuant to Section 16(b)(i) or Section 16(b)(ii) hereof, as of the date upon which this Agreement automatically terminates in accordance with the provisions of such Section.
- (B) Newco shall not be permitted to deliver the Letter of Instruction to the Escrow Agent in the event that AP Biotech delivers a notice of termination to Newco under Section 16(b)(i) hereof as a result of (x) a breach by Newco of its obligations under Section 15(b) hereof or (y) prior to the effective date of termination of this Agreement, Newco's making, or appointing a distributor to make, sales of Current Products or New Products to the Market within the Territory in violation of Section 2 hereof (a "Newco Sale Breach").
- (g) The provisions of Sections 10, 12, 14, 16(f), 16(g), 16(h), 17, 19(c) and 19(d) hereof shall survive termination of this Agreement. The provisions of Sections 5, 7(c), 7(d), 8(b), 11, 16(a), 16(b) (i), 16(b) (ii) and 16(e) hereof shall survive termination of this Agreement to the extent that any obligations thereunder remain outstanding.
- (h) Following a termination of this Agreement, Newco agrees to pay to AP Biotech a commission in the amount of five percent (5%) of the actual sale price for each sale of a Product by Newco, or any distributor of Newco, to a customer in the Territory made within six (6) months of termination which was identified to Newco in writing, and evidenced by a copy of a written quotation for sale of a Product by AP Biotech prior to such termination.

### SECTION 17. NON-COMPETITION.

In consideration of transactions to be consummated by Newco in connection with the Acquisition and in consideration of Newco's entering into this Agreement, AP Biotech hereby agrees that it shall not, either solely or jointly with any person or entity, directly or indirectly:

(a) at any time until the later of (x) four (4) years after the Closing Date or (y) the termination or expiration of this Agreement engage in the Territory in the manufacture, distribution or sale of any Current Products or New Products or of any products directly competitive with the Current Products or New Products. Notwithstanding the foregoing, nothing in this Agreement shall prevent AP Biotech from: (i) engaging in the manufacture, distribution or sale of (A) mass spectrometers and related products or instruments in which mass spectrometer technology is utilized, (B) chromatography instruments and related products or instruments in which spectrophotometer technology is utilized or (C) electrophoresis

instruments and related products or instruments in which electrophoresis technology is utilized, including without limitation DNA sequencing instruments; or (ii) subject to the last sentence of this Section 17(a) and receipt by Newco of a written agreement executed by the Subject Company (as hereinafter defined) to be bound by the terms contained in the last sentence of this Section 17(a) (provided that such written agreement shall not be required in the case of a merger between AP Biotech and the Subject Company), acquiring, being acquired or merging (in each case whether by sale of stock, assets or otherwise) with a company that sells spectrophotometers (a "Subject Company"); PROVIDED, HOWEVER, that AP Biotech shall notify Newco that it has entered into such a transaction within thirty (30) days following the consummation of such transaction. In the event that AP Biotech shall enter into an acquisition or merger with a Subject Company as permitted under clause (ii) above, AP Biotech agrees that (A) AP Biotech will continue to distribute the Current Products and New Products as provided for herein, (B) the Escrowed Customer Information shall not be used in connection with the marketing or sale of any products of the Subject Company, (C) the Intellectual Property shall not be used in connection with spectrophotometers manufactured by the Subject Company and (D) the spectrophotometers manufactured by the Subject Company (x) shall not be sold by those persons and entities that constituted the AP Biotech sales force prior to the acquisition or merger and (y) shall not be included in AP Biotech's world wide web site, the Pharmacia BioDirectory (or any successor publication) or the Pharmacia BioDirect mailings (or any successor publication).

- (b) While each of the undertakings contained in Section 17(a) above is considered by the parties to be reasonable, if any such undertaking should be held invalid as an unreasonable restraint of trade or for any other reason but would have been held valid if part of the wording thereof had been deleted or the period thereof reduced or the range of activities or area dealt with thereby reduced in scope, said undertaking shall apply with such modifications as may be necessary to make them valid and effective.
- (c) Each undertaking contained in Section 17(a) above shall be read and construed independently of the other undertakings therein contained so that if one or more should be held to be invalid as an unreasonable restraint of trade or for any other reason whatsoever then the remaining undertakings shall be valid to the extent that they are not held to be so invalid.
- (d) The benefit of the undertakings contained in Section 17(a) above may be assigned in whole or in part by Newco in accordance with the terms of Section 19(e) hereof.

SECTION 18. FORCE MAJEURE.

Neither party shall be subject to any liability to the other party for failure to meet any of its obligations under this Agreement if such failure results from causes or circumstances beyond the reasonable control of the defaulting party, including any act of God, fire, explosion, perils of the sea, flood, drought, war, riot, sabotage, accident, embargo, interruption of or delay in transportation, strike, compliance with any order, direction, request

from any governmental agency or office, other than the obligations of either party under Section 12 hereof. The party which shall be subject to any such event of force majeure shall, promptly upon the occurrence thereof, notify the other party of the occurrence of such event and shall, promptly upon the cessation thereof, notify the other party of such cessation.

SECTION 19. MISCELLANEOUS.

- (a) EFFECTIVENESS OF AGREEMENT. This Agreement is conditioned, and will only become effective, upon the closing of the Acquisition.
- (b) NOTICES. All notices required or authorized by this Agreement to be given by either party to the other shall be in writing and shall be delivered by hand or shall be sent by courier, registered mail (return receipt requested), or facsimile (receipt confirmed) to the following addresses:

IF TO NEWCO, TO:

Biochrom Limited Cambridge Science Park Milton Rd. Cambridge CB4 4FJ England Attention: Barry Brown Facsimile No.: +44 122 342 0238

with a copy to:

Harvard Apparatus, Inc. 80 October Hill Road Holliston, MA 01746 Attention: David Green Facsimile No.: (508) 429-5732

Goodwin, Procter & Hoar LLP Exchange Place Boston, MA 02109 Attention: H. David Henken, P.C. Facsimile No.: (617) 523-1231

Cameron McKenna Mitre House 160 Aldersgate Street London, EC1A 4DD Attention: Guilherme Brafman

Facsimile No.: + 44 171 367 2000

IF TO AP BIOTECH, TO:

Amersham Pharmacia Biotech AB Bjorkgatan 30 SE-751 84 Uppsala Sweden Attention: Ulf Lundberg, Esq. Facsimile No.: + 46 181 65 322

with a copy to:

Cardiff Labs
Forrest Farm Estate
Whitchurch
Cardiff, Wales CF4 7YT
Attention: Andrew Carr
Facsimile No.: + 44 122 252 6440

Curtis, Mallet-Prevost, Colt & Mosle 101 Park Avenue New York, New York 10178 Attention: Eric Gilioli, Esq. Facsimile No.: (212) 697-1559

Any notice sent by registered mail which is not returned to the sender as undelivered shall be deemed to have been given on the tenth business day after being deposited in the mail. Any notice sent by courier shall be deemed to have been given on the date on which such notice was delivered by the courier service. Any notice delivered by hand, or sent by facsimile, shall be deemed to have been given on the date on which such notice was delivered or sent.

## (c) GOVERNING LAW.

This Agreement shall be governed by and construed in accordance with the laws of England and Wales.

- (d) DISPUTE RESOLUTION. All disputes between the parties arising out of the circumstances and relationships contemplated by this Agreement including disputes relating to the validity, construction or interpretation of this Agreement and including disputes relating to pre-contractual representations shall be settled by arbitration as follows:
- (i) Newco and AP Biotech hereby agree to cooperate in good faith to resolve any disputes, claims or controversies that may arise hereunder or with respect to the performance by either party of its obligations as contemplated hereby.
- (ii) In the event that any dispute, claim or controversy shall not be so resolved by the parties between themselves, Newco and AP Biotech agree that any and all disputes, claims or controversies arising out of or relating to this Agreement or a breach thereof, whether grounded in common law or statutory law, shall be finally settled in accordance with the Arbitration Rules of the International Chamber of Commerce in effect on the Closing Date. Save as otherwise expressly provided herein the procedural rules shall be the rules of the High Court in England and Wales and the lex curiae shall be the law of England and Wales.
- (iii) The number of arbitrators shall be three, chosen in accordance with the procedures set out in this Section  $19\,(d)$ . The award of the arbitrators shall be final and binding on the parties.
- (iv) Each party shall appoint one arbitrator. If within (30) days after receipt of the claimant's notification of the appointment of an arbitrator the respondent has not notified the claimant of the arbitrator it appoints, the second arbitrator shall be appointed by the appointing authority.
- (v) The arbitrators thus appointed shall choose a further arbitrator who will act as the presiding arbitrator of the tribunal. If within (30) days after the appointment of arbitrators under (d) (iv) above, they have not agreed upon the choice of the presiding arbitrator, then at the request of any party to the arbitration proceeding the presiding arbitrator shall be appointed by the appointing authority.
- (vi) The Chartered Institute of Arbitrators, London, England shall be the appointing authority.
- (vii) At the request of any party to the arbitration ("requesting party") the arbitrators shall order the other party ("furnishing party") to supply and furnish to the requesting party (the cost of which shall be reimbursed upon demand by the requesting party to the furnishing party) true and complete copies of the Relevant Material and to produce to the arbitral tribunal any or all of the Relevant Material and/or copies thereof as any part or the arbitral tribunal shall require.

- (viii) The procedures leading to the production of Relevant Material under this paragraph shall be determined by the arbitrators, and may include the preparation of lists of Relevant Material for initial evaluation by the requesting party prior to disclosure and/or inspection of Relevant Material by the requesting party prior to supply and furnishing the copies. In making such determination, the arbitrators shall take into account the urgency with which the Relevant Material should be brought before the arbitral tribunal.
- (ix) No party shall use or disclose any Relevant Material obtained under this paragraph for any purpose except in the course of the conduct of the arbitration and (as far as applicable) proceedings before any court, and then only to the extent necessary for the implementation and enforcement of any aware of the arbitrators.
- $\mbox{\ensuremath{(x)}}$  The arbitration, including the making of the award, shall take place in London, U.K.
- $\,$  (xi) All submissions and awards in relation to arbitration hereunder shall be made in English and all arbitration proceedings shall be conducted in English.
- (xii) The failure or refusal of either party to submit to arbitration in accordance with this Section 19(d) shall be deemed a breach of this Agreement. If either party seeks and secures judicial intervention requiring enforcement of this arbitration provision, such party shall be entitled to recover from the other party in such judicial proceeding all costs and expenses, including reasonable attorneys' fees, that it was thereby required to incur.
- (xiii) The procedures specified in this Section 19(d) shall be the sole and exclusive procedures for the resolution of disputes between the parties arising out of or relating to this Agreement; PROVIDED, HOWEVER, that a party, without prejudice to the above procedures, may seek equitable remedies, including without limitation, specific performance, a preliminary injunction or other provisional judicial relief if in its sole judgment such action is necessary to avoid irreparable damage or to preserve the status quo. The parties to this Agreement hereby acknowledge and agree that the failure of AP Biotech to deposit the Initial Customer Information or any Semi-Annual Customer Information with the Escrow Agent in accordance with the delivery requirements of Section 1A(a) and Section 1A(b) hereof, respectively, will cause irreparable damage to Newco and its businesses and that, accordingly, Newco shall be entitled, if the circumstances so require, to seek the equitable remedy of specific performance to force AP Biotech to deliver such Initial Customer Information or Semi-Annual Customer Information.

## (e) ASSIGNABILITY; BINDING EFFECT.

This Agreement shall be binding upon and inure to the benefit of the parties hereto, their successors and permitted assigns. Neither party may assign any of its rights or obligations hereunder except as may be contemplated hereby or except with the prior written consent of the other party; PROVIDED, HOWEVER that (i) AP Biotech shall be entitled to assign its

rights and obligations hereunder without obtaining the prior written consent of Newco to (A) any of its affiliates, or (B) any successor in interest in the event of a merger, a sale of substantially all of its assets, a sale of a majority of its capital stock or a sale of a material portion of its assets (provided that such material portion includes the business and assets of AP Biotech necessary for the performance of this Agreement consistent with past practice) and (ii) Newco shall be entitled to assign its rights and obligations hereunder without obtaining the prior written consent of AP Biotech to (A) any of its affiliates, or (B) any successor in interest in the event of a merger, a sale of substantially all of its assets or a sale of a majority of its capital stock; PROVIDED, HOWEVER, that no assignment by AP Biotech under clause (i)(A) above or by Newco under clause (ii)(A) above shall relieve the assigning party of any of its obligations hereunder. Notwithstanding clause (ii)(B) above, the consent of AP Biotech shall be required for the assignment by Newco of any of its rights or obligations  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ hereunder in the event of a merger with, or a sale of substantially all of its assets or a majority of its capital stock to, any of the companies listed on SCHEDULE 19(e) or any successor in interest thereto.

## (f) ENTIRE AGREEMENT.

This Agreement, including the Schedules referred to herein, is complete, reflects the entire agreement of the parties with respect to its subject matter, and supersedes all previous written or oral negotiations, commitments and writings in connection therewith.

### (g) EXECUTION IN COUNTERPARTS.

This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which shall constitute one (1) and the same document.

#### (h) AMENDMENT.

This Agreement may not be amended except by a writing duly and validly executed by each party hereto.

### (i) SEVERABILITY.

If any provisions of this Agreement shall be held by any arbitral panel or court of competent authority to be void and unenforceable in whole or in part, this Agreement shall continue to be valid and in full force and effect with respect to the other provisions hereof.

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IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the date first above written.

AMERSHAM PHARMACIA BIOTECH AB

By: Signature not legible

Name:

Title: CEO (acting)

BIOCHROM LIMITED

By: /s/ David Green

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Name: David Green Title: President

Schedule 1(a)

## NEW CO PRICING

AMINO ACID ANALYSIS PRICING

Main Instruments:

Item Number	Description	Price at 20/11/98	
80-2107-03 80-2107-04 80-2107-05 80-2107-06 80-2107-07 80-2107-09 80-2107-09 80-2108-18 80-2108-19 80-2108-20 80-2108-20	BIOCHROM 20 SODIUM ECHP 20cm x 4.6mm COLUMN BIOCHROM 20 SODIUM ECHR 20cm x 4.6mm COLUMN BIOCHROM 20 LITHIUM HP 20cm x 4.6mm COLUMN BIOCHROM 20 LITHIUM HR 25cm x 4.6mm COLUMN BIOCHROM 20 SODIUM HP 20cm x 4.6mm COLUMN BIOCHROM 20 SODIUM HP 20cm x 4.6mm COLUMN BIOCHROM 20 SODIUM HR 20cm x 4.6mm COLUMN BIOCHROM 20 SODIUM OXHP 20cm x 4.6mm COLUMN BIOCHROM 20 SODIUM OXHP 20cm x 4.6mm COLUMN S/H BIOCHROM 20 SODIUM OXHR 20cm x 4.6mm COLUMN S/H BIOCHROM 20 LITHIUM HP 20cm x 4.6mm COLUMN S/H BIOCHROM 20 LITHIUM HR 25cm x 4.6mm COLUMN S/H	*** *** *** *** *** *** ***	* * * * * * * * * * * * * * * * * * *
80-2108-22 80-2108-23 80-2108-24 80-2108-83 80-2108-93 Chemicals, C	BIOCHROM 20 SODIUM HP 20cm x 4.6mm COLUMN S/H BIOCHROM 20 SODIUM HR 20cm x 4.6mm COLUMN S/H BIOCHROM 20 POLYAMINE 10cm x 4.6mm COLUMN S/H BIO 20 LITHIUM HP 20cm FLUORESCENCE SPARK/H BIO 20 SODIUM HP 20 cm FLUORESCENCE SPARK/H Chemical Kits, Packed Columns:	*** *** *** ***  Price at 20/11/98	
80-2037-56 80-2037-57 80-2037-62 80-2037-67 80-2037-69 80-2037-71 80-2037-72 80-2037-74 80-2037-79 80-2037-80 80-2037-80 80-2037-90 80-2037-90	SODIUM BORATE BUFFER PH10.0 2L SODIUM HYDROXIDE SOLUTION, 1L CALIBRATION STANDARD PHYSIOLOGICAL FLUID SODIUM CITRATE BUFFER PH2.2, 2L SODIUM CITRATE BUFFER PH3.2, 2L LITHIUM CITRATE BUFFER PH3.55 2L BORATE BUFFER (FLUORIMETRY) 1L ORTHOPHTHALALDEHYDE (OPA), 2G POLYAMINE BUFFER, 2L SODIUM CITRATE BUFFER PH2.65, 2L SODIUM CITRATE BUFFER PH3.35, 2L BORATE/CITRATE BUFFER PH3.6, 2L PROTEIN HYDROLYSATE KIT 4150 PROTEIN HYDROLYSATE KIT BIO20/4151-II/4151	*** *** *** *** *** *** *** *** ***	***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***

80-2037-99	FLUORIMETER REAGENT KIT	* * *	***
60-2038-00	NINHYDRIN REAGENT KIT 4150	***	***
80-2038-04	PHYSIOLOGICAL FLUID KIT 4151	***	***
80-2038-07	NINHYDRIN REAGENT KIT 2L BIO20/4151-II/4151	***	***
80-2038-08	SODIUM CITRATE BUFFER PH4.25, 2L	***	***
80-2038-09	SODIUM CITRATE BUFFER PH6.45, 2L	* * *	***
80-2038-10	LITHIUM CITRATE BUFFER PH2.2, 2L	***	* * *
80-2038-15	LITHIUM CITRATE BUFFER A 2L	***	***
80-2038-16	LITHIUM CITRATE BUFFER B 2L	***	***
80-2038-17	LITHIUM CITRATE BUFFER C 2L	***	***
80-2038-18	LITHIUM CITRATE BUFFER D 2L		
80-2038-19	LITHIUM CITRATE BUFFER E 2L	***	***
80-2038-20	LITHIUM HYDROXIDE SOLUTION 1L	***	***
80-2038-33	ULTROPAC 8 RESIN, LITHIUM, 7.5G	***	***
80-2038-40	ULTROPAC 1 RESIN, SODIUM, 10G	***	***
80-2038-41	ULTROPAC 1 RESIN, LITHIUM, 10G	***	***
80-2038-42	ULTROPAC 8 RESIN, SODIUM, 1G	***	***
80-2038-43	ULTROPAC 8 RESIN, LITHIUM, 1G	***	***
80-2038-45	ULTROPAC 8 RESIN, SODIUM, 6G	***	***
80-2038-46	ULTROPAC 8 RESIN, LITHIUM, 6G	***	***
80-2087-14	PREWASH COLUMN RESIN 2G BIO20/41561-II	***	***
80-2097-18	LITHIUM BUFFER D II FILTERED, 2L	***	***
80-2098-05	PHYSIOLOGICAL FLUID KIT BIO20/4151-II	***	***
80-2089-83	LITHIUM CITRATE BUFFER CII 4151-II	***	***
80-2101-42 80-2104-11	OXIDISED FEEDSTUFF KIT BIO20/4151-II/4151	***	***
	HR LI COLUMN 25X4.6 PEEK	***	***
80-2104-12 80-2104-13	HR LI COLUMN 20X4.6 PEEK LI PREWASH COLUMN 10X4.0 PEEK	***	***
80-2104-13	HR NA COLUMN 20X4.6 PEEK	***	***
80-2104-14	HP NA COLUMN 20X4.6 PEEK	***	***
80-2104-15	NA PREWASH COLUMN 10X4.0 PEEK	***	***
80-2104-16	HR NA EEC COLUMN 20X4.6 PEEK	***	***
80-2104-17	HP NA EEC COLUMN 20X4.6 PEEK	***	***
80-2104-18	POLYAMINE COLUMN 10X4.0 PEEK	***	***
80-2104-19	BIOCHROM 20 RESIN LI 1G	***	***
80-2104-74	BIOCHROM 20 RESIN NA 1G	***	***
80-2104-73	HR LI COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-71	HP LI COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-73	HR NA COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-74	HP NA COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-75	HR NA EEC COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-76	HP NA EEC COLUMN 26X4.6 PEEK ALPHA PLUS SERIES I	***	***
80-2105-77	POLYAMINE COLUMN 10XS4.0 ALPHA PLUS SERIES I	***	***
80-2105-81	HR LI COLUMN 25X4.6 PEEK ALPHA PLUS SERIES II	***	***
80-2105-82	HP LI COLUMN 20X4.6 PEEK ALPHA PLUS SERIES II	***	***
80-2105-83	HR NA COLUMN 20X4.6 PEEK ALPHA PLUS SERIES II	***	***
80-2105-84	HP NA COLUMN 20X4.6 PEEK ALPHA PLUS SERIES II	***	***
80-2105-85	HR NA EEC COLUMN 20X4.6 ALPHA PLUS SERIES II	***	***
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80-2105-86	HP NA EEC COLUMN 20X4.6 ALPHA PLUS SERIES II	* * *	***
80-2105-87	POLYAMINE COLUMN 10X4.0 ALPHA PLUS SERIES II	* * *	***
80-2108-22	ULTROSOLVE 2L	* * *	***
80-2109-23	NINHYDRIN POWDER 20G	* * *	***
80-2109-24	HYDRINDANTIN 1.6G	* * *	***
80-2109-25	NINHYDRIN REAGENT KIT 1L	***	***

