As filed with the Securities and Exchange Commission on May 14, 1996 Registration No. 33-48717 SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 POST-EFFECTIVE AMENDMENT NO. 3 TO FORM S-1 REGISTRATION STATEMENT UNDER The Securities Act of 1933 BIOTIME, INC. (Exact name of Registrant as specified in charter) California 8099 94-3127919 (Primary Standard Industrial (I.R.S. Employer Identification Number) (State or other jurisdiction of Industrial incorporation Classification or organization) Code Number) Paul E. Segall, President 935 Pardee Street BioTime, Inc. 935 Pardee Street Berkeley, California 94710 (510) 845-9535 Berkeley, California 94710 (510) 845-9535 (Name, address, including zip (Address, including zip code, and telephone number, including area code, and telephone number, including area code, of Registrant's principal executive offices) code, and telephone number, including area code, of agent for service) Copies of all communications, including all communications sent to the agent for service, should be sent to: RICHARD S. SOROKO, ESQ. Lippenberger, Thompson, Welch & Soroko LLP 250 Montgomery Street, Suite 500 San Francisco, California 94104 Tel. (415) 421-5300 CROSS REFERENCE SHEET Pursuant to Item 501(b) of Regulation S-K Under the Securities Act of 1933, as amended Item in Part I of Form S-1 Caption and Subcaption in Prospectus Forepart of the Registration Statement and Outside Front Cover Page of Prospectus......Outside Front Cover Page Inside Front and Outside Back Cover Pages of Prospectus.......Inside Front and Outside Back Cover Pages Summary Information; Risk Factors and Ratio of Earnings to Fixed Charges.......Prospectus Summary; Risk Factors Use of Proceeds......Inapplicable Determination of Offering Price.......Cover Page; Plan of Distribution 6. Dilution......Inapplicable

Selling Securityholders......Selling Shareholders

10	Interests of Named Experts and Counsel	Inapplicable
10.	Three ests of Mained Experts and Counsel	. Thappiicable
11.	Information With Respect to the Registrant	.Prospectus Summary; Selected Financial Information Management's Discussion and Analysis of Financial Condition and Results of Operations; Business; Management; Certain Transactions; Principal Shareholders; Description of Securities; Financial Statements
12.	Disclosure of Commission Position on Indemnification for Securities Act Liabilities	.Inapplicable

Description of Securities to be Registered................Description of Securities

**PROSPECTUS** 

BIOTIME, INC.

# 147,473 COMMON SHARES

This Prospectus relates to 11,400 common shares, no par value ("Common Shares") of BioTime, Inc. (the "Company" or "BioTime") presently outstanding, 60,000 Common Shares issuable upon the exercise of certain warrants sold to investors who purchased BioTime Series A Convertible Preferred Shares (the "Warrants"), and 76,073 Common Shares issuable upon the exercise of certain warrants sold to the underwriter of BioTime's initial public offering of Common Shares (the "Underwriter's Warrants"). The Company will receive none of the proceeds from the sale of the Common Shares offered and sold by the Selling Shareholders named herein. Holders of the Warrants and Underwriter's Warrants may also rely upon this Prospectus in connection with the purchase of Common Shares from the Company through the exercise of their Warrants or Underwriter's Warrants. The Warrants will expire unless exercised by 5:00 p.m. Pacific Standard Time on the earlier of the date 30 calendar days after the date of this Prospectus or June 30, 1996 (unless the expiration date is extended to a later date by the Company), or the day immediately preceding the date on which the Warrants are redeemed by the Company. The Underwriter's Warrants will expire unless exercised by 5:00 p.m. Eastern Standard Time on March 4, 1997.

The Common Shares are authorized for trading on the National Association of Securities Dealers, Inc. Automated Quotations system ("NASDAQ") Small-Cap Market under the symbol BTIM and are listed for trading on the Boston Stock Exchange under the symbol BTM. The Selling Shareholders may sell their Common Shares from time to time at prices and on terms then prevailing, or at prices related to the then current market price, or in negotiated transactions. Selling Shareholders who are not brokers or dealers may pay usual and customary brokerage fees, commissions and discounts in connection with the sale of their Common Shares.