# Accessories:

Item Number	Description	Price at 20/11/98	
80-2104-10	2 CHANNEL RECORDER WHITE (KIPP & ZONEN)	***	***
	1 CHROMATOGRAPH 2 DETECT DATA HANDLING SYSTEM	***	* * *
80-2105-26	2 CHROMATOGRAPH 2 DETECT DATA HANDLING SYSTEM		***
80-2105-27	4 CHROMATOGRAPH 2 DETECT DATA HANDLING SYSTEM	* * *	* * *
80-2105-33	UPGRADE 1-2/2-2 EZCHROM	* * *	* * *
80-2105-34	UPGRADE 1-2/4-2 EZCHROM	* * *	* * *
80-2105-35	UPGRADE 1-2/4-4 EZCHROM	* * *	* * *
80-2105-36	UPGRADE 2-2/4-2 EZCHROM	***	* * *
80-2105-37	UPGRADE 2-2/4-4 EZCHROM	***	* * *
80-2105-38	UPGRADE 4-2/4-4 EZCHROM	***	* * *
80-2108-40	EMPTY PEEK COLUMN 25X4.6 U/C	***	* * *
80-2108-41	EMPTY PEEK COLUMN 20X4.6 U/C	***	***
80-2108-42	EMPTY PEEK COLUMN 15X4.6 U/C	* * *	* * *
80-2108-43	EMPTY PEEK COLUMN 10X4.0 U/C	* * *	* * *
80-2108-44	COLUMN HEAT TRANSFER BLOCK 25cm U/C	* * *	* * *
80-2108-45	COLUMN HEAT TRANSFER BLOCK 20cm U/C	***	* * *
80-2108-46	COLUMN HEAT TRANSFER BLOCK 15cm U/C	***	* * *
80-2108-47	COLUMN HEAT TRANSFER BLOCK 10cm U/C	***	* * *
80-2108-52	1 CHROMATOGRAPH 2 DETECT DHS - BCD LICENCE EZCH	***	* * *
80-2108-53	2 CHROMATOGRAPH 2 DETECT DHS - BCD LICENCE EZCH	* * *	***
80-2108-54	4 CHROMATOGRAPH 2 DETECT DHS - BCD LICENCE EZCH	* * *	***
80-2108-57	AUTOSAMPLER UPDATE KIT INC MARATHON WIN 3.1	* * *	***
80-2108-77	EZCHROM SOFTWARE UPDATE TO LATEST VERSION	***	* * *
80-2108-81	AUTOSAMPLER UPDATE KIT MARATHON WIN 3.1	***	* * *
	AUTOSAMPLER UPDATE KIT INC MIDAS WIN 3.1	***	* * *
	AUTOSAMPLER UPDATE KIT EX MIDAS WIN 3.1	***	***
	EZCHROM BOARD C/W CABLES	***	* * *
80-2109-48	EU EZCHROM PCB	***	* * *
80-2109-73	AUTOSAMPLER UPDATE KIT INC MIDAS WIN 95	***	* * *
	AUTOSAMPLER UPDATE KIT EX MIDAS WIN 95	***	* * *
	EZCHROM 1xX TO ELITE 1 UPGRADE	***	* * *
80-2110-41	EZCHROM 2xX TO ELITE 2 UPGRADE	***	***

Consumanies and Spare Parts

Item Number	Description	Price at 20/11/98	
80-2016-26	SYRINGE ADAPTOR	***	***
	COMPRESSION SPRING	***	***
80-2016-45	TAPERED FLOW CELL END CAP	***	***
80-2016-46	FLOW CELL END CAP	***	***
80-2016-47	FLOWCELL SEAL (PKT OF 2)	***	***
80-2016-49	METAL SCREEN (PKT OF 10)	* * *	***
80-2016-53	FLOWCELL LOCATING STUD	* * *	***
80-2016-58	BEAM SPLITTER MOUNTING BRACKET	***	* * *
80-2016-62	SAMPLE LOADING VALVE ASSEMBLY	***	***
80-2016-68	CAPSULE WHEEL MK II	***	* * *
80-2016-77	3 WAY MANIFOLD	***	***
80-2016-85	REACTION COIL TUBING	* * *	* * *
80-2016-96	COVER	* * *	* * *
80-2017-16	FLOWCELL BODY	***	***
80-2017-26	MAGNETIC CATCH SPACER	***	***
80-2017-37	NITROGEN RESTRICTOR	* * *	* * *
80-2017-50	PIPE	***	***
80-2017-56	COLUMN CLAMP SCREW	***	***
80-2017-59	COLUMN PELTIER CLAMP BLOCK	* * *	***
80-2017-71	4 WAY MANIFOLD	* * *	***
80-2017-72	COLUMN PELTIER RETAINER	***	* * *
80-2017-75	CAPSULE SHUTE CLIP	***	* * *
80-2017-78	CHUTE SLIDER BUSH	***	***
80-2018-00	PELTIER CONNECTION PILLAR 4151	***	***
80-2018-29	COIL FLUSHCAP	***	***
80-2018-30	COIL FLUSH BODY	***	* * *
80-2018-31	COIL FLUSH PISTON	***	* * *
80-2018-32	RETAINER PLATE	***	***
80-2018-33	VALVE ADAPTOR FOR N-R VALE	***	***
80-2018-35	BELLOFRAM MODIFIED	***	***
80-2018-40	NITROGEN MANIFOLD - 4151 MKII	* * *	***
80-2018-43	COLUMN ADAPTOR	* * *	***
80-2018-88	THERMISTOR CLAMP	* * *	***
80-2018-89	RAM GUIDE - 4151	***	***
80-2018-92	CAPSULE BUFFER	***	***
80-2019-23	CAPOFLEX LOOSE WOOL 500G	***	***
80-2018-25	ROLL PIPE TAPE	***	***
80-2019-41	PIN SPRING - PKT 10	***	***
80-2019-80	MAGNETIC CATCH	***	***
20-2019-92	O RING (PKT OF 5)	***	***
80-2019-94	O RING VITON (PKT OF 10)	***	***
80-2019-95	MOTOR DRIVE COUPLING	***	***

80-2019-99	CARD EJECTOR	***	* * *
80-2020-20	NITROGEN NON-RETURN VALVE	***	***
80-2020-23	BUFFER SOLENOID VALVE	***	***
80-2020-24	FAN	***	***
80-2020-25	PRESSURE REGULATOR	* * *	* * *
80-2020-26	SOLENOID VALVE	***	***
80-2020-27	PRESSURE SWITCH 5150/100	***	***
80-2020-28	SOLENOID VALVE	***	***
80-2020-30	FAN	***	***
80-2020-31	ADAPTOR TAP	***	***
80-2020-33	PISTON SEAL REPLACEMENT KIT	* * *	* * *
80-2020-34	LENS F25	* * *	* * *
80-2020-38	FLOWCELL WINDOW (PKT OF 2)	* * *	* * *
80-2020-39	BAND PASS FILTER 440	* * *	* * *
80-2020-40	FILTER 570NM	* * *	* * *
80-2020-64	FLANGING TOOL 220V	* * *	* * *
80-2020-65	FLANGING TOOL 110V	* * *	* * *
80-2020-70	INSERTION TOOL	***	***
80-2020-74	3 WAY WHITEY VALVE	***	***
80-2020-75	CHROMATRONIX COUPLING	***	***
80-2020-76	PTFE TUBE 3.1X1.5MM (PACK 3M)	* * *	* * *
80-2020-77	PTFE TUBING 0.7 X 2 MM (PACK 3M)	***	* * *
80-2020-78	CHROMATRONIX END FITTING	***	***
80-2020-79	SWAGELOK NUT 1/16"	***	***
80-2020-82	MALE CONNECTOR 1/16"	***	***
80-2020-84	SWAGELOK FRONT FERRULE 1/4"	***	***
80-2020-85	SWAGELOK BACK FERRULE 1/4"	***	***
80-2020-87	REDUCING UNION 1/16" TO 1/8"	***	***
80-2020-88	TEFLON TUBING 1.8X0.5MM (PACK 3M)	***	***
80-2020-89	PTFE TUBING 1.6X0.3MM (PACK 3M)	***	***
80-2020-91	ELBOW TAPER CONNECTOR	***	***
80-2020-92	TAPER CONNECTOR	***	***
80-2020-95	TUBING BLUE 5 X 3 MM (PACK 3M)	***	* * *
80-2020-96	TUBING RED 5 X 3 MM (PACK 3M)	***	* * *
80-2020-98	CONNECTOR	***	***
80-2021-00	BEV-A-LINE TUBING (3m)	***	* * *
80-2021-03	CROSS TUBE FITTING	***	* * *
80-2021-04	TEE 1410-5/3-1/8"	***	* * *
80-2021-08	LUER ADAPTOR (PACK 2)	***	* * *
80-2021-12	PIPETTE TIPS (PKT 1000)	***	* * *
80-2021-19	GILSON PIPETTE 10-100UL	***	* * *
80-2021-21	100MM GLASS BOTTLE	***	* * *
80-2022-23	POT CET 75W2K20-TURN	***	***
80-2022-50	TRANSDUCER	***	***
80-2022-51	CARTRIDGE HEATER 24V	***	***
80-2022-56	70 DEGREE THERMAL SAFETY SWITCH	***	***
80-2022-57	RELAY 3 POLE	***	***
80-2022-59	CAPSULE WHEEL MOTOR 24V	***	***

80-2022-64	DIODE	***	***
80-2022-97	MICROSWITCH - CAPSULE AND RAM	* * *	***
80-2023-01	SWITCH TO DISPLAY PRESSURE	***	***
	CAPSULE SET NOS. 1-25, 80UL	***	***
80-2023-51	CAPSULE SET NOS. 25-50, 80UL	***	***
80-2023-53	CAPSULE SET NOS. 1-25, 160UL	***	***
80-8023-55	FLOWCELL WASHER (PACK 2)	***	***
80-8023-56	DETECTOR PCB	***	***
80-2023-57	CAPSULE WHEEL ALIGNMENT PCB	***	***
80-2023-58	CAPSULE SET NOS 25-50, 160UL	***	***
80-2023-63	UNIVERSAL CONTROL PCB	* * *	***
80-2023-64	SIGNAL LEAD	* * *	* * *
80-2023-65	TRANSFORMER	* * *	* * *
80-2023-67	PHOTOMETER SYSTEM PCB	* * *	* * *
80-2023-80	SILICONE OIL 100ML	* * *	* * *
80-2023-82	INTEGRATOR CABLE	* * *	* * *
80-2023-91	COLUMN THERMISTOR ASSY	* * *	* * *
80-2023-93	REACTION COIL TERMISTOR	* * *	* * *
80-2023-95	PELTIER DRIVE PCB	* * *	* * *
80-2024-05	AUTOLOADER ASSY - 4151	* * *	* * *
80-2024-08	FLOWMETER ASSEMBLY	* * *	* * *
80-2024-14	COIL FLUSH ASSEMBLY	* * *	***
80-2024-27	RS 232 CONNECTION CABLE FOR PRINTER TO 4151	* * *	***
80-2024-37	INTEGRATOR INTERFACE KIT	* * *	***
80-2024-47	MOTHERBOARD PCB - 4151	* * *	***
80-2024-56	PRESSURE REGULATOR 4150/4151	* * *	***
80-2024-68	REGULATOR LAS 3905	* * *	* * *
80-2026-11	METERING VALVE	* * *	***
80-2026-29	TEE NO 2070-1/8"-1/8"	* * *	***
80-2026-40	100 ML GLASS BOTTLE	* * *	* * *
80-2026-73	IC LM311N	* * *	* * *
80-2026-76	IC OPTO ISOLATOR	* * *	***
80-2028-47	PRESSURE GAUGE 0.1 BAR	* * *	***
80-2030-22	BEAM SPLITTER MIRROR	* * *	***
80-2030-45	CAPSULE FOLLOWER	* * *	***
80-2030-58	LOOM PCB ASSY	* * *	***
80-2032-77	PRESSURE RELIEF VALVE 10 BAR	* * *	***
80-2041-35	BOTTLE TOP	* * *	***
80-2041-96	BUFFER BOTTLE SCREW CAP	* * *	***
80-2050-20	"O" RNG 008 E.P.	* * *	***
80-2051-93	ARMATURE	* * *	***
80-2052-09	PRESSURE SWITCH	* * *	***
80-2052-10	SEAL KIT FOR CHECK VALVE	***	* * *
80-2052-12	CHECK VALVE	* * *	***
80-2052-13	OUTLET CHECK VALVE HOUSING	* * *	* * *
80-2052-14	INLET CHECK VALVE HOUSING	* * *	* * *
80-2052-15	PUMP HEAD AND CHECK VALVE	***	***
80-2052-20	24VDC COIL	***	***

80-2052-22	PLUNGER SEAL KIT	* * *	***
80-2052-23	PUMP SEAL	* * *	***
80-2052-24	SEAL SUPPORT	***	***
80-2052-28	VERNIER KNOB	* * *	***
80-2052-29	COMPRESSION SPRING	* * *	***
80-2052-32	PRESSURE RING	* * *	***
80-2053-80	M3 ALLEN KEY	* * *	***
80-2053-81	FLANGING TOOL TIP MEDIUM	* * *	***
80-2053-85	SWAGELOK CONNECTOR 1/8"	* * *	***
80-2053-97	SWAGELOK NUT 1/8:	* * *	***
80-2054-21	PTFE TUBING 1.5X0.6MM (PACK 3M)	* * *	***
80-2054-23	PTFE TUBING 1.8X0.8MM	* * *	***
80-2054-65	NIN COLUMN COUPLING	* * *	***
80-2054-68	PTFE INSERT FOR REACTION COL	* * *	***
80-2054-88	FILTER DISC 9 MM (PKT OF 10)	* * *	***
80-2054-97	TUBING NATURAL 5 X 3 MM	* * *	***
80-2054-98	TUBING 1/16 X 3/16 (PKT OF 3M)	* * *	***
80-2062-19	MOTOR BRUSH - PAIR	* * *	***
80-2063-37	IC CA3140E	* * *	***
80-2063-88	SWITCH - TWO POSITION	* * *	***
80-2064-82	SHORTING PLUG 12.7 MM	* * *	***
80-2065-74	PTFE FILTER 6 MM (PKT OF 10)	***	***
80-2066-88	RAM PROBE PIPE ASSY	***	***
80-2066-94	FILER 440 NM	* * *	***
80-2066-95	FILTER ASSY 570 NM	* * *	***
80-2067-20	PIPE MIXING TEE 4480	* * *	***
80-2067-21	PIPE BACK PRESSURE VALVE 4480	* * *	***
80-2067-40	DOUBLE EURO-EXTENDER CARD	* * *	***
80-2067-42	PRESSURE IND/ABSORB SWITCH	* * *	***
80-2067-78	NITROGEN INLET LINE	* * *	***
80-2067-81	REACTION COIL ASSY	* * *	***
80-2067-84	REACTION COIL INDICATOR LED	* * *	***
80-2068-06	PRESSURE RELIEF VALVE	***	***
80-2069-49	CONTROL EPROM IC 102-4151	***	***
80-2069-55	COIL FLUSH VALVE SPARES	* * *	***
80-2069-58	PIPE KIT	* * *	***
80-2069-60	COILED TUBE ASSY	* * *	***
80-2069-89	MOD KIT - FLOWMETER 4151	* * *	***
80-2070-09	TRANSDUCER ASSY 1000 OSI 320MM	* * *	***
80-2070-11	TRANSDUCER ASSY 1000 PSI	* * *	***
80-2070-13	PRESSURE TRANSDUCER 1000 PSI	* * *	***
80-2070-14	PRESSURE TRANSDUCER 2000 PSI	* * *	***
80-2070-15	PRESSURE TRANSDUCER 1000 PSI	***	***
80-2070-16	PRESSURE TRANSDUCER 1000 PSI	***	***
80-2070-17	TRANSDUCER ASSEMBLY 2000 PSI	***	***
80-2070-18	TRANSDUCER ASSEMBLY 1000 PSI	***	***
80-2070-19	PRESSURE TRANSDUCER	***	***
80-2071-20	SERVICE KIT FOR 4151	***	***

80-2072-47	NIN BOTTLE ADAPTOR	***	***
80-2072-77	PISTON ASSEMBLY	***	***
80-2073-94	SWAGELOK FRONT FERRULE 1/16"	***	***
80-2073-95	SWAGELOK BACK FERRULE 1/16"	***	***
80-2074-95	PELTIER ELEMENT	***	***
80-2074-96	RELAY 24V DPCO	***	***
80-2075-04	9 WAY PLUG	***	***
80-2075-12	SMALL COUPLING SCREW	***	***
80-2075-53	440NM BEAM SPLITTER ASSEMBLY	***	***
80-2084-29	TUBE NUT & FERRULE KIT 1/8"	***	***
80-2084-30	TUBE NUT & FERRULE KIT 1/16"	***	***
80-2086-65	2ND INTERFACE PCB - 4151 MK II	***	***
80-2086-89	PROGRAMMER ASSEMBLY - 4151 MK II	***	***
80-2086-90	MODIFIED FRIDGE ASSY - 4151 MK II	***	***
80-2086-93	PUMP ASSEMBLY 4151 MK II	***	***
80-2086-96	COLUMN DOOR ASSEMBLY - 4151 MK II	***	***
80-2086-97	AC OUTPUT PCB - 4151 REPLACES 80-2023-89	***	***
80-2087-00	METER PANEL ASSEMBLY - 4151 MK II	***	***
80-2087-01	BUFFER METER ASSY - 4151 MK II	***	***
80-2087-03	PROBE ASSY - 4151 MK II	***	***
80-2087-04	AUTOLOADER ASSY - 4151 MK II	***	***
80-2087-27	FERRULE 1/16" 4151 MK II	***	***
80-2087-28	COMPRESSION SCREW - 4151 MK II	***	***
80-2087-29	BUFFER BOTTLE TOP	***	***
80-2087-30	ROTOR SEAL -4151 MK II	***	***
80-2079-31	TEFZEL TUBING (PACK 2M) 4151 MK II	***	***
80-2087-39	DRIP TRAY CLIP 4151 MK II	***	***
80-2087-55	NOZZLE - 4151 MK II	***	***
80-2087-62	A LOADER VALVE + ACTUATOR MK II	***	***
80-2087-65	FLOWMETER 1ML 4151 MK II	***	***
80-2087-71	PUMP PRIMING VALVE-4151 MK II	***	***
80-2088-00	THERMAL FUSE - 4151 & 4151 MK II	***	***
80-2088-12	REACTION COIL MOD KIT	***	***
80-2088-63	BUBBLE TRAP TOP	***	***
80-2089-00	E.U. SECOND INTERFACE PCP (40 00 4978/80202433)	***	***
80-2089-01	E.U. AC OUTPUT PCB (40 00 2853/80202369)	***	***
80-2089-02	E.U. UNIVERSAL CONTROL PCB (40 00 2832/80202363)	***	***
80-2089-03	E.U. PHOTOMETER PCB (40 00 2847/80202367)	***	***
80-2089-75	AUTOLOADER ASSEMBLY - 4151	***	***
80-2097-32	NIN BOTTLE TOP	***	***
80-2099-28	4151 MK II EPROMIC 102 VERSION 5.3	***	***
80-2099-30	4151 MK II EPROMIC 103 VERSION 5.3	***	***
80-2099-31	4151 MK II EPROMIC 104 VERSION 5.3	***	***
80-2099-32	4151 MK II EPROMIC 106 VERSION 5.3	***	***
80-2100-52	TOOL KIE BIOCHROM 1	***	***
80-2100-53	COLUMN CLAMP ASSEMBLY	***	***
80-2101-43	SAMPLE LOADING VALVE REPLACEMENT	***	***
80-2101-44	PREWASH COLUMN REPLACEMENT LITHIUM	***	***

80-2101-45	PREWASH COLUMN REPLACEMENT SODIUM	***	***
80-2101-59	MODIFIED MOTOR AUTOLOADER	***	***
80-2101-61	E.U. 2ND I/F PCB 4151 II	***	***
80-2101-62	E.U. A/C O/P PCB 4161 II	***	***
80-2102-05	4151 FRIDGE THERMOSTAT	***	***
80-2102-17	FRIDGE DRIP TRAY KIT	* * *	***
80-2102-18	LOOM PCB DRIP GUARD	***	***
80-2103-11	NAVIGATOR SOFTWARE KIT	***	***
80-2103-12	NAVIGATOR UNIVERSAL CONTROL PCB	***	***
80-2103-80	SIGNAL & SOR CABLE FOR AAA DATA HANDLING SYSTEM	* * *	***
80-2103-81	SIGNAL & SOR CABLE HFLC DATA HANDLING SYSTEM	* * *	***
80-2104-23	PROBE ASSEMBLY	***	***
80-2104-24	FLOWCELL ASSEMBLY	***	***
80-2104-25	PRESSURE RELIEF VALVE ASSEMBLY PHOTOMETER	***	***
80-2104-26	PEEK UNION	***	***
80-2104-27	DURAN BOTTLE (NIN) 2000ml	* * *	***
80-2104-28	MANUAL INSTRUCTION BIO20 IDENT INC S/W WIN 3.1	* * *	***
80-2104-29	CAPSULE SET OF 5	***	***
80-2104-30	COLUMN PACKING RESERVIOR	***	***
80-2104-31	MODIFIED FINGERTIGHT FITTING	***	***
80-2104-32	AC OUTPUT PCB ASSEMBLY	***	***
80-2104-33	MOTHERBOARD PCB ASSEMBLY	***	***
80-2104-35	COLUMN HEAT TRANSFER BLOCK 25cm	***	***
80-2104-36	COLUMN HEAT TRANSFER BLOCK 16cm	***	***
80-2104-38	COLUMN HEAT TRANSFER BLOCK 20cm	***	***
80-2104-39	MODIFIED FRIDGE 240V	***	***
80-2104-42	MODIFIED BOTTLE CAP	***	
80-2104-43	PROBE AND FERRULE KIT	* * *	***
80-2104-44	FLOWCELL WINDOW KIT		
80-2104-45	FINGERTIGHT PEEK FITTING PACK OF 5	***	***
80-2104-46	DOUBLE FERRULE PEEK PACK OF 2	***	***
80-2104-47	TEE PEEK HIGH PRESSURE	***	***
80-2104-48	PEEK COLUMN FRIT (PKT 6)	***	***
80-2104-49	PEEK TUBING 1/16"X 5mm 6 METRE LENGTH		***
80-2104-50	PEEK TUBING 1/16"X 0.5mm 6 METRE LENGTH	* * *	***
80-2104-51	TEFLON PACKING SEAL PACK OF 10	* * *	***
80-2104-52	1/16 FLANGELESS FITTING KIT (PACK OF 5)	***	***
80-2104-53	1/8" FLANGELESS FITTING KIT (PACK OF 5)	***	***
80-2104-62	AUTOLOADER VALVE	***	***
80-2104-64	SYRINGELESS FILTER UNIT 0.45UM PKT 10	***	***
80-2104-69	CAPSULE CHUTE WINDOW	***	***
80-2104-70 80-2104-80	BIQ 20 EPROM 1C127 V1.1	***	***
	NINHYDRIN FILER CARTRIDGE	***	***
80-2104-82	BUFFER PUMP FILTER	***	***
80-2104-84	1 YEAR SPARES KIT BIO 20	***	***
80-2104-85	2 YEAR SPARES KIT BIO 20	***	***
80-2104-86	BUFFER FILTER CARTRIDGE	***	***
80-2104-87	TACHOMETER INTERFACE PCB ASSEMBLY	^ ^ ^	^ ^ *

80-2104-88	TRANSDUCER PCB ASSEMBLY	***	***
80-2104-89	SERVICE MANUAL BIO 20	***	***
80-2104-93	EPROM IC127V1.2 4152 PL	***	***
80-2105-00	PEEK CONE UPDATE KIT FOR ALPHA PLUS	***	***
80-2105-01	PEEK COLUMN UPDATE KIT FOR ALPHA PLUS	***	***
80-2105-28	AUTOSAMPLER VIAL READER EZCHROM	***	***
80-2105-29	BINARY PUMP CNTRL SINGLE EZCHROM	***	***
80-2105-30	BINARY PUMP CNTRL MULT EZCHROM	***	***
80-2105-32	OPERATOR MANUAL EZCHROM	***	***
80-2105-46	SIGNAL CABLE ASSY AAA-EZCHROM	***	***
80-2105-53	TEFZEL TUBING (PACK 5M)	***	***
80-2105-58	PRESSURE REGULATORY KIT 0-10 BAR	***	***
80-2105-66	FERRULE 1/4" PTFE	***	***
80-2105-67	EZCHROM REPROCESSING S/W DONGLE SOFTWARE & M	***	***
80-2105-70	BURETTE ASSY	***	***
80-2106-41	REFURBISHED AUTOLOADER VALVE WET END	***	***
80-2106-59	E.U. ALPHA DETECTOR PCB ONLY SENT FROM SWEDEN	***	***
80-2106-72	EU. 4151-2 NAVIGATOR PCB ONLY SENT FROM SWEDEN	***	***
80-2106-73	E.U. BIO20 A/C O/P PCB ONLY SENT FROM SWEDEN	***	
80-2107-15	CAPSULE SHUTE UPDATE KIT	***	***
80-2107-20	BIOCHROM 20 SHORTFORM INSTRUCTIONS A/LOADER	***	
80-2107-56	PEEK COLUMN END FITTING	***	***
80-2107-57	TUNGSTEN LAMP FOR AAA	***	***
80-2107-96	CAPSULE SHUTE (PLASTIC)	***	***
80-2107-97	COIL FLUSH NON-RETURN VALVES - REPLACEMENT KIT	***	***
80-2107-99	EPROM V2 O (4152 S/H) IC127	***	***
80-2108-30	COLUMN PACKING RESERVIOR UPCHURCH		***
80-2108-32	COIL FLUSH ASSY	***	***
80-2108-33	COIL FLUSH DIAPHRAGM X2		
80-2108-34	SOLENOID VALVE SINGLE AUTOLOADER	* * *	***
80-2108-35	SOLENOID VALVE DOUBLE AUTOLOADER	***	***
80-2108-36	ANTI SURGE THERMISTOR KIT	***	***
80-2108-37	EPROM V1.0 (4152) IC2 CAPSULE IDENT	***	***
80-2108-39	EPROM V3.0 (4152) IC127		***
80-2108-48	PHARMACIA COLUMN COUPLER	* * *	***
80-2108-49	COLUMN END FITTING C/W 2 MICRON FRIT (6 PACK)	***	***
80-2108-50	PACKING SEAL U/C PACK OF 10		
80-2108-51	CAPSULE IDENT PCB	***	***
80-2108-55	CAPSULE HOLDER	***	***
80-2108-56	CAPSULE IDENT UPDATE KIT		***
80-2108-65	COIL FLUSH NON RETURN VALVE	***	***
80-2108-66	E.U. OPTO HOLDER ASSY		
80-2108-73	BUFFER PUMP ASSEMBLY	***	***
80-2108-74	NINHYDRIN PUMP ASSEMBLY	***	***
80-2108-75	UNIVERSAL CONTROL PCB BIOCHROM 20	***	***
80-2108-84	BIO 20 PELTIER DRIVE PCB	***	***
80-2108-85	TEE ASSY LOW PRESSURE	***	***
80-2108-86	CROSS ASSY LOW PRESSURE	***	***

80-2108-87	FLANGELESS NUT TOOL	***	***
80-2108-90	NIN PRESS RELIEF VALVE	***	***
80-2108-98	LOW PRESSURE MANIFOLD UPDATE KIT	***	***
80-2108-99	SET OF SEALED PELTIER ELEMENTS	* * *	***
80-2109-16	TACHOMETER INTERFACE PCB ASSY BIOCHROM 20	* * *	***
80-2109-17	PUMP MOTOR INC PCB ALPHA PLUS & BIOCHROM 20	* * *	***
80-2109-18	PUMP MOTOR BIOCHROM 20	* * *	***
80-2109-21	BUFFER PUMP FILTER ALPHA PLUS	* * *	***
80-2109-27	COIL FLUSH NITROGEN SOLENOID VALVE	* * *	***
80-2109-28	CALIBRATION CAPSULE SET	***	***
80-2109-30	BIOCHROM 20 SHORTFORM INSTRUCTIONS A/S WIN 3.1	***	***
80-2109-31	MANUAL INSTRUCTION BIO20 S/H INC S/W WIN 3.1	* * *	***
80-2109-32	AUTOLOADER RAM NITROGEN SOLENOID VALVE	* * *	***
80-2109-52	BUFFER PUMP HEAD AND CHECK VALVES ASSY	* * *	***
80-2109-53	AUTOSAMPLER S/W UPDATE KIT	* * *	***
80-2109-75	MANUAL INSTRUCTION BIO20 A/L INC S/W FOR WIN 95	***	***
80-2109-76	MANUAL INSTRUCTION BIO20 A/S INC S/W FOR WIN 95	***	***
80-2109-89	LINK ARM ASSY - PUMP	***	***
80-2109-90	PISTON FOLLOWER ASSY - PUMP	***	***
80-2109-91	1YR SPARES KIT BIO20 A/S	***	***
80-2109-92	2YR SPARES KIT BIO20 A/S	***	***
80-2109-93	SAMPLE NEEDLE MIDAS	* * *	***
80-2110-10	REFURBISHED PUMP MECHANICAL ASSY	* * *	***
80-2110-22	BUFFER PUMP HEAD WITHOUT FITTINGS	* * *	***
80-2110-23	NIN PUMP HEAD WITHOUT FITTINGS	***	***
80-2110-24	CAPSULE SET D01-D50 FOR CAPSULE IDENT. SYSTEM	* * *	***

RDP transfer prices - Blochrom Spectrophotometers, 1998 and 1999 Schedule 1(b)

		RDP EUR/INT. 1998	RDP EUR./INT 1999 (Newco)
Part Number	Description (Main instruments)	Transfer Price GBP	Transfer Price GBP
80-2088-64	Novaspec II	***	* * *
80-2103-98 80-2105-98 8021-0-98	GeneQuant GeneQuant II GeneQuant pro	*** *** ***	* * * * * * * * *
80-2109-10 80-2198-00	Ultrospec 1000 Ultrospec 1000E	* * * * * *	* * * * * *
80-2106-00 80-2106-20 80-2108-00	Ultrospec 2000 Ultrospec 3000 Ultrospec 4000	*** *** ***	*** *** ***
		RDP EUR/INT. 1998	RDP EUR./INT 1999 (Newco)
Part Number	Description (Accessories, Spares and Consumables)	Transfer Price GBP	Transfer Price GBP
Product Line	4001.cells		
80-2106-85 80-2004-53	SET OF CELL SPACERS DISPCUVETTE, UV AND VIS METHACRYLATE	* * *	* * *
	(PKT 100)	* * *	***
80-2080-60	10MM FLOWCELL AUTOFILL II/III/PLUS/4060	***	***
80-2001-97	CASE FOR 6" 10MM CELLS	***	***
80-2002-50	10MM TDS FLOWCELL AND MOUNT	* * *	***
80-2002-51	1MM PATHLENGTH TDS FLOWCELL	***	***
80-2002-54	1MM CELL TYPE O UV SILICA	* * *	***
80-2002-57 80-2002-58	5MM CELL TYPE O UV SILICA	***	***
80-2002-58	10MM CELL TYPE O UV SILICA 50MM CELL TYPE O UV SILICA	***	***
80-2002-63	10MM CELL TYPE O UV SILICA	***	***
80-2002-70	10MM CELL TYPE 4 UV SILICA	***	***
80-2002-77	10MM CELL TYPE 5 UV SILICA	***	***
80-2002-95	10MM CELL TYPE 8 UV SILICA	***	* * *
80-2002-99	10MM CELL TYPE 9 UV SILICA	* * *	***

80-2003-05	10MM CELL TYPE 10 UV SILICA	* * *	***
80-2003-09	10MM CELL TYPE 11 UV SILICA	* * *	***
80-2003-12	100MM CELL TYPE 12 UV SILICA	***	***
80-2003-13	40MM FUNNEL FLOWCELL	***	***
80-2003-14	50MM FUNNEL FLOWCELL	***	***
80-2003-15	1MM STANDARD CELL - TDS	***	***
80-2003-83	1MM CELL TYPE O GLASS	***	***
80-2003-85	5MM CELL TYPE O GLASS	***	***
80-2003-87	10MM CELL TYPE O GLASS	***	***
80-2003-93	50MM CELL TYPE O GLASS	***	***
80-2003-98	10MM CELL TYPE I GLASS	* * *	***
80-2004-15	10MM CELL TYPE 4 GLASS	* * *	***
80-2004-41	10MM CELL TYPE 10 GLASS	* * *	***
80-2004-45	10MM CELL TYPE 11 GLASS	* * *	***
80-2004-49	TALL SERIES RECTANGULAR CELL	* * *	***
80-2004-50	TEST TUBE GLASS 12MM PACK OF 10	* * *	***
80-2004-51	TEST TUBE GLASS 24MM PACK OF 10	* * *	***
80-2076-38	10MM SQ MICRO I UV SILICA CELL	* * *	***
80-2079-60	FUNNEL FLOWCELL NOVA SPEC II	* * *	***
80-2099-89	2 MTCHD CELL STD REC. LID UVS 10MMP	* * *	***
80-2099-91	6 MTCHD CELL STD REC LID UVS 10MMP	* * *	***
80-2099-97	6 MTCHD CELL STD REC LID GLS 10MMP	* * *	***
80-2100-13	2 MTCHD CELL S/MICRO LID UVS 10MMP	* * *	***
80-2100-15	6 MTCHD CELL S/MICRO LID UVS 10MMP	* * *	***
80-2100-22	2 MTCHD CELL S/MICRO STP UVS 10MMP	* * *	***
80-2100-25	2 MTCHD CELL MICRO LID UVS 10MM PL	* * *	***
80-2100-27	6 MTCHD CELL MICRO LID UVS 10MM PL	* * *	***
80-2103-68	ULTRA MICRO VOLUME CEL		
	(5-7 UL WORKING VOLUME)	* * *	***
80-2103-69	MICRO VOLUME CELL (70 UL WORKING VOLUME)	* * *	***
80-2104-66	HELIX CAPILLARY CELL -		
	100 QUARTZ CAPILLARIES	* * *	***
80-2104-67	SPARE QUARTZ CAPILLARIES (100)	* * *	***
80-3004-65	10MM STANDARD CELL TDS	* * *	***
80-2004-67	1MM TDS FLOWCELL AND MOUNT	* * *	***
80-2108-12	TDS FLOWCELL 10MM P/L	* * *	***
80-2108-13	TDS FLOWCELL 1MM P/L	* * *	***
Product line,	4010, accessories		
80-2109-01	TEMPERATURE CONTROLLER	* * *	***
80-2109-02	SERIAL INTERFACE ADAPOR LEAD	* * *	***
80-2109-03	CHART RECORDER LEAD	* * *	***
80-2109-04	2 POSITION MANUAL CELL CHANGER	* * *	***
80-2109-05	50MM PATHLENGTH CELL HOLDER	***	***
80-2109-06	WATER HEATED CELL HOLDER U100	***	***
80-2109-08	FITTING KIT FOR EXTERNAL SAMPLE DELIVERY	***	***
80-2109-09	SPARE SINGLE CELL HOLDER	* * *	***

		iono.	
80-2109-13	DUST COVER	* * *	***
80-2109-33	TEST TUBE HOLDER U1000	***	***
80-2109-07	ELECTRICALLY HEATED CELL HOLDER U1000	***	***
80-2109-12	USER MANUAL FOR ULTROSPEC 1000	***	***
80-2109-34		***	***
80-2109-45	DEMONSTRATION KIT USER MANUAL	***	***
80-2108-63	BASIC UV/VIS SPECTRO BOOKLET	***	***
80-2108-72	UV/VISIBLEWALL POSTER	***	***
	.,,		
80-2109-11	DEUTERIUM LAMP ASSY 4010	***	***
Product line,	4010, spares		
80-2109-36	POWER SUPPLY ASSY U1000	***	***
80-2109-37	MAIN PCB ASSY U1000	***	***
80-2109-38	PHOTOMETER PCB ASSY 4010	***	***
80-2109-39	LAMP-SELECT MOTOR 4010	***	***
80-2109-40	FILTER MOTOR ASSY 4010	***	***
80-2109-41	FILTER QUADRANT 4010	***	***
80-2109-44	FAN 4010 SERIES	***	***
80-2109-42	KEY BD/DISPLAY ASSY U1000	***	***
80-2108-67	ULTROSPEC 1000 SERVICE MANUAL	***	***
80-2109-51	EPROM VI-4 (4010) IC102	***	***
80-2109-46	CONTROLLER IC3 V1.0 (4020)	***	***
Product line	4040. Novaspec 11. Accessories		
80-2001-10	TEST TUBE COVER (100MM) NOVASPECT II	***	***
80-2103-70	NOVASPEC II USER MANUAL (PHARMACIA)	***	***
80-2103-70	NOVASPEC II USEK MANUAL (FRAKMACIA) NOVASPEC FUNNEL F/CELL COVER ASSEMBLY	***	***
80-2104-03	5MM CELL HOLDER FOR NOVASPEC II	***	***
80-2103-19	JMM CELL HOLDER FOR NOVASIEC II		
	NOVACCAN COPTWARE FOR WINDOWS		***
	NOVASCAN SOFTWARE FOR WINDOWS	* * *	***
80-2001-11	SPECTRAL LIGHT PIPE NOVASPEC I	***	***
80-2001-11 80-2077-57	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II	* * * * * * * * *	* * * * * * * * *
80-2001-11 80-2077-57 80-2078-89	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II	* * * * * * * * * * * * * * * * * * *	* * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II	***  ***  ***  ***	* * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II	***  ***  ***  ***  ***	* * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A	***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II	***  ***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A	***  ***  ***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-205-94 80-2103-16	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I	***  ***  ***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-2005-94 80-2103-16 Product line	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I RS 232C LEAD, SPECTRO TO EPSON P40 PRINTER 4040. Novaspec II. Spares	*** *** *** *** *** *** ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-2005-94 80-2103-16 Product line 80-2107-26	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I RS 232C LEAD, SPECTRO TO EPSON P40 PRINTER 4040. Novaspec II. Spares FUSE KIT NOVASPEC II	*** *** *** *** *** *** ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-2005-94 80-2103-16 Product line 80-2107-26 80-2075-02	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I RS 232C LEAD, SPECTRO TO EPSON P40 PRINTER 4040. Novaspec II. Spares FUSE KIT NOVASPEC II CONNECTOR 25 WAY D TYPE FEMALE SOCKET	***  ***  ***  ***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-2005-94 80-2103-16 Product line 80-2107-26 80-2075-02 80-2077-48	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I RS 232C LEAD, SPECTRO TO EPSON P40 PRINTER  4040. Novaspec II. Spares FUSE KIT NOVASPEC II CONNECTOR 25 WAY D TYPE FEMALE SOCKET GRATING ASSY.	*** *** *** *** ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *
80-2001-11 80-2077-57 80-2078-89 80-2079-61 80-3089-80 80-2094-88 80-2095-03 80-2005-94 80-2103-16 Product line 80-2107-26 80-2075-02 80-2077-48 80-2077-51	SPECTRAL LIGHT PIPE NOVASPEC I MULTI-SIZE SAMPLE HOLDER NOVASPEC II SPECTRAL LIGHT PIPE NOVASPEC II 10MM FUNNEL FLOWCELL VENTURI-NOVASPEC II 16MM TEST TUBE HOLDER NOVASPEC II FUNNEL FLOWCELL HOLDER S/A WATER HEATED CELL HOLDER NOVASPEC II TEST TUBE/CUVETTE HOLDER NOVASPEC I RS 232C LEAD, SPECTRO TO EPSON P40 PRINTER 4040. Novaspec II. Spares FUSE KIT NOVASPEC II CONNECTOR 25 WAY D TYPE FEMALE SOCKET	***  ***  ***  ***  ***  ***  ***  ***	* * * * * * * * * * * * * * * * * * *

80-2077-56	MOUNTING BLOCK SUB ASSY 4040	* * *	***
80-2077-68	PHOTOMETER PCB	***	***
80-2077-71	FILTER WHEEL MOTOR S/A 4040	***	***
80-2077-73	4040 GRATING MOTOR ASSEMBLY	***	***
80-2077-82	LAMPHOLDER MOUNTING BLOCK-4040	* * *	***
80-2078-03	FILTER 10 DIA 1 THK	* * *	***
80-2078-04	FILTER 10 DIA 1 THK	* * *	***
80-2078-23	FUSE CARRIER (DOUBLE)	* * *	***
80-2078-70	4040 LAMP HOLDER	* * *	***
80-2086-52	SPINDLE	* * *	***
80-2086-53	SPRING - 4040	***	***
80-2099-96	4040 + DIA MEMBRANE KEYBOARD	***	***
80-2099-27	SAMPLE COVER S/A	***	***
80-2101-32	DISPLAY WINDOW 4040	***	***
80-2101-57	CONTROL EPROM V1.2 DIA PL	***	***
80-2104-54	COLLIMATING MIRROR	***	***
80-2107-34	MAIN PCB 4040 (CE)	***	***
80-2107-34	TRANSFORMER 4040 (CE)	***	***
80-2107-36	· ·	***	***
80-2107-36	SEIKO DPU-414 SERIAL PRINTER	* * *	***
00-2100-79	SEIRO DPU-414 SERIAL PRINTER		
00 0060 00	TG 01741 0001	***	***
80-2063-23	IC SN74LSOON	^ ^ ^	* * * *
00 0000 50	CELL CERTING OF THE MOVINGERS TO	***	***
80-2080-53	CELL SPRING CLIP NOVASPEC II	***	***
80-2086-68	SERVICE MANUAL - 4040		
80-2088-93	E.U. (40004563/80200597)	***	***
80-2088-94	E.U. (40007042/80207768)	* * *	***
80-2106-40	NOVASPEC CLINICAL EPROM V1.0 (4040)	* * *	***
80-3107-98	EPROM V2.0 (4040) IC 100	* * *	***
Product line	4050, Ultrospec II/III, accessories		
80-2084-58	RS232C SERIAL INTERFACE LEAD -		
	SPECTROPHOTOMETER	* * *	***
80-2100-98	SERIAL TO DIN PRINTER LEAD	* * *	***
80-2015-09	CORROSIVE FUME TRAP FOR FUNNEL FLOWCELL	* * *	***
80-2071-87	EPSON-IBM PARALLEL INTERFACE LEAD	* * *	***
80-2099-67	SIX POSN CELL CHANGER ULTROSPEC III	* * *	***
80-2099-71	TURRET THUMB SCREW (ULTROSPEC III)	* * *	***
80-2001-84	HPLC CELL HOLDER AND FLOWCELL	* * *	***
80-3001-85	CYLINDRICAL CELL HOLDER	***	***
80-2001-86	10MM SINGLE CELL HOLDER	***	***
80-2001-87	50MM SINGLE CELL HOLDER	***	***
80-2001-89	ACCESSORY BASE PLATE	* * *	***
80-2001-90	WATER HEATED SINGLE CELL HOLDER	* * *	***
80-2002-03	FOUR CELL HOLDER LONG PATHLENGTH	***	***
80-2102-13	TUBE RESTRAINER ASSEMBLY WATER		
	HTD CELL CHANGER	***	***

80-2103-46	ULTROSPEC III MANUAL A5	* * *	***
80-2103-18	ELECTRICAL VACUUM PUMP ACCESSORY KIT	* * *	***
80-2105-47	RS232CI/F CABLE M/F 25 INST TO 9 COMP	***	***
80-2007-13	TDS 8 POSITION, 1MM 6 FLOWCELL, 2 STOPPERED		***
80-2007-16	TDS 8 POSITION 10MM 6 FLOWCELL, 2 STOPPERED		***
80-2010-14	6 POSITION WATER HEATED TURRET	***	***
80-2070-57	TDS 8 POSITION 1MM 8 FLOWCELLS	***	***
80-2070-60	TDS 8 POSITION 10MM 8 FLOWCELLS	***	***
80-2076-34	MICROVOLUME CELL HOLDER	***	***
80-2091-86	25MM TEST TUBE HOLDER	***	***
80-2091-88	J TOPHY TEST TODE HODDER	***	***
80-2091-61	VENTORE LOWING LEON CORE, LOUIS	***	***
80-2093-74	100 DOFTWARE 3.5 DIDC	***	***
80-2100-88	APPLICATIONS SOFTWARE MS WINDOWS		
	Olinobile III	***	***
80-2103-88	ULTRA MICROVOLUME (SUL) CELL HOLDER	***	***
80-2100-58	DEUTERIUM LAMP AND MOUNT ASSEMBLY,		
00 0100 70	VERSION 2	***	* * *
80-2102-70	FLOWCELL AND TUBING KIT AUTOFILL III/SIPPER	***	***
80-2102-71	TOME TODING KIT ACTOFFED TITY STITEK	***	***
80-2007-06	TUBING KIT (TDS)	***	***
Droduct line	4050 III+rospos II/III sparos		
Product line	4050, Ultrospec II/III, spares		
80-2000-64	INTERCONNECTION LEAD	***	***
80-2005-85	LAMP HOLDER - 4040/4040	***	***
80-2022-94	TUNGSTEN LAMP 20W 12V	***	***
80-2062-93	REFLECTIVE OPTOSWITCH	***	***
	NUT M2 (PKT 10)	***	***
80-2000-65	INTERCONNECTION LEAD AUX	***	***
	LIGHT EMITTING DIODE	***	***
	VOLTAGE SELECTOR	***	***
		***	***
80-2075-55	EPROM - 4051 V3.2 SUPPORT TIL END OF 2001	***	***
80-2075-56	PROGRAM EPROM 4052 V3.2 SUPPORT TIL END		
	OF 2001	***	***
80-2075-57	CONTROL EPROM IC23 4037 SUPPORT TIL END		
	OF 2001	***	***
80-2075-59	EPROM IC23 V.6.2 4057 SUPPORT TIL END		
	OF 2001	* * *	***
80-2099-65	EPROM IC3 4070 II/III V3 SUPPORT TIL END		
	OF 2001	* * *	***
80-2007-39	TDS PUMP CONTROL CABLE ASSEMBLY	* * *	***
80-2068-56	SET OF N/D CALIBRATION FILTERS	* * *	***
80-2069-63	CELL TURRET UPDATE KIT SUPPORT TIL EN		
	OF 2001	* * *	* * *
80-2098-54	TOP COVER ASSY - SPARES AUTOFILL III	* * *	* * *
80-2098-99	SERVICE MANUAL - 4050 ULTROSPEC III	***	***
80-2108-94	EPROM V2.0 (4058)	***	***

OF THE OMITTE	D INFORMATION HAVE BEEN INDICATED WITH ASTER	KISKS.	
Product line	4054. Ultrospec Plus, accessories		
80-2087-82	9-16MM TEST TUBE HOLDER ULTROSPEC PLUS	***	***
	AUTOSAMPLER INTERFACE KIT (4054)	* * *	***
80-2010-76	AUTOFIL PLUS	* * *	***
Product line	4054, Ultrospec Plus, spares		
80-3105-11	EPROM V2.5 (4054) CIII SUPPORT TIL END		
** *-**	OF 2001	* * *	***
80-2086-67	SERVICE MANUAL - 4054	* * *	***
80-2107-49	SEIKO PRINTER (4054) REPLACED BY		
	80-2108-79	* * *	***
80-2108-95	EPROM (ICI 110) V2.6 4054 SUPPORT TO END		
	OF 2001	* * *	***
Product line	4060, Biochrom 4060, accessories		
80-2103-46	MULTIPURPOSE CELL HOLDER	***	***
80-2103-47	SIPPER ACCESSORY	***	***
80-2103-48	FELTIER HTD CELL HOLDER SINGLE	***	***
80-2103-49	SINGLE CELL HOLDER WATER HEATED	***	***
80-2103-50	MICROVOLUME CELL HOLDER	***	***
80-2103-51 80-2103-52	SEVEN CELL CHANGER SEVEN CELL CHANGER (WM) WATER HEATED	***	***
80-2103-52	SEVEN CELL CHANGER BASE PLATE	***	***
	HPLC FLOWCELL/HOLDER	* * *	***
80-2103-82	ACCESSORY BASEPLATE	* * *	***
80-2105-41	CELL COMPARTMENT COVER FOR BIOCHROM 4060	* * *	***
80-2105-52	7 POSITION FELTIER CELL CHANGER	* * *	***
80-2105-94	TM PROGRAMMABLE FELTIER CELL HOLDER		
	AND SOFTWARE	* * *	***
80-2106-58	BIOCHROM 4060 USER MANUAL	* * *	***
80-2103-29	DEUTERIUM LAMP & COLLAR	* * *	***
Product line	4060, Boichrom 4060, spares		
	-		
80-2103-20	GRATING MOTOR S/A	* * *	***
80-2103-22	LAMP SELECT MIRROR ASSY	* * *	***
80-2103-23	CONTROL MOTOR ASSY LAMP SELECT		
	& DARK FLAG	* * *	***
80-2103-24	TUNGSTEN LAMP SOCKET	***	***
80-2103-25	F/W AND MOTOR ASSY	***	***
80-2103-26	FILTER WHEEL MOTOR	***	***
80-2103-28	PHOTOMULTIPLIER TUBE	***	***
80-2103-30	PMT CONTROL PCB ASSY	***	***
80-2103-32	POWER SUPPLY PCB ASSY	* * *	***

80-2103-33

80-2103-36 80-2103-40 80-2103-42 TRANSFORMER ASSY

RING SNAP FAN ASSY TENSATOR SPRING \*\*\*

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80-2103-43 F	POWER-ON INDICATOR ASSY	* * *	***
	TUBING RESTRAINER 4060 WATER HTD		
00 2101 00 1	CELL CHANGER	***	***
80-2107-23 N	MAIN PCB (4060) VER 2	***	***
	BIOCHROM 4060 SERVICE MANUAL	***	***
80-2103-83 E	FILTER FLAG & MOTOR ASSY	***	***
80-2103-84 E	FILTER FLAG ASSY	***	***
80-2105-57 E	BIOCHROM 4060 DUST COVER	***	***
80-2106-67 E	EPROM V1.4 (4060) IC404	***	***
	21R011 VI.1 (1000) 10100	***	***
	EPROM V2.00 4060 IC404	***	***
80-2107-25 E	EPROM V2.00 4060 IC405	* * *	***
Product line 40	080 / 4081. GeneQuant and GeneQuant ii, spa	res and accessori	es
80-2105-20	GENEQUANT USER MANUAL	* * *	***
80-2105-56 T	DEUTERIUM LAMP GENEQUANT	***	***
	4080 PRINTER CABLE	* * *	***
80-2104-57 N	MAIN PCB 4080	***	***
80-2104-59	OPTICAL UNIT 4080	***	***
80-2104-60 T	TOP COVER ASSEMBLY 4080	***	***
80-2104-61 E	EPROM 4080 V1.5	***	***
80-2105-18	GENEQUANT DUST COVER	***	***
	11 KOII V2.2 (1000P) 10100	***	***
	SIDE AND SINING CHIL FON GENEGOANI	* * *	***
	KEYBOARD - GENEQUANT	***	***
	DISPLAY - GENEQUANT	* * *	***
80-2107-37	FRANSFORMER/REAR PANEL 4080 (CE)	* * *	***
00 0107 22	400 BILBER OFF (MERELOO) FOR CENTRALINE	***	***
80-2107-33 N	MOQ FILTER SET (MEDELCO) FOR GENEQUANT	* * *	* * *
80-2105-58 C	CENEQUANT II USER MANUAL	* * *	***
00-2103-30	SENEQUANT II USER MANUAL		
80-2106-27 F	KEYBOARD - GENEQUANT II	***	***
80-2106-32 E	EPROM 4081 v 1.0	***	***
Product line 40	090, Ultrospec 2000, accessories		
	TEMPERATURE CONTROL UNIT	***	***
	SWIFT-SCAN SOFTWARE	***	***
	SWIFT-KIN SOFTWARE		
	SWIFT-TIME SOFTWARE	***	***
	SWIFT-QUANT SOFTWARE SWIFT-MULTI SOFTWARE	***	***
	SWIFT-MOLTI SOFTWARE SWIFT-FRAC SOFTWARE	***	***
	RS232C1/F CABLE M/F 9 INST TO 9 COMP	***	***
00 Z10J-91 F	NOZUZUT/I CADDE PI/I 9 INOT 10 9 COMP		

80-2106-01	4 POSITION CELL HOLDER	* * *	***
80-2106-02	6 POSITION CELL CHANGER	* * *	***
80-2106-03	6 POSITION WATER HEATED CELL CHANGER	* * *	***
80-2106-04	6 POSITION FELTIER HEATED CELL CHANGER	* * *	***
80-2106-05	10MM SINGLE CELL HOLDER	* * *	***
80-2106-06	ULTRAMICROVOLUME CELL HOLDER, 2 AXIS		
	ADJUST	* * *	***
80-2106-07	50MM SINGLE CELL HOLDER	***	***
80-2106-08	WATER HEATED SINGLE CELL HOLDER	* * *	***
80-2106-09	MICROVOLUME CELL HOLDER (50 UL)	* * *	***
80-2106-10	CYLINDRICAL CELL HOLDER	* * *	***
80-2106-11	HPLC CELL HOLDER AND FLOWCELL	***	***
80-2106-12	10MM ELECTRICALLY HEATED CELL HOLDER	***	***
80-2106-13	10MM FELTIER HEATED CELL HOLDER	* * *	***
80-2106-14	TM PROGRAMMABLE HEATED CELL HOLDER		
	AND SOFTWARE	* * *	***
80-2106-15	SIPPER	* * *	***
80-2106-19	DUST COVER 4090	* * *	***
80-2106-24	ULTROSPEC 2000 USER MANUAL	* * *	***
80-2106-26	SWIFT-LAB SOFTWARE	* * *	***
80-2106-31	SWIFT-METHOD SOFTWARE	* * *	***
80-2106-51	RS232C UF CABLE M/F 9 INST TO 25 COMP	* * *	***
80-2106-59	SWIFT SOFTWARE USER MANUAL	* * *	***
80-2106-60	PRINTER STAND	* * *	***
80-2104-96	AUTOSAMPLER INTERFACE KIT		
	(2000/3000/4000)	* * *	***
80-2105-95	CHART RECORDER CABLE	* * *	***
80-2106-78	ACCESSORIES USER MANUAL	* * *	***
80-2107-14	100MM SINGLE CELL HOLDER	* * *	***
80-2108-10	SINGLE CELL HOLDER - USE WITH MAGNETIC		
	STIRRER	* * *	***
80-2108-64	SPRECROPHOTOMETRY DEMO KIT	* * *	***
80-2055-13	TUBING KIT FOR FLOWCELL	* * *	***
80-2106-16	TUNGSTEN HALOGEN LAMP 4090	* * *	***
80-2106-17	DEUTERIUM LAMP ASSY, 4090	* * *	***
80-2080-74	PUMP TUBING (PKT OF 6)	* * *	***
80-2106-99	VITON PUMP TUBING	* * *	***
80-2107-68	CELL HOLDER ASSEMBLY	***	***
80-2107-69	CELL CORNER SPRING	* * *	***
80-2107-70	CELL PACKERS (8) FOR 1MM PATHLENGTH CELLS	* * *	***
80-2107-71	CELL PACKERS (8) FOR 5MM PATHLENGTH CELLS	* * *	***

Product line 4090, Ultrospec 2000. spares

80-2106-18	BASEPLATE PLUG FOR 4090 SAMPLE		
	COMPARTMENT	***	***
80-2106-44	PHOTOMETER PCT ASSY 4090	***	***
80-2106-45	LAMP-SELECT MOTOR ASSY	* * *	***
80-2106-46	FILTER MOTOR ASSY	* * *	***
80-2106-48	CELL MOTOR ASSY 4090	***	***
80-2106-49	DISPLAY MODULE 4090	* * *	***
80-2106-50	KEYBOARD & WINDOW 4090	***	***
80-2106-61	CELL CHANGER THUMB SCREW	* * *	***
80-2106-80	CONCAVE DIFFRACTION GRATING	* * *	***
80-2107-38	MAIN PCB ASSY 4090 (CE)	* * *	***
80-2107-39	POWER SUPPLY ASSY 4090 (CE)	* * *	***
80-2107-47	FAN 4090 SERIES	* * *	***
80-2107-48	FILTER QUADRANT ASSY	* * *	***
80-2108-62	LAMP SELECT MIRROR 4090	***	***
80-2009-85	F/CELL-TUBING SPARE DIT ULTROSPEC 2000		
	SERIES	* * *	***
80-2106-52	UL TROSPEC 2000 SERVICE MANUAL	***	***
80-2106-83	HEIGHT GAUGE	* * *	***
80-2107-00	EPROM V3.0 (ICI1) TEMP CONTROL UNIT	* * *	***
80-2107-18	CALIBRATION SOFTWARE AND FILTER-ACCRED		
	ENG ONLY	* * *	***
80-2107-21	SLAVE MICROCONTROLLER V1.70 4090/4094		
	IC127	* * *	***
80-2107-66	EPROM V1.90 400IC105 VAN DER HEYDEN	* * *	***
80-2108-60	LAMP ACCESS COVER 4090	* * *	***
80-2108-61	CELL COMPARTMENT ACCESS COVER (4090) ELSA CD-ROM V1.00 (ULTROSPEC 2000 ONLY)	* * *	***
80-2108-96	ELSA CD-ROM V1.00 (ULTROSPEC 2000 ONLY)	* * *	***
80-2109-59	EPROM V2.2 4090 ICI05 PL	***	***
Product line	4090, Ultrospec 3000, spares		
80-2106-25	ULTROSPEC 3000 USER MANUAL	* * *	***
80-2106-55	VGA DRIVER PCB 4094	* * *	***
80-2106-56	VGA DISPLAY 4094	* * *	* * *
80-2106-57	KEYBOARD & WINDOW 4094	***	***
80-2106-53	ULTROSPEC 3000 SERVICE MANUAL	* * *	* * *
	EPROM V2.1 (4094)	* * *	* * *
Product line	4096, Ultrospec 4000, accessories		
80-2108-31	SWIFT II - MTHOD S/W	***	* * *
80-2100-50	QUAL/PERE VERIF LOGBOOK FOR PHB		
	UV/VIS SPECTROS	***	***
	- ,		
80-2107-68	SWIFT II - SCAN S/W	***	***
80-2107-89	The state of the s	***	***

80-2107-90	SWIFT II - TIME S/W	* * *	***
80-2107-91	SWIFT II - QUANT S/W	* * *	***
80-2107-92	SWIFT II - MULTI S/W	* * *	***
80-2107-93	SWIFT II - FRAC S/W	* * *	***
80-2108-01	8 POSITION CELL CHANGER	* * *	***
80-2108-04	ULTROSPEC 4000 USER MANUAL	* * *	***
80-2108-25	SWIFT II USER MANUAL	* * *	***
80-2108-26	SWIFT II - LAB S/W	* * *	***
80-2108-08	CELL HOLDER ASSY 4096	***	***
Product line	4096, Ultrospec 4000, spares		
80-2108-05	ULTROSPEC 4000 SERVICE MANUAL	* * *	***
80-2108-09	PHOTOMETER PCG ASSY 4096	* * *	***
80-2108-28	SLAVE MICROCONTROLLER V1.1 4096 ICI27	* * *	***
80-2109-49	EPROM V2.0 4096 ICI05	* * *	* * *

Schedule 3(a)(i)

FORECAST

## BIOCHROM

	March	April	May	June	Q2	July	August	September	Q3	October	November	December	Q4
Nevaspec	21				72								
Ultrospec 1000E	7.5				15.5								
Ultrospec 1080	23				43								
Ultrospec 2080	63				280								
Ultrospec 3900	44				148								
Ultrospec 4900	22				21.5								
Genequant	11				35								
Genequant II	33				123								
Genequantpro													
B20 (autoloader)	21				22								
B20 (autosampler)	22				22								

# Schedule 3(b)

## All costs in SEK

## APBiotech site costs

	иa	

179730-021 295643-B21 336356-B2 306592-B2 313616-B21 PILA 8460 Sony 17"	ProLiant 3000R P450-512K Smart 3200 Array Controller 4.3GB Wide-Ultra SCSI-3 10K RPS-aggregate ProLiant 3000/5500 256MB 5DRAM DIMM EtherExpress PRO/100 for PCI Museum GDM-200PST TCO-95	Price 38894 Price 17150 Price 5024 x 3 Price 5613 Price 10954 Price 664 x 2 Price 5910
	Subtotal	89.000

## Software

Microsoft NT server 4.0	Price 3000
FW Encrypton center 4.0	Price 141.500
Areserve Back-up software	Price 3640
Subtotal	153.140

# Installation

Upnet personal	36cm a 1000	kr	Price 36000
Subtotal			36.000

# Biochrom site costs

Cisco 2500 Routers	Price 25000 x 2	
Subtotal	50.000	
Grand Total	328.140	

Schedule 5(d)

Barclays Bank PLC Barclays Business Centre Cambridge, Chesterton Branch 28 Chesterton Road, Cambridge Sort Code 201735 Account #\*\*\*

Account Name: Biochrom Limited

### Schedule 19E

Perkin-Elmer Corporation and any entity that, directly or indirectly, is wholly-owned, or has not less than a majority of its voting power or economic interests owned, by Perkin-Elmer Corporation

Bio-Rad Laboratories, Inc. and any entity that, directly or indirectly, is wholly-owned, or has not less than a majority of its voting power or economic interests owned, by Bio-Rad Laboratories, Inc.

### ESCROW AGREEMENT

Exhibit 1A(a)

This ESCROW AGREEMENT is entered into as of \_\_\_\_\_\_\_, 1999 by and among Biochrom Limited, a limited liability company incorporated under the laws of England ("Newco"), Amersham Pharmacia Biotech AB, a company incorporated in Sweden ("AP Biotech") and Boston Safe Deposit & Trust Company (the "Escrow Agent").

WHEREAS, pursuant to a certain Asset Purchase Agreement, dated as of March 2, 1999 (the "Purchase Agreement"), by and among Newco, Pharmacia Biotech (Biochrom) Limited ("Seller"), Harvard Apparatus, Inc. and Pharmacia & Upjohn, Inc., Newco has agreed to purchase the business and substantially all of the assets of Seller (the "Asset Purchase");

WHEREAS, as a condition to the consummation of the Asset Purchase, Newco and AP Biotech have entered into a certain Distribution Agreement, dated as of March 2, 1999 (the "Distribution Agreement"), pursuant to which Newco has agreed to sell to AP Biotech, and AP Biotech has agreed to distribute, certain of Newco's products;

WHEREAS, pursuant to Section 1A(a) of the Distribution Agreement, on the date hereof, AP Biotech will deposit with the Escrow Agent certain information regarding its customers for the three (3) years prior to the date of the closing of the Asset Purchase (the "Closing Date"), such information to be both in paper form and contained on a floppy diskette (the "Initial Customer Information"), to be held as hereinafter provided;

WHEREAS, pursuant to Section 1A(b) of the Distribution Agreement, within thirty (30) days following June 30 and December 31 of each calendar year during the term of the Distribution Agreement, AP Biotech shall deposit with the Escrow Agent certain information regarding its customers with respect to the six month period immediately preceding each of such dates (or in the case of June 30, 1999, with respect to the period between the Closing Date and June 30, 1999), such information to be both in paper form and contained on a floppy diskette (the "Semi- Annual Customer Information" and, together with the Initial Customer Information, the "Customer Information"), with the Escrow Agent, to be held as hereinafter provided:

 $\hbox{\tt WHEREAS, the Escrow Agent is willing to establish an escrow account on the terms and subject to the conditions hereinafter set forth.}$ 

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, the parties hereto agree as follows:

1. APPOINTMENT OF ESCROW AGENT. Newco and AP Biotech hereby appoint Boston Safe Deposit & Trust Company as Escrow Agent, and Boston Safe Deposit & Trust Company hereby accepts such appointment.

#### 2. ESTABLISHMENT OF ESCROW.

- (a) On the date hereof, AP Biotech will deposit with the Escrow Agent the Initial Customer Information in accordance with Section 1A(a) of the Distribution Agreement and the Escrow Agent hereby acknowledges receipt of such Initial Customer Information.
- (b) In accordance with Section 1A(b) of the Distribution Agreement, within thirty (30) days following June 30 and December 31 of each calendar year during the term of this Escrow Agreement, AP Biotech shall deposit with the Escrow Agent the Semi-Annual Customer Information for the six month period immediately preceding each such date (or in the case of June 30, 1999, with respect to the period between the Closing Date and June 30, 1999). The Escrow Agent shall acknowledge receipt of each such deposit by AP Biotech of Semi-Annual Customer Information in writing to each of Newco and AP Biotech (in accordance with the notice provisions set forth in Section 8 hereof) within five (5) business days after such deposit is made. Such Initial Customer Information, together with all Semi-Annual Customer Information, as held by the Escrow Agent in accordance with the terms of this Agreement, shall be referred to herein as the "Escrow." The Escrow shall be segregated from the other assets of the Escrow Agent, held in a fire-proof location subject to appropriate controls necessary to maintain the confidentiality of the materials constituting the Escrow in accordance with the provisions of Section 13 hereof, and held in trust for the benefit of Newco pursuant hereto.
- (c) In accordance with Section 1A(c) of the Distribution Agreement, within ten (10) business days following the execution of this Agreement and the deposit by AP Biotech of the Initial Customer Information with the Escrow Agent as provided for in Section 2(a) above, the Escrow Agent shall deliver to Newco and AP Biotech (in accordance with the notice provisions set forth in Section 8 hereof) copies of that number of pages of the Initial Customer Information which contains the names and information with respect to approximately, but not less than, twenty (20) customers, which pages shall be selected by the Escrow Agent at random.
- 3. DISTRIBUTION. The Escrow Agent shall distribute all of the Customer Information from the Escrow to Newco or its designee as set forth in written instructions executed by Newco in the form attached hereto as Exhibit B, which statement shall be true and correct as of the date delivered.
- 4. TERMINATION. This Escrow Agreement shall terminate upon the distribution of the Customer Information in accordance with Section 3 hereof.

- 5. DUTIES AND RESPONSIBILITIES OF ESCROW AGENT.
- (a) DUTIES LIMITED. The Escrow Agent undertakes to perform only such duties as are expressly set forth herein. The Escrow Agent shall not be bound by any waiver, modification, amendment, termination, cancellation or revision of this Escrow Agreement, unless any of the foregoing is in writing and signed by each of the parties hereto. The Escrow Agent shall not be bound by any assignment by any party hereto of its rights hereunder unless (i) the assignment complies with Section 10 hereof, and (ii) the Escrow Agent shall have received written notice thereof from the assignor. The Escrow Agent is not deemed to have any knowledge of the terms of the Distribution Agreement.
- (b) NO REPRESENTATIONS. The Escrow Agent makes no representation as to the validity, value, genuineness or the collectibility of any security or other document or instrument held by or delivered to the Escrow Agent.
- (c) INDEMNIFICATION OF ESCROW AGENT. Newco and AP Biotech hereby jointly and severally agree to indemnify the Escrow Agent for, and to hold it harmless against, any and all claims, suits, actions, proceedings, investigations, judgments, deficiencies, damages, settlements, liabilities and expenses (including reasonable legal fees and expenses of attorneys chosen by the Escrow Agent) as and when incurred, arising out of or based upon any act, omission, alleged act or alleged omission by the Escrow Agent or any other cause, in any case in connection with the acceptance of, or performance or non-performance by the Escrow Agent of, any of the Escrow Agent's duties under this Escrow Agreement, except as a result of the Escrow Agent's bad faith, willful misconduct or gross negligence. Except in cases of the Escrow Agent's bad faith, willful misconduct or gross negligence, the Escrow Agent shall be fully protected in acting in reliance upon any certificate, statement, request, notice, advice, direction, other agreement or instrument or signature reasonably and in good faith believed by the Escrow Agent to be genuine, in assuming that any person purporting to give the Escrow Agent any of the foregoing in accordance with the provisions hereof, or in connection with either this Escrow Agreement or the Escrow Agent's duties hereunder, has been duly authorized to do so, or in acting or failing to act in good faith on the advice of any counsel retained by the Escrow Agent. The Escrow Agent shall not be liable for any mistake of fact or law or any error of judgment, or for any act or omission, except as a result of its bad faith, willful misconduct or gross negligence.
- (d) LIABILITY OF ESCROW AGENT. The Escrow Agent shall incur no liability whatever in connection with its duties hereunder except for bad faith, willful misconduct or gross negligence. In the event that the Escrow Agent shall be uncertain as to its duties or rights hereunder, or shall receive any certificate, statement, request, notice, advice, direction or other agreement or instrument from any other party with respect to the Escrow which, in the Escrow Agent's reasonable and good faith opinion, is in conflict with any of the provisions of this Escrow Agreement, or shall be advised that a dispute has arisen with respect to the distribution, ownership or right of possession of the Escrow or any part thereof (or as to the delivery,

non-delivery or content of any certificate, statement, request, notice, advice, direction or other agreement or instrument), the Escrow Agent shall be entitled, without liability to any person, to refrain from taking any action other than to use its best efforts to keep safely the Escrow until the Escrow Agent shall be directed otherwise in accordance with Section 3 hereof, but the Escrow Agent shall be under no duty to institute or defend any proceeding, although the Escrow Agent may, in its discretion and at the expense of Newco, on the one hand, and AP Biotech, on the other hand, as provided in Section 5(c) hereof, institute or defend such proceedings. In the event of any dispute hereunder, the Escrow Agent shall be entitled to petition a court of competent jurisdiction and shall perform any acts ordered by such court.

(e) AUTHORITY TO INTERPLEAD. The parties hereto authorize the Escrow Agent, if the Escrow Agent is threatened with litigation or is sued, to interplead all interested parties in any court of competent jurisdiction and to deposit the Escrow with the clerk of that court.

### 6. RESIGNATION; SUCCESSOR ESCROW AGENT.

- (a) RESIGNATION. The Escrow Agent may resign and be discharged from its duties and obligations hereunder at any time by giving no less than thirty (30) days notice of such resignation to Newco and AP Biotech, specifying the date when such resignation shall take effect. Thereafter, the Escrow Agent shall have no further obligation hereunder except to hold the Escrow as depositary. In the event of such resignation, Newco and AP Biotech agree that they will jointly appoint a banking corporation, trust company, attorney or other person as successor Escrow Agent within thirty (30) days of notice of such resignation. The Escrow Agent shall refrain from taking any action until it shall receive joint written instructions from Newco and AP Biotech designating the successor Escrow Agent. Upon receipt of such instructions, the Escrow Agent shall promptly deliver all of the Escrow to such successor Escrow Agent in accordance with such instructions and upon receipt of the Escrow, the successor Escrow Agent shall thereupon be bound by all of the provisions hereof.
- (b) TERMINATION OF ESCROW AGENT. Newco and AP Biotech acting together shall have the right to terminate the appointment of the Escrow Agent hereunder by giving notice in writing of such termination to the Escrow Agent, specifying the date upon which such termination shall take effect. Prior to the date of such termination, Newco and AP Biotech agree that they will jointly appoint a banking corporation, trust company, attorney or other person as successor Escrow Agent. Upon receipt of joint written instructions from Newco and AP Biotech designating the successor Escrow Agent, the Escrow Agent shall promptly deliver to such successor Escrow Agent all of the Escrow in accordance with such instructions and upon receipt of the Escrow, the successor Escrow Agent shall thereupon be bound by all of the provisions hereof. In the event that the Escrow Agent does not receive such instructions prior to the date of termination of the Escrow Agent's duties hereunder, the Escrow Agent shall have no further obligation hereunder except to hold the Escrow as depositary.

- 7. SUCCESSOR ESCROW AGENT. Upon receipt by the successor Escrow Agent of the Escrow, the Escrow Agent shall be released from its obligations hereunder, and the successor Escrow Agent shall thereupon be bound by all of the provisions hereof and the term "Escrow Agent" as used herein shall mean such successor Escrow Agent. The provisions of Sections 5(c), 5(d) and 5(e) shall inure to the benefit of the Escrow Agent notwithstanding its release or removal.
- 8. NOTICES. Any notice permitted or required hereunder shall be deemed to have been duly given if delivered personally, sent by facsimile transmission or if mailed certified or registered mail, postage prepaid, to the parties at their respective addresses set forth below or to such other address as any party may hereafter designate.

### If to Newco:

Biochrom Limited
22 Cambridge Science Park
Milton Rd.
Cambridge CB4 4FJ
England
Attention: Barry Brown
Facsimile No.: 011-44-122-342-0238

## with a copy to:

Harvard Apparatus, Inc. 84 October Hill Road Holliston, MA 01746 Attn: David Green Fax: (508) 429-5732

Goodwin, Procter & Hoar LLP Exchange Place Boston, MA 02109 Attn: H. David Henken, P.C Fax: (617) 523-1231

Cameron McKenna Mitre House 160 Aldersgate Street London, EC1A 4DD Attention: Guilherme Brafman Facsimile No.: 011-44-171-367-2000

### If to AP Biotech:

Amersham Pharmacia Biotech AB Bjorkgatan 30 SE-751 84 Uppsala Sweden Attention: Ulf Lundberg, Esq. Facsimile No.: 011-46-18-321-126

with a copy to:

Cardiff Labs
Forrest Farm Estate
Whitchurch
Cardiff, Wales CF4 7YT
Attention: Andrew Carr
Facsimile No.: 011-44-122-252-6440

Curtis, Mallet-Prevost, Colt & Mosle 101 Park Avenue New York, New York 10178 Attention: Eric Gilioli, Esq. Facsimile No.: (212) 697-1559

# If to the Escrow Agent:

Boston Safe Deposit and Trust Company One Boston Place Third Floor/024-003C Boston, MA 02108 Attention: Brian F. Gregory Fax: (617) 722-7982

- 9. MODIFICATIONS. This Agreement may not be altered or modified without the express written consent of the parties hereto. No course of conduct shall constitute a waiver of any of the terms and conditions of this Agreement, unless such waiver is specified in writing, and then only to the extent so specified. A waiver of any of the terms and conditions of this Agreement on one occasion shall not constitute a waiver of the other terms of this Agreement, or of such terms and conditions on any other occasion.
- 10. ASSIGNMENT. No assignment of any rights or delegation of any obligations provided for herein may be made by any party hereto without the express written consent of

the other parties hereto, except for the provisions hereof respecting successor Escrow Agents. This Escrow Agreement shall inure to the benefit of any binding upon the successors, heirs, personal representatives and permitted assigns of the parties hereto.

- 11. FEES AND EXPENSES OF ESCROW AGENT. Except as provided in Section 5 above, the fees and expenses of the Escrow Agent for serving as Escrow Agent hereunder are as set forth on Exhibit A hereto. Such fees and expenses shall be borne by Newco.
- 12. MISCELLANEOUS. This Agreement shall be construed under and governed by the laws of The Commonwealth of Massachusetts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original but all of which shall constitute one agreement.
- 13. CONFIDENTIALITY. The Escrow Agent agrees that it shall treat any and all information in the Escrow (all such Escrow information being "Confidential Information") as confidential and shall not disclose any Confidential Information to any third party, other than its legal advisors who have a need to know, for any purpose other than the performance of its obligations under the Escrow Agreement without the prior written consent of Newco and AP Biotech; provided, however, that the limitation on disclosure set forth in this Section 13 shall not apply in the case of any information which the disclosing party is required to disclose by law (including the regulations of a stock exchange) or a court order.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this as of the date first forth above.

BIOCHROM LIMITED

By:

Name:
Title:

AMERSHAM PHARMACIA BIOTECH AB

By:

Name:
Title:

BOSTON SAFE DEPOSIT AND TRUST
COMPANY

By:

Name:
Title:

EXHIBIT A

ESCROW AGENT FEES

 $$425 \ \mathrm{per}\ \mathrm{calendar}\ \mathrm{quarter}\ \mathrm{during}\ \mathrm{the}\ \mathrm{term}\ \mathrm{of}\ \mathrm{this}\ \mathrm{Agreement}$ 

EXHIBIT B

Boston Safe Deposit & Trust Company One Boston Place Boston, MA 02110 Attn: Brian Gregory

Re: ESCROW ACCOUNT FOR BIOCHROM LIMITED/AMERSHAM PHARMACIA BIOTECH AB

Ladies and Gentlemen:

Reference is hereby made to that certain Escrow Agreement, dated , 1999 by and among Biochrom Limited ("Biochrom"), Amersham Pharmacia Biotech AB ("AP Biotech") and Boston Safe Deposit & Trust Company (the "Escrow Agreement").

The undersigned duly authorized officer of Biochrom, in his/her capacity as such, does hereby certify as follows:

- 1. Either (a) the Distribution Agreement has been terminated pursuant to Section  $16\,(a)$  or Section  $16\,(c)$  thereof and notice of termination has been physically delivered by the terminating party to the non-terminating party or (b) the Distribution Agreement has automatically terminated pursuant to Section  $16\,(b)\,(i)$  or Section  $16\,(b)\,(ii)$  thereof; and
- 2. AP Biotech has not delivered a notice of termination to Biochrom pursuant to Section 16(b) (i) of the Distribution Agreement as a result of (a) a breach by Biochrom of its obligations under Section 15(b) thereof or (b) a Newco Sales Breach (as defined in the Distribution Agreement) prior to the effective date of the termination of the Distribution Agreement.

Therefore, in accordance with Section 3 of the Escrow Agreement, you are hereby instructed to distribute all of the Customer Information (as defined in the Escrow Agreement) from the Escrow (as defined in the Escrow Agreement) to:

Biochrom Limited 22 Cambridge Science Park Milton Rd. Cambridge CB4 4FJ England Attention: Barry Brown

In witness whereof, the undersigned has executed this letter as of the date first written above on behalf of Biochrom Limited  ${\sf Limited}$ 

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ву:																			
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Schedule 13(b)(i)

TRADE MARK LICENSE AGREEMENT (this Agreement) made March 2,1999

#### BETWEEN

- (1) PHARMACIA & UPJOHN, INC., a Delaware corporation with offices at 7000 Portage Road, Kalamazoo, MI 49001 U.S.A. (Licensor).
- (2) BIOCHROM LIMITED, a limited liability company incorporated in England whose registered office is at Cambridge Science Park, Milton Road, Cambridge CB4  $4\mathrm{FJ}$ , England (Licensee).

#### WHEREAS

- (A) The Licensor is the beneficial owner and the registered proprietor or has made application for the registration of, and licenses or through its associated companies has used in connection with its business for a number of years, the Licensed Marks, the particulars of which are set out in Schedule 1.
- (B) The Licensor has agreed to grant or to cause to procure the grant to the Licensee of certain rights in respect of the Licensed Marks subject to the terms and conditions of this Agreement.
- (C) This Agreement has been entered into in pursuance of the Asset Purchase Agreement dated March 2, 1999 (the Asset Purchase Agreement) which contemplates the sale to Licensee by Pharmacia Biotech (Biochrom) Limited (Biochrom) of substantially all of the assets of Biochrom, and the Distribution Agreement dated March 2, 1999 (the Distribution Agreement) between Licensee and Amersham Pharmacia Biotech AB (AP Biotech) being entered into in connection with the Asset Purchase Agreement.

#### IT IS AGREED AS FOLLOWS

#### DEFINITIONS

1.1 In this Agreement unless the context otherwise requires the following expressions shall have the following meanings (capitalized terms used herein without definition have the meanings assigned to them in the Distribution Agreement):

Business means the manufacture and sale by Biochrom of the Products and the distribution of the Products as contemplated in the Distribution Agreement.

Licensed Marks means those trade marks which are registered or the subject of a pending application particulars of which are set out in Schedule 1.

Products means the Current Products and New Products as defined in the Distribution Agreement.

#### INTERPRETATION

- 1.2 In this Agreement unless the context otherwise requires:
- (a) reference to persons shall include individuals, bodies corporate (wherever incorporated), unincorporated associations and partnerships;
- (b) the headings are inserted for convenience only and shall not affect the construction of the Agreement;  $\;$
- (c) references to one gender shall include each gender and all genders; and  $\boldsymbol{\varphi}$
- (d) any reference to an enactment is a reference to it as from time amended, consolidated or re-enacted (with or without modification) and includes all instruments or orders made under such enactment.
- 1.3 The schedules comprise Schedules to this Agreement and form part of this Agreement.

# GRANT OF LICENSE

- 2.1 In consideration of the good and valuable consideration given by the Licensee in pursuance of the Asset Purchase Agreement and the Distribution Agreement, the Licensor hereby grants to and/or agrees to cause to procure the grant to the Licensee of a royalty-free, non-exclusive, non-sublicensable license to use, solely in connection with the Business, the Licensed Marks on or in relation to the Products, subject to the provisions set out in this Agreement. The Licensee acknowledges and agrees that, after four (4) months from the Closing Date (as defined in the Asset Purchase Agreement) or, in the case of Fisher Scientific Limited, after December 3 1, 1999, the Licensee shall be entitled to use the Licensed Marks solely in connection with the Products to be sold by the Licensee to AP Biotech pursuant to the Distribution Agreement unless AP Biotech shall otherwise consent in writing.
  - 2.2 The license granted hereunder shall be for the term of this Agreement.
- 2.3 The Licensor or Licensee shall at the request of the other party execute and at Licensee's expense take all steps reasonable requisite for the registration or recordal of the license granted hereunder in such form as may be reasonably required by the requesting party. The Licensee agrees that any such recordal may be canceled by the Licensor on the termination of this Agreement in accordance with its terms and that it will assist the Licensor so far as is necessary to achieve such cancellation by executing any necessary documents or doing any necessary acts

in connection therewith.

# CONDITIONS OF USE

# 3.1 The Licensee hereby undertakes that:

- (a) it will use the Licensed Marks only in relation to Products which conform to the current quality standards used by Licensee or AP Biotech;
- (b) it will use the Licensed Marks (including, without limitation, both with respect to presentation of the Licensed Marks on the Products, packing, wrappers, notepaper, price lists, advertisements and other promotional material and the like and with respect to shaping, printing style, colour, quality of materials used and otherwise) only in the form set out in Schedule 2 or as may from time to time be approved by the Licensor or AP Biotech;
- (c) it will not use the Licensed Marks together or in combination with any other marks, names, words, logos, symbols or devices other than: (i) those specified in Schedule 1 or the trademarks licensed to Licensee by Pharmacia & Upjohn, Inc. under a Trade Mark License Agreement of even date hereof-, and (ii) the names "Biochrom" and "Harvard", whether jointly or separately, and all related and associated logos and trademarks;
- (d) it will not use the Licensed Marks in relation to any goods other than the Products nor use or seek to register any other trade or service marks which are similar to or substantially similar to or so nearly resemble the Licensed Marks as to be likely to cause deception or confusion;
- (e) it shall, when requested to do so by the Licensor or AP Biotech, supply the Licensor and AP Biotech with details of any written complaints made by customers relating to the Products together with reports, if any exist, on the manner in which such complaints are being or have been dealt with and shall comply with any reasonable directions or recommendations given by the Licensor or AP Biotech in respect thereof,
- (f) it shall submit to the Licensor and AP Biotech for their approval a specimen of every new advertising or promotional material issued or created by Licensee in which the Licensed Marks appear and the Licensee undertakes not to use or distribute such material unless and until the Licensor and AP Biotech shall have approved the same in writing. If Licensor and AP Biotech fail to respond within twenty-eight (28) days the foregoing material will be deemed approved;
- (g) to the extent consistent with past practice, it will include on the Products and in all documentation and material referred to in paragraphs (b) and (f) a statement that the relevant Licensed Mark is the registered trade mark or the trade mark as the case may be of the Licensor; and

(h) it will not use the Licensed Marks in a manner which is likely to cause material harm to the goodwill attached to the Licensed Marks.

The parties acknowledge that AP Biotech is a distributor of the Products and that Licensee shall not be responsible for, or deemed to control, the actions or omissions of AP Biotech.

# APPROVAL, INSPECTION AND TESTING

- 4.1 On reasonable request by the Licensor or AP Biotech, the Licensee agrees to supply at Licensor's sole expense t6 the Licensor or AP Biotech samples of the Products offered for sale under the Licensed Marks.
- 4.2 The Licensee shall, on reasonable prior notice from the Licensor or AP Biotech, permit the Licensor, AP Biotech and/or their representatives or agents at all reasonable times access to the premises of the Licensee to inspect the Products as manufactured and/or offered for sale by the Licensee under the Licensed Marks and the method by which the Products are manufactured, packed and labelled. The Licensee undertakes that it will do such things as may reasonably be necessary to ensure that such Products are processed, packed and labelled by the methods and in conformity with such specifications and standards of quality consistent with Biochrom's past practices. Licensor and its representatives, however, shall sign a confidentiality agreement on a form acceptable to Licensee before any such inspection may take place.
- 4.3 If (consequent on any such inspection by any representatives or agent of the Licensor or AP Biotech as is referred to in Clause 4.2) it is found that any licensed Products bearing or intended to bear the Licensed Marks are not in conformity with any of the Licensee's obligations under Clause 4 hereof and the Licensor or AP Biotech shall give the Licensee written notice of that fact, the Licensee undertakes that it will not sell any of such non-conforming Products under the Licensed Marks without the prior written consent of the Licensor or AP Biotech.

### MAINTENANCE OF TRADEMARKS

5.1 Licensor shall at its own expense take any and all action that may be required to maintain the registration of any of the Trademarks.

## INFRINGEMENTS

6.1 The Licensee and Licensor shall forthwith give written notice (in

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accordance with the provisions of Clause 12) to the other party of any of the following matters which may at any time during the continuance of this Agreement come to their knowledge, giving full particulars thereof:

- (a) any infringement or suspected or threatened infringement of the Licensed Marks, whether by reason of imitation of get-up or otherwise;
- (b) any allegation or complaint made by any third party that the use by the Licensee of the Licensed Marks in accordance with this Agreement may be liable to cause deception or confusion to the public; or
- (c) any other form of attack, charge or claim to which the Licensed Marks may be subject;

Provided always that the notifying party shall not make any admissions in respect of such matters other than to the notified party and provided further that the notifying party shall in every case furnish the notified party with all information in its possession relating thereto which may be reasonably required by the notified party.

- 6.2 Licensor shall consult with Licensee on any matter within the scope of Clause 6.1 on the appropriate course of action. The Licensor shall have the sole right to assume the conduct of any actions and proceedings (whether in its own name or that of the Licensee) relating to the Licensed Marks and shall bear the costs and expenses of any such actions and proceedings. Any costs or damages recovered in connection with any such actions or proceedings shall be for the account of the Licensor.
- 6.3 The Licensee undertakes and agrees that it will indemnify and hold the Licensor harmless from and against all costs and expenses (including, without limitation, legal costs, fees and expenses), actions, proceedings, claims, demands, and damages arising from:
  - (a) a breach of this Agreement by the Licensee; and
  - (b) the Licensee's use of the Licensed Marks on defective products.
- $6.4\ {\rm The\ Licensor\ shall}$  not be obliged to bring or extend any proceedings relating to the Licensed Marks if it decides in its sole discretion not to do so.

# TERM AND TERMINATION

7.1 This Agreement shall continue, unless terminated in accordance with Clause 7.2 or 7.3, until terminated at any time by either party in writing as specified in Clause 11 giving at least eighteen (18) months advance notice, provided that Licensor shall not have any right to give such notice before the date which is eighteen (18) months following the date first above written.

- 7.2 This Agreement shall terminate immediately upon the occurrence of either of the following events:
  - (a) termination of the Distribution Agreement; or
- (b) termination of the Trade Mark License Agreement dated August 4, 1997, between Licensor and AP Biotech;

such termination to take effect immediately upon the effective date of termination of either such agreement identified above.

- 7.3 Notwithstanding the provisions of Clause 7.1 forthwith upon the occurrence of any of the following events, the Licensor or Licensee, as the case may be, may (without prejudice to any other right of remedy) by written notice to the other party terminate this Agreement with immediate effect:
- (a) if the Licensee or Licensor commits a breach of any obligation under this Agreement, including a breach of any representation or warranty, and fails to remedy it within sixty (60) days of receipt of notice from the Licensor or Licensee, as the case may be, of such breach; or
- (b) if the Licensee enters into liquidation whether compulsory or voluntary, other than for the purposes of amalgamation or reconstruction approved in writing by the Licensor on the basis that the resulting company undertakes that other party's obligations under this Agreement and is commercially acceptable to the former party, or has a receiver or administrative receiver or administrator or similar official appointed over all or any of its assets and is not discharged within a period of thirty (30) days;
- $\,$  (c) if the Licensee is declared insolvent or makes any general composition with its creditors;
- $\,$  (d) if the Licensee ceases or threatens to cease to carry all or any material part of its business;
  - (e) Intentionally omitted.
- (f) if any distress, execution or exception is levied on any of the assets of the Licensee or if any judgment of a monetary sum is given against the Licensee and is not paid out within forty-five (45) days; or
- (g) if the Licensee shall challenge the validity of or the entitlement of the Licensor to use or license the use of the Licensed Marks.
- 7.4 Termination of this Agreement shall not release either of the parties from any other liability which at the time of termination has already accrued to the other party, nor affect in any way the survival of any other right, duty or obligation of the parties which is expressly stated elsewhere in this Agreement to survive such termination.

# EFFECTS OF TERMINATION

- 8.1 Upon termination of this Agreement for any reason, the rights and license granted hereunder to the Licensee shall cease and determine and the Licensee shall forthwith discontinue any and all use of the Licensed Marks save that, except in the case of a termination pursuant to Clause 7.3(a) attributable to a breach by the Licensee of an obligation under this Agreement or pursuant to Clause 7.3(g), the Licensee may continue to sell solely in connection with the Business the Products bearing the Licensed Marks in stock at the date of termination for ninety (90) days provided that the Licensee shall comply with the terms and conditions hereof in respect of the sales of such Products during such period.
- 8.2 Upon termination, or expiration of the period referred to in Clause 8.1, whichever is the later, the Licensor or AP Biotech may request that the Licensee delete or remove the Licensed Marks from or (where such deletion or removal is not reasonably practicable) destroy or, if the Licensor or AP Biotech shall so elect, deliver to the Licensor, AP Biotech or any other company, firm or person designated by the Licensor or by AP Biotech, all Products and all wrappers and packing and all price-lists, sheets of note paper and the like and all other materials or documents in the possession or under the control of the Licensee to which the Licensed Marks are then affixed or approved. In the event that Licensor or AP Biotech elect to have any such Products delivered to them, Licensor or AP Biotech (as the case may be) shall, after receipt of such Products, pay their market value to Licensee.

#### ACKNOWLEDGEMENT

- 9.1 The Licensee recognizes the Licensor's title to the Licensed Marks and shall not at any time do or suffer to be done any act or thing which is likely in any way to prejudice such title. It is understood that the Licensee shall not acquire and shall not claim any title to the Licensed Marks or the goodwill attaching thereto by virtue of the rights hereby granted to the Licensee or through the Licensee's use of the Licensed Marks, either before, on or after the date of this Agreement, it being the intention of the parties that all use of the Licensed Marks by the Licensee shall at all times inure to the benefit of the Licensor.
- 9.2 Licensee hereby represents and warrants that it has the full power and authority to enter into this Agreement and that its execution, delivery and performance of this Agreement has been duly authorized by all required corporate action by Licensee.
- 9.3 Licensor hereby represents and warrants that (i) it has the full power and authority to grant to Licensee all of the rights granted to Licensee herein and that its execution, delivery and performance of this Agreement has been duly authorized by all required corporate action by Licensor, (ii) Licensor and its affiliates are the sole legal and beneficial owners of the Licensed

Marks, and (iii) it is unaware of any rights in the Licensed Marks superior to its rights or those of its affiliates.

## LAW AND CONSTRUCTION

 $10.1\ \mathrm{This}\ \mathrm{Agreement}$  is governed by and shall be construed in accordance with the laws of England and Wales.

#### ARBITRATION

- 11.1 All disputes between the parties arising out of the circumstances and relationships contemplated by this Agreement including disputes relating to the validity, construction or interpretation of this Agreement and including disputes relating to pre-contractual representations shall be settled by arbitration as follows:
- 11.2 The parties hereby agree to cooperate in good faith to resolve any disputes, claims or controversies that may arise hereunder or with respect to the performance by either party of its obligations as contemplated hereby.
- 11.3 In the event that any dispute, claim or controversy shall not be so resolved by the parties between themselves, the parties agree that any and all disputes, claims or controversies arising out of or relating to this Agreement or a breach thereof, whether grounded in common law or statutory law, shall be finally settled in accordance with the Arbitration Rules of the International Chamber of Commerce in effect on the date hereof. Save as otherwise expressly provided herein the procedural rules shall be the rules of the High Court in England and Wales and the lex curiae shall be the law of England and Wales.
- 11.4 The number of arbitrators shall be three, chosen in accordance with the procedures set out in this Clause 11. The award of the arbitrators shall be final and binding on the parties.
- 11.5 Each party shall appoint one arbitrator. If within (30) days after receipt of the claimant's notification of the appointment of an arbitrator the respondent has not notified the claimant of the arbitrator it appoints, the second arbitrator shall be appointed by the appointing authority.
- 11.6 The arbitrators thus appointed shall choose a further arbitrator who will act as the presiding arbitrator of the tribunal. If within (30) days after the appointment of arbitrators under Clause 11.5 above, they have not agreed upon the choice of the presiding arbitrator, then at the request of any party to the arbitration proceeding the presiding arbitrator shall be appointed by the appointing authority.
- 11.7 The Chartered Institute of Arbitrators, London, England shall be the appointing authority.

- 11.8 At the request of any party to the arbitration ("requesting party") the arbitrators shall order the other party ("furnishing party") to supply and furnish to the requesting party (the cost of which shall be reimbursed upon demand by the requesting party to the furnishing party) true and complete copies of the relevant documents and materials (the "Relevant Materials") and to produce to the arbitral tribunal any or all of the Relevant Material and/or copies thereof as any part of the arbitral tribunal shall require.
- 11.9 The procedures leading to the production of Relevant Material under this paragraph shall be determined by the arbitrators, and may include the preparation of lists of Relevant Material for initial evaluation by the requesting party prior to disclosure and/or inspection of Relevant Material by the requesting party prior to supply and furnishing the copies. In making such determination, the arbitrators shall take into account the urgency with which the Relevant Material should be brought before the arbitral tribunal.
- 11.10 No party shall use or disclose any Relevant Material obtained under this paragraph for any purpose except in the course of the conduct of the arbitration and (as far as applicable) proceedings before any court, and then only to the extent necessary for the implementation and enforcement of any aware of the arbitrators.
- 11.11 The arbitration, including the making of the award, shall take place in London, U.K.
- 11.12 All submissions and awards in relation to arbitration hereunder shall be made in English and all arbitration proceedings shall be conducted in English.
- 11.13 The failure or refusal of either party to submit to arbitration in accordance with this Clause 11 shall be deemed a breach of this Agreement. If either party seeks and secures judicial intervention requiring enforcement of this arbitration provision, such party shall be entitled to recover from the other party in such judicial proceeding all costs and expenses, including reasonable attorneys' fees, that it was thereby required to incur.
- 11.14 The procedures specified in this Clause 11 shall be the sole and exclusive procedures for the resolution of disputes between the parties arising out of or relating this Agreement; provided, however, that a party, without prejudice to the above procedures, may seek equitable remedies, including without limitation, specific performance, a preliminary injunction or other provisional judicial relief if in its sole judgment such action is necessary . to avoid irreparable damage or to preserve the status quo.

# NOTICES

12.1 Any notice or other communication to be given by one party to any other party under, or in connection with the matters contemplated by, this Agreement shall be in writing and signed by or on behalf of the party giving it and may be served by delivering it or sending it by fax, pre-paid recorded delivery or registered or certified post to the address and for the attention of the relevant party set out in Clause 12.2 (or as otherwise notified from time to time hereunder). Any

notice so served by hand, fax or post shall be deemed to have been received

(a) in the case of delivery by hand, when delivered;

(b) in the case of fax, twelve (12) hours after the time of dispatch;

(c) in the case of pre-paid recorded delivery or registered post, forty-eight (48) hours from the date of posting.

12.2 The addresses of the parties for the purpose of Clause 12.1 are as follows:

Address: Pharmacia & Upjohn, Inc.

7000 Portage Road Kalamazoo, MI 49001-0199

USA

Att: Robert J. Meisenhelder, Esq.

(616) 833-7564 Fax:

Amersham Pharmacia Biotech AB Address:

Bjorkgatan 30 SE-751 84 Uppsala

Sweden

Att: Ulf Lundberg, Esq.

Fax: 46 18 165 322

Address: Curtis, Mallet-Prevost, Colt & Mosle

101 Park Avenue New York, NY 10178 Att: Eric Gilioli, Esq.

(212) 697-1559 Fax:

Biochrom Limited Address:

Cambridge Science Park

Milton Road Cambridge CB4 4FJ England

Att: Barry Brown

44 1223 420238 Fax:

Goodwin, Procter & Hoar LLP Address:

Exchange Place

Boston, MA 02109 Att: H. David Henken, P.C.

Fax: (617) 523-1231

Address: Cameron McKenna

Mitre House

160 Aldersgate Street London, EC1A 4DD

Attention: Guilherme Brafman

44-171-367-2000 Fax:

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#### NON-ASSIGNABILITY

- 13.1 The Licensee may not nor may not purport to assign, transfer, change or part with all or any of its rights and/or obligations under this Agreement or sub-contract the performance of any of its obligations under this Agreement without the prior written consent of the Licensor. A change of control of the Licensee shall be deemed an assignment hereunder. For purposes of this Clause 13.1, "control" shall mean the ownership of the majority of ordinary share capital or the ability to cast the majority of the votes at a general meeting of Licensee, to appoint the majority of the board of directors or to direct the general management of Licensee. The sale of substantially all of the assets of Licensee shall also be deemed a change of control for purposes of this Clause 13.1.
- 13.2 Any right, power, privilege or remedy of a party under or pursuant to this Agreement shall not be capable of being waived or varied otherwise than by an express waiver or variation in writing.
- 13.3 No failure or delay by any party in exercising any right, power, privilege or remedy shall impair such right, power, privilege or remedy or operate or be construed as a waiver or variation thereof or preclude its exercise at any subsequent time or on any subsequent occasion and no single or partial exercise of any such right, power, privilege or remedy shall preclude any other or further exercise thereof or the exercise of any other right, power, privilege or remedy.

### SEVERANCE

14.1 If any provision of this Agreement is held to be invalid or unenforceable, then such provision shall (so far as invalid or unenforceable) be given no effect and shall be deemed not to be included in this Agreement but without invalidating any of the remaining provisions of this Agreement. The parties shall then use all reasonable endeavors to replace the invalid or unenforceable provisions by a valid and enforceable substitute provision the effect of which is as close as possible to the intended effect of the invalid or unenforceable provision.

# ENTIRE AGREEMENT

15.1 This Agreement, including the Schedules referred to herein, is complete, reflects the entire agreement of the parties with respect to its subject matter, and supersedes all previous written or oral negotiations, commitments and writings in connection therewith.

In witness whereof, the parties have executed this Agreement as of the date first above written.  $\,$ 

PHARMACIA & UPJOHN, INC.

By: /s/ Mats Pettersson

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Name: Mats Pettersson Title: Senior Vice President Business Development

BIOCHROM LIMITED

By: /s/ David Green

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Name: David Green Title: Director

# Schedule 1

# Licensed Marks

Trac	demark 	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
DROP desi	ign	AR	N	1,656,953	1988-07-21				1	PH (OLD)	P
DROP desi	ign	AR	N	1,656,956	1988-07-21				10	PH (OLD)	Р
DROP desi	ign	AR	N	2033294	1996-05-14				42	PH	Р
DROP desi	ign	AU	N	2660581	1995-05-09				42	PH	Р
DROP desi	ign	AU	N	2660580	1995-05-09	660580	1995-05-09	2005-05-09	9, 42	PH	P
DROP desi	ign	BD	N	44697	1995-08-30				1	PH	Р
DROP desi	ign	BD	N	44699	1995-08-30				5	PH	P
DROP desi	ign	BD	N	44698	1995-08-30				9	PH	Р
DROP desi	ign	BD	N	44700	1995-08-30				10	PH	Р
DROP desi	ign	BD	N	43639	1995-05-09				16	PH	Р
DROP desi	ign	BD	N	43637	1995-05-09				3	PH	Р
DROP desi	ign	BD	N	43641	1995-05-09				30	PH	Р
DROP desi	ign	BD	N	43640	1995-05-09				29	PH	Р
DROP desi	ign	BG	N	35646	1996-07-11	30845	1997-06-16	2006-07-11	1 <b>,</b> 9	PH	Р
DROP desi	ign	BR	N			780190858	1982-12-28	2002-12-28	05.00	PH	Р
DROP desi	ign	BY	N	950797	1995-05-26	7811	1998-01-19	2005-05-26	1, 9, 10, 42	PH	Р
DROP desi	ign	CA	N			162,525	1969-05-02	1999-05-02		PH	P

Trademark	CWT	Р	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
DROP design	CA	N			314,300	1986-09-12	2001-09-12		РН	P
DROP design	CA	N			325,547	1987-04-03	2002-04-03		РН	P
DROP design	CN	N			352632	1989-06-30	1999-06-29	14	PH (OLD)	Р
DROP design	CN	N			152773	1989-06-30	1999-06-29	31	PH (OLD)	Р
DROP design	CN	N			156063	1989-07-30	1999-07-29	26	PH (OLD)	Р
DROP design	CN	N			160102	1989-05-10	1999-09-09	17	PH (OLD)	Р
DROP design	DE	N			1109203	1987-07-28	2006-10-31	9	PU	Р
DROP design	DE	N			156,882	1969-04-24	2008-02-29	1, 3, 5, 10	PU DV	Р
DROP design	DK	N	3350/67	1967-09-32	6362/60	1968-02-09	2008-02-09	1, 3, 5, 10, 35, 36, 41	PU	P
DROP design	DK	N	9501092	1995-02-22	22082					P
DROP design	EG	N			72273	1989-11-14	1998-08-14	1	PH (OLD)	Р
DROP design	EG	N			72276	1989-11-14	1998-0-14	10	PH (OLD)	P
DROP design	EG	N			72274	1989-11-14	1998-06-14	5	PH (OLD)	P
DROP design	EG	N			72275	1989-11-14	1998-06-14	9	PH (OLD)	P
DROP design	FR	N			1443280	1969-01-05	2008-01-04	1, 5, 10	PU FR	P
DROP design	GB	N	3255794	1998-01-17				9	PU	Р
DROP design	GB	N			929,347	1970-01-09	2003-01-05	1	PU	P
DROP design	GB	N			919,349	1969-01-05	2003-01-05	5	PU	P
DROP design	GB	N			919,348	1969-08-27	2003-01-05	3	PU	P

 Tra 	ademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
DROP des	sign	GR	N			89824	1990-11-19	2008-05-09	1, 5, 9, 10	PU	Р
DROP des	sign		N	BA8961149A	1996-12-24				1, 9	PU	P
DROP des	sign	HK	N	5536/95	1995-05-11	0493/96	1995-06-11	2002-05-11	1	PH	Р
DROP des	sign	HK	N	5597/95	1995-05-11	8656/95	1995-05-11	2002-15-11	9	PH	P
DROP des	sign	HK	N	5598/95	1995-05-11	8194/95	1995-05-11	2002-05-11	10	PK	Р
DROP des	sign	HK	N	5599/95	1995-05-11	8822/1998	1995-05-11	2002-05-11	42	PK	Р
DROP des	sign	BR	N	950913	1995-05-22	8950913	1995-05-22	2005-05-22	1, 9, 18, 42	PH	Р
DROP des	sign	ID	N	20273	1995-06-13	357982	1996-09-17	2004-12-15	1	PH	Р
DROP des	sign	ID	N	10274	1995-06-15	373898	1996-11-18	2004-12-15	9	PH	Р
DROP des	sign	ID	N	10275	1995-06-15	371415	1996-10-17	2004-12-15	10	PH	Р
DROP des	sign	ID	N	10276	1995-06-15	371414	1996-10-17	2004-12-15	42	PH	Р
DROP des	sign	IH	N			76,036	1970-01-09	2005-01-09	1	PH (OLD)	Р
DROP des	sign	IH	N			76,481	1970-01-09	2005-01-09	5	PH (OLD)	Р
DROP des	sign	IH	N			76,482	1970-01-13	2005-01-13	3	PH (OLD)	Р
DROP des	sign	IN	N	522505	1990-01-09				1	PH (OLD)	Р
DROP des	sign	IN	N	522502	1990-01-09				10	PH (OLD)	P
DROP des	sign	IN	N	522506	1990-01-09				5	PH (OLD)	P
DROP des	sign	IN	N	522507	1990-01-09	522507	1990-01-09	1997-01-09	9	PHDS	Р
DROP des	sign	JP	N	10-101653	1998-11-30				1, 5, 9, 10, 42	PU	Р

	Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
ROP	design	KR	N	19446/95	1995-05-16	341352	1996-06-18	2005-06-19	10	РН	P
ROP	design	KR	N	20694/95	1995-05-25	356514	1997-02-18	2007-02-18	34	PH	P
ROP	design	KR	N	4848/95	1995-05-10	36419	1997-05-29	2007-05-29	112	PH	P
ROP	design	KE	N	7467	1995-05-25				1, 9, 10, 42	PH	P
ROP	design	L/T	N	95-1295	1995-05-02				1, 9, 10,42	PH	P
ROP	design	LV	N	95-750	1995-04-27	N37 165	1997-04-20	2004-04-27	1, 9, 10,42	PH	P
ROP	design	MAC	N	E-522/96	1996-10-08				1, 9	PU	P
ROP	design	MOR	N	2936/96	1996-07-10				1,9	PU	P
ROP	design	KY	N	95/09756	1995-05-20				9	PH	P
ROP	design	KY	N	97/19998	1997-12-01				44	PU	P
ROP	design	KY	N	95/04751	1995-05-10				1	PH	P
ROP	design	KY	N	95/04758	1995-03-20	95/04758	1995-05-20	2002-05-21	10	PH	P
ROP	design	PH	N	109403	1996-06-28				1	PH	P
ROP	design	PH	N	113843	1996-09-13				9	PH	P
ROP	design	PH	N	109404	1996-06-28				10	PH	P
ROP	design	RG	N	41032	1996-09-27				1, 9	PU	P
ROP	design	RG	N						1,9	PU	P
ROP	design	KU	N	95705301	1995-05-15	151470	1997-04-10	2905-05-15	10, 42	PK	P
ROP	design	GK	N	1249/68	1968-03-21	124676	1968-08-23	1998-08-23	1, 3, 5, 10, 35, 36, 41	PU	P

Trademark	CWT	Р	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
DROP design	GK	N			166,747	1979-03-09	1999-03-09	1, 3, 5	PU	Р
DROP design	GK	N	96-4627	1996-05-06	323807	1997-06-19	2007-06-19	9	PU	P
DROP design	SWR	N	8936/96	1996-07-10				1, 9	PU	P
DROP design	BG	N	4241/95	1995-05-13				9	PK	P
DROP design	BG	N	4242/95	1995-05-13				42	PK	Р
DROP design	BG	N	4240/95	1995-05-13				10	PH	Р
DROP design	BG	N	4239/95	1995-05-13	4239/95	1995-05-13	2005-05-13	1	PH	Р
DROP design	SI	N	9570579	1995-05-29	9570675	1997-01-14	2005-05-29	1, 9, 10, 42	PH	Р
DROP design	TH	N	211083	1995-08-11	SW4835	1995-08-11	2005-08-10	42	PH	Р
DROP design	TH	N	292086	1995-08-11	TN53871	1995-08-11	2005-08-10	1	PH	Р
DROP design	TH	N	291087	1995-08-11	TB0651	1995-08-11	2005-08-10	9	PH	P
DROP design	TH	N	291088	1995-08-11	46077	1995-05-25	2006-08-10	10	PH	P
DROP design	TH	N	11-055357	1995-11-07	735802	1996-11-16	2006-11-15	10	PH	P
DROP design	TH	N	11-055358	1995-11-07	87321	1996-12-16	2006-12-25	12	PH	Р
DROP design	TH	N	11-055355	1995-11-07	742479	1997-01-01	2007-12-31	1	PH	Р
DROP design	TH	N	11-055356	1995-11-07	748808	1997-02-16	2007-02-05	9	PH	Р
DROP design	UA	N	95061844IT	1995-06-01				1, 9, 10, 42	PH	Р
DROP design	UB	N			890,315	1970-05-05	2000-04-10	1	PH (OLD)	Р
DROP design	UB	N	323,662	1969-06-11	890,473	1970-05-05	2000-04-10	1	PH (OLD)	Р

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
DROP design	UB	N			890,328	1970-05-05	2000-05-05	1	PH (OLD)	P
DROP design	US	N	74/390,444	1993-05-17	1820903	1994-02-15	2004-02-15	1	PHBT	P
DROP design	US	N	384,469	1982-09-09	1,290,768	1984-08-21	2004-08-21	9	PH (OLD)	P
DROP design	US	N			1,446,200	1987-07-07	200707-07	10	PH DEL	P
DROP design	US	N			872 <b>,</b> 880	1969-07-15	2009-07-15	5	PH (OLD)	P
DROP design	XX	N			365,485	1970-02-17	2010-01-17	1, 3, 5, 10	PR D	P
DROP design PHARMACIA	AU	N			2258.597	1972-05-24	2007-05-24	1	PU	P
DROP design PHARMACIA	AU	N			2258.700	1972-05-24	2007-05-24	10	PU	Р
DROP design PHARMACIA	BK	N			114210261	1989-08-15	1999-08-15	01.90	PU	P
DROP design PHARMACIA	BR	N	814410251	1988-08-18	014418251	1990-03-20	2000-03-20	09.25/09.45	PH&S	Р
DROP design PHARMACIA	CL	N	0-89527	1994-05-17	207337	1998-02-25	2004-05-17	1, 9	PH	P
DROP design PHARMACIA	DK	N			909296	1973-08-30	2003-06-30	1, 3, 5, 10	PU DR	P
DROP design PHARMACIA	DR	N			1109202	1987-07-28	2006-10-31	9	PU	Р
DROP design PHARMACIA	DK	N	4050/69	1969-10-08	1375/70	1970-04-17	2000-04-17	1, 3, 5, 9, 10, 30	PK	P
DROP design PHARMACIA	EG	N			72277	1990-03-07	1990-06-14	1	PH (OLD)	P
DROP design PHARMACIA	EG	N			72278	1990-03-07	1990-06-14	5	PH (OLD)	P
DROP design PHARMACIA	EG	N			72273	1990-03-87	1998-06-14	9	PH (OLD)	P
DROP design PHARMACIA	EG	N			72280	1990-03-87	1998-06-14	10	PH (OLD)	P
DROP design PHARMACIA	GR	N			89423	1990-11-19	2008-06-09	1, 5, 9, 11	PU	P

 Trademark	CWT	P		Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
			App1. NO.			Reg. Date		C1455		
DROP design PHARMACIA	HP	N	M9206404	1992-12-16	137257	1992-12-16	2002-12-16	1, 9	PHET	Р
DROP design PHARMACIA	IL	N	92578	1994-05-23	92670	1996-02-11	2001-05-22	1	PH	P
DROP design PHARMACIA	IL	N	92673	1994-05-23	92671	1996-02-04	2001-05-22	3	PH	P
DROP design PHARMACIA	IN	N	522504	1990-01-05				10	PH (OLD)	Р
DROP design PHARMACIA	IN	N	522503	1990-01-09				9	PH (OLD)	Р
DROP design PHARMACIA	JР	N	74063/72	1972-06-01	1362963	1970-12-22	2008-12-22	1	PU	Р
DROP design PHARMACIA	KW	N			20376	1980-09-13	1998-09-12	1	PH	P
DROP design PHARMACIA	KW	N			20377	1980-09-13	1998-09-12	5		P
DROP design PHARMACIA	MX	N			356077	1980-08-25	2003-08-25	26		P
DROP design PHARMACIA	MX	N			357568	1980-08-25	2003-08-25	6	PHBT	Р
DROP design PHARMACIA	МО	N			70 <b>,</b> 857	1970-08-28	2000-08-28	1, 3, 5, 10, 35, 36, 41	PH	P
DROP design PHARMACIA	NZ	N			177887	1980-03-01	2009-03-01	1	PH	P
DROP design PHARMACIA	NZ	N			177099	1980-03-01	2009-03-01	3	PH	Р
DROP design PHARMACIA	NZ	N			177889	1980-03-01	2009-03-01	5	PH	P
DROP design PHARMACIA	NZ	N			177891	1988-03-01	2009-03-01	10	PH	Р
DROP design PHARMACIA	NZ	N			177890	1988-03-01	2009-03-01	9	PH	Р
DROP design PHARMACIA	PA	N			047576	1989-03-06	2005-08-01	1	PH	P
DROP design PHARMACIA	PL	N	G-133384	1994-05-16	90747	1994-05-16	2004-05-16	1, 9	PH	P
DROP design PHARMACIA	BU	N	94020756	1994-06-16	130869	1995-08-15	2004-06-16	1, 9	PH	P

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
ROP design PHARMACIA	SA	N			197/13	1989-04-23	1998-06-02	1	PH (OLD)	P
ROP design PHARMACIA	BA	N			197/14	1989-04-23	1998-06-02	5	PH (OLD)	P
ROP design PHARMACIA	BA	N			152.178	1975-08-01	2005-08-01	1, 9	PU	P
ROP design PHARMACIA	SK	N		1994-05-17			2004-04-27	1, 5, 9	PH	P
ROP design PHARMACIA		N					2003-07-07	1, 5, 9, 10	PH	P
ROP design PHARMACIA		N			106092	1988-07-20	1998-07-20	5	PU	Р
ROP design PHARMACIA	VE	N	448/96	1996-01-17				1	PHAT	Р
ROP design PHARMACIA	VE	N	447/96	1996-01-17				9	PH	Р
ROP design PHARMACIA	XX	N			402.486	1973-10-05	2013-10-05	1, 3, 5, 10	PH D	Р
ROP design PHARMACIA	JP	N			1362970	1970-12-22	1998-06-22	1	PU	Р
ROP design (POS)	DX	N	3349/67	1967-09-12	0361/88	1968-02-09	2008-02-09	1, 3, 5, 10, 35, 36, 41	PU	P
ROP design (POS)	РЈ	N			54.129	1969-02-20	1999-02-20	1, 3, 5, 10, 35, 36, 41	PU	P
ROP design (POS)	NO	N			74.427	1968-05-30	2008-05-30	1, 3, 5, 10, 35, 36, 41	PU	P
ROP design (POS)	BN	N			122.446	1968-02-12	2008-02-02	1, 3, 5, 10, 35, 36, 41	PU	P

 Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
Pharmacia	AR	N	1889706	1993-08-25				5	KP	P
Pharmacia	AR	N	1889707	1993-08-25	1585743	1995-12-20	2005-12-20	1	KP	P
Pharmacia	AR	N	1889705	1993-08-25	1585742	1995-12-20	2005-12-20	9	KP	P
Pharmacia	AR	N	1889704	1993-08-25	1585741	1995-12-20	2005-12-20	10	KP	Р
Pharmacia	AR	N	1889703	1993-08-25	1585740	1995-12-20	2005-12-20	41	KP	P
Pharmacia	AU	N	A638355	1994-08-19	A638355	1994-08-19	2004-08-19	1	PU	P
Pharmacia	AU	N	A638356	1994-08-19	A638356	1994-08-19	2004-08-19	5	PU	P
Pharmacia	AU	N	A638357	1994-08-19	A638357	1994-08-19	2004-08-19	9	PU	P
Pharmacia	AU	N	A638358	1994-08-19	A638358	1994-08-19	2004-08-19	10	PU	Р
Pharmacia	BD	N	43594	1994-04-21				36	PK	Р
Pharmacia	BD	N			21369	1984-11-11	2006-11-11	3	PK	Р
Pharmacia	BD	N			21371	1984-11-11	2006-11-11	10	PK	Р
Pharmacia	BD	N			21370	1984-11-11	2006-11-11	5	PK	Р
Pharmacia	BD	N			21368	1984-11-11	2006-11-11	9	PK	Р
Pharmacia	BK	N			379665	1982-01-14	2002-01-14	1, 5	PU	Р
Pharmacia	BY	N	950799	1995-05-26	7813	1998-01-15	2005-05-26	1, 3, 5, 9, 10, 16, 29, 30	PB	P
Pharmacia	CA	N			315,021	1986-06-06	2001-06-01		PR	P
Pharmacia	CA	N			326,058	1987-04-10	2002-04-10		PR	Р
Pharmacia	CN	N			350805	1989-06-10	1999-06-09	26	PU	P

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
Pharmacia	CN	N 			352631	1989-06-30 	1999-06-29	14	PU 	P
Pharmacia	CN	N			352774	1989-06-30	1999-06-29	31	PU	Р
Pharmacia	CN	N	8830223	1988-09-08	882463	1996-10-14	2006-10-13	10	PH (OLD)	Р
Pharmacia	DK	N	2289/65	1965-04-03	3010/66	1966-11-18	2006-12-28	1, 3, 5, 10	PHBT	Р
Pharmacia	DK	N	3859/56	1956-12-21	0248/57	1957-02-09	2007-02-09	5	PU	Р
Pharmacia	KC	N	42769	1993-11-08				1	KP	Р
Pharmacia	KC	N	43770	1993-11-08				3	KP	P
Pharmacia	KC	N	43771	1993-11-08				5	KP	P
Pharmacia	KC	N	43772	1993-11-08				41	KP	Р
Pharmacia	KC	N	42773	1993-11-08				10	KP	Р
Pharmacia	KC	N	42774	1993-11-08				9	KP	Р
Pharmacia	XN	N	9401232	1984-06-09	12906	1997-03-26	2007-03-26	1, 3, 5, 9, 10, 16, 41	PS	P
Pharmacia	GB	N	1560863	1994-02-28				3	PU	Р
Pharmacia	GB	N	1568414	1994-02-28	1550464	1994-01-28	2001-01-28	10	PU	P
Pharmacia	GB	N			1,162,185	1981-10-01	2002-10-01	1	PU	P
Pharmacia	GB	N			81,162,186	1982-11-01	2002-10-01	5	PU	Р
Pharmacia	GB	N			1,184,730	1982-11-04	2003-11-04	9	PU	Р
Pharmacia	HK	N			81985	1984-10-26	2005-10-26	1	PHBS	P
Pharmacia	HK	N			318	1984-10-26	2005-10-26	5	PHBS	P

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
Pharmacia	HK	N			81946	1984-10-26	2005-10-26	9	PHBS	Р
Pharmacia	НМ	N	7548/94	1994-10-13	63567	1995-11-07	2005-11-07	1	PH	Р
Pharmacia	HM	N	7541/94	1994-10-13	63406	1995-11-07	2005-11-07	10	PH	Р
Pharmacia	HM	N	7542/94	1994-10-13	63407	1995-11-07	2005-11-07	9	PH	Р
Pharmacia	НМ	N	7543/94	1994-10-23	63761	1995-12-07	2003-12-07	5	PH	Р
Pharmacia	НМ	N	958914	1995-05-22				1, 3, 5, 9, 10, 16, 29, 30	РН	Р
Pharmacia	ID	N			398960	1988-06-29	2007-06-29	5	PU	Р
Pharmacia	ID	N			398961	1988-06-29	2007-06-29	9	PU	Р
Pharmacia	ID	N			398962	1988-06-29	2007-06-29	10	PU	Р
Pharmacia	ID	N	235902	1988-06-29	398959	1997-10-13	2007-06-29	1	PU	Р
Pharmacia	IN	N	94/1722					41	PH	Р
Pharmacia	IN	N	94/1716		176357	1994-03-16	2003-03-16	1	PH	Р
Pharmacia	IN	N	94/1718		176158	1994-03-16	2002-03-16	5	PH	Р
Pharmacia	IN	N	94/1719		176160	1994-03-16	2002-03-16	10	PH	Р
Pharmacia	IN	N	94/1728		174160	1994-03-16	2002-03-16	10	РН	Р
Pharmacia	IN	N	429134	1984-10-30				10	PH (OLD)	Р
Pharmacia	IN	N	429132	1984-10-30				5	PH (OLD)	P
Pharmacia	IN	N	429135	1984-10-30	4291348	1990-10-30	1998-10-30	1	PH (OLD)	P
Pharmacia	IN	N	429133	1984-10-30			2003-12-03	1-42	PU	P

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
Pharmacia	KR	N			120540	1984-12-04	2005-09-04	11	РН	Р
Pharmacia	KR	N			121548	1985-12-23	2005-09-23	10	PH	P
Pharmacia	KR	N			117895	1985-10-04	2005-10-04	34	PH	Р
Pharmacia	KR	N	7466	1995-05-25	5781	1995-05-25	2005-05-25	1, 3, 5, 9, 10, 16, 29, 30	РН	P
Pharmacia	LT	N	16070	1994-06-25				1, 3, 5, 9, 10, 16, 41	РН	Р
Pharmacia	LV	N	94-1245	1995-06-07				1, 3, 5, 9, 10, 36, 42	РН	P
Pharmacia	NY	N			83/81234	1983-11-23	2004-11-23	1	PH	P
Pharmacia	NY	N			83/81235	1983-11-23	2004-11-23	52	PH	P
Pharmacia	NY	N	84/05098	1984-11-01	84/05090		2005-11-01	10	PH	Р
Pharmacia	NY	N	84/05089	1984-11-02	84/05089	1991-10-19	2005-11-01	9	PH	P
Pharmacia	PH	N	107587	1996-04-22				1	PH	P
Pharmacia	PH	N	107588	1996-04-22				5	PH	Р
Pharmacia	PH	N		,	41075	1988-09-12	2008-09-12	1, 5	PHBS	P
Pharmacia	PK	N	04545	1984-11-18	84565	1984-11-18	2006-11-18	10	PHBS	P
Pharmacia	PK	N		,	84543	1984-11-18	2006-11-18	1	PHBS	P
Pharmacia	PK	N	04546	1984-11-18	84546	1984-11-18	2006-11-18	5	PHBS	P
Pharmacia	PK	N			84544	1984-11-18	2006-11-18	9	PHBS	P

Trademark	CWT	Р	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
Pharmacia	RU	N	95705300	1995-05-15	251469	1997-04-20	2005-05-25	3, 5, 10, 16, 29, 30, 42	РН	Р
Pharmacia	UK	N			184,436	1982-12-17	2002-12-17	1, 5	PU	Р
Pharmacia	UK	N			106,427	1964-01-03	2004-01-03	35, 36, 41	PU	Р
Pharmacia	UK	N	94-01477	1994-02-11	303216	1995-06-30	2005-06-30	3, 9, 10	PU	Р
Pharmacia	SG	N	5738/84	1984-11-03	5738/84	1992-07-25	2001-11-03	9	PHBS	Р
Pharmacia	SG	N			5988/83	1983-11-18	2004-11-18	1	PH (OLD)	Р
Pharmacia	SG	N			в5989/83	1983-11-18	2004-11-18	5	PH (OLD)	Р
Pharmacia	SH	N	1285-95	1995-05-10	101768	1998-08-17	2005-05-10	3, 5, 10, 16, 29, 30, 42	РН	Р
Pharmacia	SH	N			118582	1987-10-12	1997-10-21	3	PH (OLD)	Р
Pharmacia	TH	N			118474	1987-10-22	2007-10-21	2	PU	Р
Pharmacia	TW	N	82-053533	1993-10-29	69927	1994-04-01	2001-04-01	1 (services)	PU	Р
Pharmacia	TW	N	82-053529	1993-10-29	638404	1994-04-01	2003-04-01	72	PU	Р
Pharmacia	TW	N	82-053520	1993-10-29	647614	1994-07-14	2003-07-16	1	PU	Р
Pharmacia	TW	N	82-053531	1993-10-29	657514	1994-10-01	2003-10-01	76	PU	Р
Pharmacia	TW	N	82-053534	1993-10-29	73994	1995-01-01	2001-01-01	12	PU	Р
Pharmacia	TW	N	82-053530	1993-10-29	640158	1994-04-16	2005-04-15	74	PU	Р
Pharmacia	TW	N	82-053532	1993-10-29	642537	1994-04-16	2004-04-15	86	PU	Р
Pharmacia	UA	N	95061840IT	1995-06-01				1, 3, 5, 9, 10 16, 29, 30	, PM	P

Trademark	CWT	P	Appl. No.	Appl. Date	Reg. No.	Reg. Date	Rpn. Date	Class	Holder	Org. Omit
harmacia	US	N			1,277,927	1984-05-13	2004-05-15	9	PU	P
harmacia	US	N	73/021625	1974-05-14	1025527	1975-11-25	2005-11-25	1	PU	P
harmacia	US	N	73/021627	1974-05-16	1,025,528	1975-11-25	2005-11-25	1, 5	PU	Р
harmacia Anti. Farea	HN	N	7539/94	1994-10-13				5	PH	PH
harmacia Anti. Farea	HN	N	7540/94	1994-10-11	63405	1995-11-07	2005-11-07	1	PH	PH
harmacia Anti. Farea	HN	N	7537/94	1994-10-13	63402	1995-11-07	2005-11-07	19	PH	PS
harmacia Anti. Farea	HN	N	7538/94	1994-10-13	63403	1995-11-07	2006-11-07	9	PH	PH
harmacia Electronics	CB	N			304,434	1980-07-22	2010-02-19	9, 10	PH EL	PH
harmacia Electronics	DK	N			0927/80	1980-02-15	2010-02-15	9, 10	PH EL	PH
harmacia FEAT	FR	N			1360813	1985-05-23	2005-05-22	1, 5	PH	ADI
harmacia (JP)	JF	N			1480517	1979-11-30	1999-05-30	1	PH	P
narmacia Laserscan	US	N	74/544,913	1996-11-21	2171501	1998-07-07	2000-07-07	9	UP	SOPCA

Schedule 2

Form of Licensed Marks

Form of Licensed Marks

[the logotype (lettering and symbol)
and 'drop' symbol]

logotype specifications

o how to use our logotype and the 'drop' symbol o the Amersham Pharmacia Biotech name o artwork reference

# amersham/pharmacia biotech

The company symbol and logotype are principal items of the identity and, as such, they must be employed with great care in accordance with the rules and guidelines set our in this document, together with any other instructions issued by Corporate Communications in Uppsala.

The logotype D consists of the symbol (or 'drop' as it is often called) and specifically centered lettering. In normal circumstances they should appear together, although on certain occasions, where indicated, the 'drop' symbol O may appear without the lettering. The lettering in this form must not be used on its own.

amersham pharmacia biotech

The 'drop' symbol and the logotype may only be reproduced using the highest quality originals. No attempt must be made to reproduce either mark from anything other than the reproduction artwork or computer files supplied by Corporate Communications in Uppsala.

To afford these marks their appropriate status and to ensure that they are clearly recognized, an area around each device must be kept free of other visual elements. No additions or amendments to the 'drop' symbol or logotype are permitted.

Creative use of the symbol and logotype is only allowed with the express permission of the head of Corporate Communications in Uppsala.

[the 'drop' symbol with technical
specifications]

amersham pharmacia biotech

The 'drop' symbol should always be reproduced in high gloss silver/chrome or, where this is not possible, in black. The lettering should appear in black only. Both the 'drop' symbol and the full logotype should normally appear on a white background; a colored background may be used (although this should be avoided as far as possible) as long as the color does not deduct from their visibility. They may also appear white out of black O using the artworks created for this purpose.

[the 'drop' symbol with technical
specifications]

The keytype should appear on all external communications, including stationery, labels, envelopes, business cards, brochures, mailings, advertisements, other printer material and where possible, all types of electronic mail, as well as buildings, signs, exhibition material, products and packaging, as directed by these guidelines or as instructed by Corporate Communications. It should also appear on internal communications, e.g., loan's and policies, and may be employed on clothing.

Generally the logotype should appear in a prominent position towards the top of all area in which it appears or, sometimes as a sign off, at the bottom. When used large, the logotype should normally be placed centrally and when smaller towards the right (approximately two-thirds of the way across the page or area in which it sits).

The 'drop' symbol may be used as a decorative element and also as a principal identifier when there is restricted space (as long as there are other elements to support or qualify it, such as a line of text). It may also appear with other elements for specific applications as directed by Corporate Communications in Uppsala.

the Amersham Pharmacia Biotech name

In legal context The full name of the relevant legal entity should be used including the appropriate suffix, e.g. AD or Inc.

[Inaccurate versions of the 'drop' symbol and logotype reproduced]

logotype specification

colours
logotype lettering
black
white out of black
logotype 'drop' symbol:
 high gloss silver/chrome or black

Signing off letters and documents The full name should also be used when signing off letters and documents. It should be set after the author's name

and accompanied by the department name. Direct telephone number and e-mail address may be added below.

In daily speech In all external communications the company must always be referred to as "Amersham Pharmacia Biotech", unless a specific regional or sales company is being referred to. Should an abbreviated terms of the company name be needed, "AP Biotech must be used. Under no circumstances should any other forms of the company name be employed, e.g. APB

In body copy In body copy the company is always called Amersham Pharmacia Biotech, unless a specific regional or sales company is being referred to.

Responsibility for our Identity. It is the responsibility of the head  $\,$ of all companies and departments within Amersham Pharmacia Biotech, as it is of everyone who uses the information set out in these pages, to ensure the identity guidelines of the company are followed

high gloss silver/chrome or white out of black

logotype artwork use only the specially prepared artwork to reproduce the symbol and logotype.

log ba (&F).aps/log blk&F.tps master artwork for the logotype solid black (although this may also be used to produce separated fall artwork)

log ba &F.eps master artwork for the logotype solid black (produce separated artwork)

log wh 85.eps master artwork for the logotype when reproduced whilte out of black when less than 65mm

Log wh +85. eps master artwork for the logotype when reproduced white out of black when more than 65mm

Sym blk.eps master artwork for the 'drop' symbol reproducing as solid black (although this may be used to produce separated full artwork)

Exceptions to the rule may not be made without the prior approval of Corporate Communications in Uppsala. Any questions regarding the identity or its implementation should also be forwarded there.

Amersham Pharmacia Biotech, Corporate Communications, Uppsala, Sweden tel 46 18165000 fax 46 1816 64 22 Sym F. eps
master artwork for the 'drop' symbol
(separated full artwork)

Sym wh.eps master artwork for the 'drop' symbol when reproduced white out of black.

Schedule 13(b)(ii)

TRADE MARK LICENSE AGREEMENT (this Agreement) made March 2,1999

#### BETWEEN

- (1) NYCOMED AMERSHAM PLC, (Company no. 1002610), a company incorporated in England whose registered office is at Amersham Place, Little Chalfont, Buckinghamshire, England HP7 9NA UK (Licensor)
- (2) BIOCHROM LIMITED, a limited liability company incorporated in England whose registered office is at Cambridge Science Park, Milton Road, Cambridge CB4 4FJ, England (Licensee).

## WHEREAS

- (A) The Licensor is the beneficial owner and the registered proprietor or has made application for the registration of, and licenses or through its associated companies has used in connection with its business for a number of years, the Licensed Marks, the particulars of which are set out in Schedule 1.
- (B) The Licensor has agreed to grant or to cause to procure the grant to the Licensee of certain rights in respect of the Licensed Marks subject to the terms and conditions of this Agreement.
- (C) This Agreement has been entered into in pursuance of the Asset Purchase Agreement dated March 2, 1999 (the Asset Purchase Agreement) which contemplates the sale to Licensee by Pharmacia Biotech (Biochrom) Limited (Biochrom) of substantially all of the assets of Biochrom, and the Distribution Agreement dated March 2, 1999 (the Distribution Agreement) between Licensee and Amersham Pharmacia Biotech AB (AP Biotech) being entered into in connection with the Asset Purchase Agreement.

# IT IS AGREED AS FOLLOWS

## DEFINITIONS

1.1 In this Agreement unless the context otherwise requires the following expressions shall have the following meanings (capitalized terms used herein without definition have the meanings assigned to them in the Distribution Agreement).

Business means the manufacture and sale by Biochrom of the Products and the distribution of the Products as contemplated in the Distribution Agreement.

Licensed Marks means those trade marks which are registered or the subject of a pending application particulars of which are set out in Schedule 1.

Products means the Current Products and New Products as defined in the Distribution Agreement.

## INTERPRETATION

- 1.2 In this Agreement unless the context otherwise requires:
- (a) reference to persons shall include individuals, bodies corporate (wherever incorporated), unincorporated associations and partnerships;
- (b) the headings are inserted for convenience only and shall not affect the construction of the Agreement;
- $% \left( 0\right) \left( 0\right) =0$  (c) references to one gender shall include each gender and all genders; and
- (d) any reference to an enactment is a reference to it as from time amended, consolidated or re-enacted (with or without modification) and includes all instruments or orders made under such enactment.
- $1.3\ \mathrm{The}$  schedules comprise Schedules to this Agreement and form part of this Agreement.

## GRANT OF LICENSE

- 2.1 In consideration of the good and valuable consideration given by the Licensee in pursuance of the Asset Purchase Agreement and the Distribution Agreement, the Licensor hereby grants to and/or agrees to cause to procure the grant to the Licensee of a royalty-free, non-exclusive, non-sublicensable license to use, solely in connection with the Business, the Licensed Marks on or in relation to the Products, subject to the provisions set out in this Agreement. The Licensee acknowledges and agrees that, after four (4) months from the Closing Date (as defined in the Asset Purchase Agreement) or, in the case of Fisher Scientific Limited, after December 3 1, 1999, the Licensee shall be entitled to use the Licensee Marks solely in connection with the Products to be sold by the Licensee to AP Biotech pursuant to the Distribution Agreement unless AP Biotech shall otherwise consent in writing.
  - 2.2 The license granted hereunder shall be for the term of this Agreement.
- 2.3 The Licensor or Licensee shall at the request of the other party execute and at Licensee's expense take all steps reasonable requisite for the registration or recordal of the license granted hereunder in such form as may be reasonably required by the requesting party. The Licensee agrees that any such recordal may be canceled by the Licensor on the termination of this Agreement in accordance with its terms and that it will assist the Licensor so far as is necessary

to achieve such cancellation by executing any necessary documents or doing any necessary acts in connection therewith.

#### CONDITIONS OF USE

- 3.1 The Licensee hereby undertakes that:
- (a) it will use the Licensed Marks only in relation to Products which conform to the current quality standards used by Licensee or AP Biotech;
- (b) it will use the Licensed Marks (including, without limitation, both with respect to presentation of the Licensed Marks on the Products, packing, wrappers, notepaper, price lists, advertisements and other promotional material and the like and with respect to shaping, printing style, colour, quality of materials used and otherwise) only in the form set out in Schedule 2 or as may from time to time be approved by the Licensor or AP Biotech;
- (c) it will not use the Licensed Marks together or in combination with any other marks, names, words, logos, symbols or devices other than: (i) those specified in Schedule 1 or the trademarks licensed to Licensee by Pharmacia & Upjohn, Inc. under a Trade Mark License Agreement of even date hereof-, and (ii) the names "Biochrom" and "Harvard", whether jointly or separately, and all related and associated logos and trademarks;
- (d) it will not use the Licensed Marks in relation to any goods other than the Products nor use or seek to register any other trade or service marks which are similar to or substantially similar to or so nearly resemble the Licensed Marks as to be likely to cause deception or confusion;
- (e) it shall, when requested to do so by the Licensor or AP Biotech, supply the Licensor and AP Biotech with details of any written complaints made by customers relating to the Products together with reports, if any exist, on the manner in which such complaints are being or have been dealt with and shall comply with any reasonable directions or recommendations given by the Licensor or AP Biotech in respect thereof,
- (f) it shall submit to the Licensor and AP Biotech for their approval a specimen of every new advertising or promotional material issued or created by Licensee in which the Licensed Marks appear and the Licensee undertakes not to use or distribute such material unless and until the Licensor and AP Biotech shall have approved the same in writing. If Licensor and AP Biotech fail to respond within twenty-eight (28) days the foregoing material will be deemed approved;
- (g) to the extent consistent with past practice, it will include on the Products and in all documentation and material referred to in paragraphs (b) and (f) a statement that the relevant Licensed Mark is the registered trade mark or the trade mark as the case may be

of the Licensor; and

(h) it will not use the Licensed Marks in a manner which is likely to cause material harm to the goodwill attached to the Licensed Marks.

The parties acknowledge that AP Biotech is a distributor of the Products and that Licensee shall not be responsible for, or deemed to control, the actions or omissions of AP Biotech.

#### APPROVAL, INSPECTION AND TESTING

- 4.1 On reasonable request by the Licensor or AP Biotech, the Licensee agrees to supply at Licensor's sole expense t6 the Licensor or AP Biotech samples of the Products offered for sale under the Licensed Marks.
- 4.2 The Licensee shall, on reasonable prior notice from the Licensor or AP Biotech, permit the Licensor, AP Biotech and/or their representatives or agents at all reasonable times access to the premises of the Licensee to inspect the Products as manufactured and/or offered for sale by the Licensee under the Licensed Marks and the method by which the Products are manufactured, packed and labelled. The Licensee undertakes that it will do such things as may reasonably be necessary to ensure that such Products are processed, packed and labelled by the methods and in conformity with such specifications and standards of quality consistent with Biochrom's past practices. Licensor and its representatives, however, shall sign a confidentiality agreement on a form acceptable to Licensee before any such inspection may take place.
- 4.3 If (consequent on any such inspection by any representatives or agent of the Licensor or AP Biotech as is referred to in Clause 4.2) it is found that any licensed Products bearing or intended to bear the Licensed Marks are not in conformity with any of the Licensee's obligations under Clause 4 hereof and the Licensor or AP Biotech shall give the Licensee written notice of that fact, the Licensee undertakes that it will not sell any of such non-conforming Products under the Licensed Marks without the prior written consent of the Licensor or AP Biotech.

### MAINTENANCE OF TRADEMARKS

5.1 Licensor shall at its own expense take any and all action that may be required to maintain the registration of any of the Trademarks.

## INFRINGEMENTS

 $6.1 \; \mathrm{The} \; \mathrm{Licensee}$  and Licensor shall forthwith give written notice (in accordance with the

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provisions of Clause 12) to the other party of any of the following matters which may at any time during the continuance of this Agreement come to their knowledge, giving full particulars thereof:

- (a) any infringement or suspected or threatened infringement of the Licensed Marks, whether by reason of imitation of get-up or otherwise;
- (b) any allegation or complaint made by any third party that the use by the Licensee of the Licensed Marks in accordance with this Agreement may be liable to cause deception or confusion to the public; or
- (c) any other form of attack, charge or claim to which the Licensed Marks may be subject;

Provided always that the notifying party shall not make any admissions in respect of such matters other than to the notified party and provided further that the notifying party shall in every case furnish the notified party with all information in its possession relating thereto which may be reasonably required by the notified party.

- 6.2 Licensor shall consult with Licensee on any matter within the scope of Clause 6.1 on the appropriate course of action. The Licensor shall have the sole right to assume the conduct of any actions and proceedings (whether in its own name or that of the Licensee) relating to the Licensed Marks and shall bear the costs and expenses of any such actions and proceedings. Any costs or damages recovered in connection with any such actions or proceedings shall be for the account of the Licensor.
- 6.3 The Licensee undertakes and agrees that it will indemnify and hold the Licensor harmless from and against all costs and expenses (including, without limitation, legal costs, fees and expenses), actions, proceedings, claims, demands, and damages arising from:
  - (a) a breach of this Agreement by the Licensee; and
  - (b) the Licensee's use of the Licensed Marks on defective products.
- $6.4\ {\rm The\ Licensor\ shall}$  not be obliged to bring or extend any proceedings relating to the Licensed Marks if it decides in its sole discretion not to do so.

## TERM AND TERMINATION

7.1 This Agreement shall continue, unless terminated in accordance with Clause 7.2 or 7.3, until terminated at any time by either party in writing as specified in Clause 11 giving at least eighteen (18) months advance notice, provided that Licensor shall not have any right to give such notice before the date which is eighteen (18) months following the date first above written.

- 7.2 This Agreement shall terminate immediately upon the occurrence of either of the following events:
  - (a) termination of the Distribution Agreement; or
- (b) termination of the Trade Mark License Agreement dated August 4, 1997, between Licensor and AP Biotech;

such termination to take effect immediately upon the effective date of termination of either such agreement identified above.

- 7.3 Notwithstanding the provisions of Clause 7.1 forthwith upon the occurrence of any of the following events, the Licensor or Licensee, as the case may be, may (without prejudice to any other right of remedy) by written notice to the other party terminate this Agreement with immediate effect:
- (a) if the Licensee or Licensor commits a breach of any obligation under this Agreement, including a breach of any representation or warranty, and fails to remedy it within sixty (60) days of receipt of notice from the Licensor or Licensee, as the case may be, of such breach; or
- (b) if the Licensee enters into liquidation whether compulsory or voluntary, other than for the purposes of amalgamation or reconstruction approved in writing by the Licensor on the basis that the resulting company undertakes that other party's obligations under this Agreement and is commercially acceptable to the former party, or has a receiver or administrative receiver or administrator or similar official appointed over all or any of its assets and is not discharged within a period of thirty (30) days;
- $\,$  (c) if the Licensee is declared insolvent or makes any general composition with its creditors;
- $\,$  (d) if the Licensee ceases or threatens to cease to carry all or any material part of its business;
  - (e) Intentionally omitted.
- (f) if any distress, execution or exception is levied on any of the assets of the Licensee or if any judgment of a monetary sum is given against the Licensee and is not paid out within forty-five (45) days; or
- (g) if the Licensee shall challenge the validity of or the entitlement of the Licensor to use or license the use of the Licensed Marks.
- 7.4 Termination of this Agreement shall not release either of the parties from any other liability which at the time of termination has already accrued to the other party, nor affect in any way the survival of any other right, duty or obligation of the parties which is expressly stated elsewhere in this Agreement to survive such termination.

## EFFECTS OF TERMINATION

- 8.1 Upon termination of this Agreement for any reason, the rights and license granted hereunder to the Licensee shall cease and determine and the Licensee shall forthwith discontinue any and all use of the Licensed Marks save that, except in the case of a termination pursuant to Clause 7.3(a) attributable to a breach by the Licensee of an obligation under this Agreement or pursuant to Clause 7.3(g), the Licensee may continue to sell solely in connection with the Business the Products bearing the Licensed Marks in stock at the date of termination for ninety (90) days provided that the Licensee shall comply with the terms and conditions hereof in respect of the sales of such Products during such period.
- 8.2 Upon termination, or expiration of the period referred to in Clause 8.1, whichever is the later, the Licensor or AP Biotech may request that the Licensee delete or remove the Licensed Marks from or (where such deletion or removal is not reasonably practicable) destroy or, if the Licensor or AP Biotech shall so elect, deliver to the Licensor, AP Biotech or any other company, firm or person designated by the Licensor or by AP Biotech, all Products and all wrappers and packing and all price-lists, sheets of note paper and the like and all other materials or documents in the possession or under the control of the Licensee to which the Licensed Marks are then affixed or approved. In the event that Licensor or AP Biotech elect to have any such Products delivered to them, Licensor or AP Biotech (as the case may be) shall, after receipt of such Products, pay their market value to Licensee.

## ACKNOWLEDGEMENT

- 9.1 The Licensee recognizes the Licensor's title to the Licensed Marks and shall not at any time do or suffer to be done any act or thing which is likely in any way to prejudice such title. It is understood that the Licensee shall not acquire and shall not claim any title to the Licensed Marks or the goodwill attaching thereto by virtue of the rights hereby granted to the Licensee or through the Licensee's use of the Licensed Marks, either before, on or after the date of this Agreement, it being the intention of the parties that all use of the Licensed Marks by the Licensee shall at all times inure to the benefit of the Licensor.
- 9.2 Licensee hereby represents and warrants that it has the full power and authority to enter into this Agreement and that its execution, delivery and performance of this Agreement has been duly authorized by all required corporate action by Licensee.
- 9.3 Licensor hereby represents and warrants that (i) it has the full power and authority to grant to Licensee all of the rights granted to Licensee herein and that its execution, delivery and performance of this Agreement has been duly authorized by all required corporate action by Licensor, (ii) Licensor and its affiliates are the sole legal and beneficial owners of the Licensed Marks, and (iii) it is unaware of any rights in the Licensed

Marks superior to its rights or those of its affiliates.

#### LAW AND CONSTRUCTION

 $10.1\ \mathrm{This}\ \mathrm{Agreement}$  is governed by and shall be construed in accordance with the laws of England and Wales.

#### ARBITRATION

- 11.1 All disputes between the parties arising out of the circumstances and relationships contemplated by this Agreement including disputes relating to the validity, construction or interpretation of this Agreement and including disputes relating to pre-contractual representations shall be settled by arbitration as follows:
- 11.2 The parties hereby agree to cooperate in good faith to resolve any disputes, claims or controversies that may arise hereunder or with respect to the performance by either party of its obligations as contemplated hereby.
- 11.3 In the event that any dispute, claim or controversy shall not be so resolved by the parties between themselves, the parties agree that any and all disputes, claims or controversies arising out of or relating to this Agreement or a breach thereof, whether grounded in common law or statutory law, shall be finally settled in accordance with the Arbitration Rules of the International Chamber of Commerce in effect on the date hereof. Save as otherwise expressly provided herein the procedural rules shall be the rules of the High Court in England and Wales and the lex curiae shall be the law of England and Wales.
- 11.4 The number of arbitrators shall be three, chosen in accordance with the procedures set out in this Clause 11. The award of the arbitrators shall be final and binding on the parties.
- 11.5 Each party shall appoint one arbitrator. If within (30) days after receipt of the claimant's notification of the appointment of an arbitrator the respondent has not notified the claimant of the arbitrator it appoints, the second arbitrator shall be appointed by the appointing authority.
- 11.6 The arbitrators thus appointed shall choose a further arbitrator who will act as the presiding arbitrator of the tribunal. If within (30) days after the appointment of arbitrators under Clause 11.5 above, they have not agreed upon the choice of the presiding arbitrator, then at the request of any party to the arbitration proceeding the presiding arbitrator shall be appointed by the appointing authority.
- 11.7 The Chartered Institute of Arbitrators, London, England shall be the appointing authority.

- 11.8 At the request of any party to the arbitration ("requesting party") the arbitrators shall order the other party ("furnishing party") to supply and furnish to the requesting party (the cost of which shall be reimbursed upon demand by the requesting party to the furnishing party) true and complete copies of the relevant documents and materials (the "Relevant Materials") and to produce to the arbitral tribunal any or all of the Relevant Material and/or copies thereof as any part of the arbitral tribunal shall require.
- 11.9 The procedures leading to the production of Relevant Material under this paragraph shall be determined by the arbitrators, and may include the preparation of lists of Relevant Material for initial evaluation by the requesting party prior to disclosure and/or inspection of Relevant Material by the requesting party prior to supply and furnishing the copies. In making such determination, the arbitrators shall take into account the urgency with which the Relevant Material should be brought before the arbitral tribunal.
- 11.10 No party shall use or disclose any Relevant Material obtained under this paragraph for any purpose except in the course of the conduct of the arbitration and (as far as applicable) proceedings before any court, and then only to the extent necessary for the implementation and enforcement of any aware of the arbitrators.
- 11.11 The arbitration, including the making of the award, shall take place in London, U.K.
- 11.12 All submissions and awards in relation to arbitration hereunder shall be made in English and all arbitration proceedings shall be conducted in English.
- 11.13 The failure or refusal of either party to submit to arbitration in accordance with this Clause 11 shall be deemed a breach of this Agreement. If either party seeks and secures judicial intervention requiring enforcement of this arbitration provision, such party shall be entitled to recover from the other party in such judicial proceeding all costs and expenses, including reasonable attorneys' fees, that it was thereby required to incur.
- 11.14 The procedures specified in this Clause 11 shall be the sole and exclusive procedures for the resolution of disputes between the parties arising out of or relating this Agreement; provided, however, that a party, without prejudice to the above procedures, may seek equitable remedies, including without limitation, specific performance, a preliminary injunction or other provisional judicial relief if in its sole judgment such action is necessary . to avoid irreparable damage or to preserve the status quo.

# NOTICES

12.1 Any notice or other communication to be given by one party to any other party under, or in connection with the matters contemplated by, this Agreement shall be in writing and signed by or on behalf of the party giving it and may be served by delivering it or sending it by fax, pre-paid recorded delivery or registered or certified post to the address and for the attention of the relevant party set out in Clause 12.2 (or as otherwise notified from time to time hereunder). Any

notice so served by hand, fax or post shall be deemed to have been received

(a) in the case of delivery by hand, when delivered;

(b) in the case of fax, twelve (12) hours after the time of dispatch;

(c) in the case of pre-paid recorded delivery or registered post, forty-eight (48) hours from the date of posting.

12.2 The addresses of the parties for the purpose of Clause 12.1 are as follows:

Address: Nycomed Amersham plc

Amersham Place Little Chalfont

Buckinghamshire HP7 9NA, England

UK

Att: Robert Allnutt, Esq.

Fax: 44 1494 542242

Address: Amersham Pharmacia Biotech AB

Bjorkgatan 30 SE-751 84 Uppsala

Sweden

Att: Ulf Lundberg, Esq.

Fax: 46 18 165 322

Address: Curtis, Mallet-Prevost, Colt & Mosle

101 Park Avenue New York, NY 10178 Att: Eric Gilioli, Esq.

Fax: (212) 697-1559

Address: Biochrom Limited

Cambridge Science Park Milton Road

Cambridge CB4 4FJ

England

Att: Barry Brown

Fax: 44 1223 420238

Address: Goodwin, Procter & Hoar LLP

Exchange Place Boston, MA 02109

Att: H. David Henken, P.C.

Fax: (617) 523-1231

Address: Cameron McKenna

Mitre House 160 Aldersgate Street

London, EC1A 4DD

Attention: Guilherme Brafman

Fax: 44-171-367-2000

# NON-ASSIGNABILITY

- 13.1 The Licensee may not nor may not purport to assign, transfer, change or part with all or any of its rights and/or obligations under this Agreement or sub-contract the performance of any of its obligations under this Agreement without the prior written consent of the Licensor. A change of control of the Licensee shall be deemed an assignment hereunder. For purposes of this Clause 13.1, "control" shall mean the ownership of the majority of ordinary share capital or the ability to cast the majority of the votes at a general meeting of Licensee, to appoint the majority of the board of directors or to direct the general management of Licensee. The sale of substantially all of the assets of Licensee shall also be deemed a change of control for purposes of this Clause
- 13.2 Any right, power, privilege or remedy of a party under or pursuant to this Agreement shall not be capable of being waived or varied otherwise than by an express waiver or variation in writing.
- 13.3 No failure or delay by any party in exercising any right, power, privilege or remedy shall impair such right, power, privilege or remedy or operate or be construed as a waiver or variation thereof or preclude its exercise at any subsequent time or on any subsequent occasion and no single or partial exercise of any such right, power, privilege or remedy shall preclude any other or further exercise thereof or the exercise of any other right, power, privilege or remedy.

## SEVERANCE

 $14.1\ \text{If}$  any provision of this Agreement is held to be invalid or unenforceable, then such provision shall (so far as invalid or unenforceable) be given no effect and shall be deemed not to

be included in this Agreement but without invalidating any of the remaining provisions of this Agreement. The parties shall then use all reasonable endeavors to replace the invalid or unenforceable provisions by a valid and enforceable substitute provision the effect of which is as close as possible to the intended effect of the invalid or unenforceable provision.

## ENTIRE AGREEMENT

15.1 This Agreement, including the Schedules referred to herein, is complete, reflects the entire agreement of the parties with respect to its subject matter, and supersedes all previous written or oral negotiations, commitments and writings in connection therewith.

In witness whereof, the parties have executed this Agreement as of the date first above written.  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

NYCOMED AMERSHAM PLC

By:	
	Name: Title:
BIOC	HROM LIMITED
By:	
	<pre>Name: Title:</pre>

Schedule 1

# Licensed Marks

# Corporate Trademarks; AMERSHAM 22 December 1998

# AMERSHAM

Country	App. No.	Reg. No.
Argentina		1515753 1515755 1797465 1515752 1515751 1515754 B359261 B359260 B400211 B400213 B400214 B400214
Austria		97957
Benelux		366718
Brazil	817657231 817657240	817657223
	817657258 817657215	817657207
	61/63/213	817657266
Canada		353995
France		1714292
Germany		647795
Greece		128839

Country	App. No.	Reg. No.
Hong Kong		5615A-B1996
India	703032	
Indonesia		323408 323405 323407 323406 323409 323410
Italy		393994 376290
Japan		1708820 1773613 1551216 1708820
Mexico		473600 473599 473601 473602 473603 473598
New Zealand		160043 160042 160041 160040 106039 160038 160037
South Africa		85/5523 85/5520 85/5521 85/5522 85/5524 85/5525 85/55265
Spain		971081 971080

Country	App. No.	Reg. No.
		971079 971078 991327 1026239
Sweden		174766 179341
Switzerland		344329
Taiwan	85-014275	800207 777864
United Arab Emirates		3214 3211
USA		1457058

Schedule 2

# Form of Licensed Marks

the logotype (lettering and symbol) and 'drop' symbol

logotype specifications

- o how to use our logotype and the  $\,$ 'drop' symbol
- o the Amersham Pharmacia Biotech name
- o artwork reference

## amersham/pharmacia biotech

The company symbol and logotype are principal items of the identity and, as such, they must be employed with great care in accordance with the rules and guidelines set our in this document, together with any other instructions issued by Corporate Communications in Uppsala.

The logotype D consists of the symbol(or 'drop' as it is often called) and specifically centered lettering. In normal circumstances they should appear together, although on certain occasions, where indicated, the 'drop' symbol O may appear without the lettering. The lettering in this form  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ must not be used on its own.

amersham pharmacia biotech

The 'drop' symbol and the logotype may only be reproduced using the highest quality originals. No attempt must be made to reproduce either mark from anything other than the reproduction artwork or computer files supplied by Corporate Communications in Uppsala.

To afford these marks their appropriate status and to ensure that they are clearly recognized, an area around each device must be kept free of other visual elements. No additions or amendments to the 'drop' symbol or logotype are permitted.

Creative use of the symbol and logotype is only allowed with the express permission of the head of Corporate Communications in Uppsala.

[The 'drop' symbol with technical specifications]

amersham pharmacia biotech

The 'drop' symbol should always be reproduced in high gloss silver/chrome or, where this is not possible, in black. The lettering should appear in black only. Both the 'drop' symbol and the full logotype should normally appear on a white background; a colored background may be used (although this should be avoided as far as possible) as long as the color does not deduct from their visibility. They may also appear white out of black O using the artworks created for this purpose.

[The 'drop' symbol with technical specifications]

The keytype should appear on all external communications, including stationery, labels, envelopes, business cards, brochures, mailings, advertisements, other printer material and where possible, all types of electronic mail, as well as buildings, signs, exhibition material, products and packaging, as directed by these guidelines or as instructed by Corporate Communications. It should also appear on internal communications, e.g., loan's and policies, and may be employed on clothing.

Generally the logotype should appear in a prominent position towards the top of all area in which it appears or, sometimes as a sign off, at the bottom. When used large, the logotype should normally be placed centrally and when smaller towards the right (approximately two-thirds of the way across the page or area in which it sits).

The 'drop' symbol may be used as a decorative element and also as a principal identifier when there is restricted space (as long as there are other elements to support or qualify it, such as a line of text). It may also appear with other elements for specific applications as directed by Corporate Communications in Uppsala.

the Amersham Pharmacia Biotech name

In legal context
The full name of the relevant legal
entity should be used including the
appropriate suffix, e.g. AD or Inc.

[Inaccurate versions of the 'drop' symbol and logotype reproduced]

logotype specification

colours
logotype lettering
black
white out of black
logotype 'drop' symbol:
 high gloss silver/chrome or black
 high gloss silver/chrome or white out
 of black

Signing off letters and documents The full name should also be used when signing off letters and documents. It should be set after the author's name and accompanied by the department name. Direct telephone number and e-mail address may be added below.

In daily speech

In all external communications the company must always be referred to as "Amersham Pharmacia Biotech", unless a specific regional or sales company is being referred to. Should an abbreviated terms of the company name be needed, "AP Biotech must be used. Under no circumstances should any other forms of the company name be employed, e.g. APB

In body copy

In body copy the company is always called Amersham Pharmacia Biotech, unless a specific regional or sales company is being referred to.

Responsibility for our Identity. It is the responsibility of the head of all companies and departments within Amersham Pharmacia Biotech, as it is of everyone who uses the information set out in these pages, to ensure the identity guidelines of the company are followed

Exceptions to the rule may not be made without the prior approval of Corporate Communications in Uppsala. Any questions regarding the identity or its implementation should also be forwarded there.

logotype artwork use only the specially prepared artwork to reproduce the symbol and logotype.

log ba (&F).aps/log blk&F.tps
master artwork for the logotype solid black (although this may also be used to produce separated fall artwork)

log ba &F.eps master artwork for the logotype solid black (produce separated artwork)

log wh 85.eps master artwork for the logotype when reproduced whilte out of black when less than 65mm

Log wh +85. eps master artwork for the logotype when reproduced white out of black when more than 65mm

Sym blk.eps master artwork for the 'drop' symbol reproducing as solid black (although this may be used to produce separated full artwork)

Sym F. eps master artwork for the 'drop' symbol (separated full artwork)

Amersham Pharmacia Biotech, Corporate
Communications, Uppsala, Sweden tel 46
18165000 fax 46 1816 64 22
Sym wh.eps
master artwork for the 'drop' symbol when reproduced white out of black.

# INDEPENDENT AUDITORS' CONSENT

The Board of Directors Harvard Apparatus, Inc.:

We consent to the inclusion of our report dated February 25, 2000, with respect to the consolidated balance sheets of Harvard Apparatus, Inc. and subsidiaries as of December 31, 1999 and 1998 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, 1999 which report appears in this Registration Statement, and to the reference to our firm under the heading "Experts" in this Registration Statement.

/s/ KPMG LLP

Boston, Massachusetts September 18, 2000

EXHIBIT 23.3

# CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Registration Statement on Form S-1 of our reports dated February 26, 1998 (for the year ended December 31, 1997) and April 9, 1999 (for the year ended December 31, 1998), except for the US GAAP reconciliation as described in Note 24 which is at September 15, 2000, relating to the financial statements and financial statement schedules of Pharmacia & Upjohn (Cambridge) Limited, which appear in the Registration Statement. We also consent to the references to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers

PRICEWATERHOUSECOOPERS Cambridge, England September 18, 2000

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM CONSOLIDATED BALANCE SHEETS AT DECEMBER 31, 1999 AND JUNE 30, 2000 AND CONSOLIDATED STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 1999 AND THE SIX MONTHS ENDED JUNE 30, 2000 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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