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THESE SECURITIES INVOLVE A HIGH DEGREE OF RISK AND SHOULD BE PURCHASED ONLY BY PERSONS WHO CAN AFFORD THE LOSS OF THEIR ENTIRE INVESTMENT. SEE "RISK FACTORS".

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THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is May 14, 1996

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith files reports and other information with the Securities and Exchange Commission. Reports, proxy and information statements and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C., at its New York Regional Office at 7 World Trade Center, Suite 1300, New York, New York, 10048, and at its Chicago Regional Office at 500 West Madison Street, Suite 1400, Chicago, Illinois 60621-2511. Copies of such material can be obtained from the Public Reference Section of the Commission, Washington, D.C. 20549 at prescribed rates.

### PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and financial statements appearing elsewhere in this Prospectus. Except as otherwise noted, all information in this Prospectus, (i) has been adjusted to give effect to a 1-for-6 reverse stock split effective July 17, 1991, (ii) reflects the conversion of all outstanding Series A Preferred Shares into 120,000 Common Shares on March 12, 1992, (iii) assumes that outstanding warrants and options to purchase Common Shares are not exercised.

### The Company

BioTime Inc. ("BioTime" or the "Company") is a development stage company engaged in the research and development of aqueous based synthetic solutions that can be used as plasma expanders, blood substitutes during hypothermic (low temperature) surgery, and organ preservation solutions. These products are intended for several important medical applications, including: the emergency treatment of blood loss due to traumatic injury or during surgery; cardio-pulmonary bypass surgery; the replacement of very large volumes of a patient's blood during cardiac surgery and neurosurgery that involve lowering the patient's body temperature to hypothermic levels; the preservation of body organs and tissues awaiting transplant; cancer treatment; and other biomedical applications. Because the Company's solutions are synthetic, rather than human blood by-products, use of the solutions would not pose the risk of transmitting AIDS, hepatitis or other blood borne infectious diseases, and would not have to be matched to a patient's blood type.

The Company's first two blood replacement products are Hextend(TM) and PentaLyte(TM), which are composed of different hydroxyethyl starches, electrolytes, sugar and a buffer. The Company believes that a solution that sustains the patient's fluid volume and physiological balance, thereby maintaining tissue and organ function, can reduce or eliminate the need for supplemental whole blood and blood plasma. Based upon the results of its laboratory research, the Company has determined that in many emergency care and surgical applications, it is not necessary for the solution to include special oxygen carrying molecules to replace red blood cells. Therefore, the Company has devoted its efforts to the development of formulations that do not rely upon the use of recombinant DNA or other complex technologies to synthesize and assimilate into solution costly and potentially toxic oxygen carrying molecules such as hemoglobin and perfluorocarbons.

The Company has filed an Investigational New Drug Application ("IND") with the United States Food and Drug Administration (the "FDA") for permission to commence clinical trials of Hextend(TM) in human patients. Because of the proven safety of the components of Hextend(TM) in other pharmaceutical products, the Company plans to conduct its first clinical trial

as a Phase III trial involving fewer than 100 patients. Clinical trials may begin during the late summer or early fall of 1996. Although BioTime has conducted pharmacology and toxicology testing of Hextend(TM), and has compiled a significant amount of data demonstrating the safety and efficacy of Hextend(TM) in laboratory testing using animal subjects, the outcome of human trials cannot be predicted with certainty.

The proposed clinical trials have been designed to test Hextend(TM) as a blood plasma volume expander in surgical procedures that often involve a large amount of blood loss. A sufficient quantity of Hextend(TM) for the first clinical trials has been obtained, but before clinical trials can begin at any hospital or medical center, the trials must be approved by the institutional review board ("IRB") of that institution. See "BUSINESS - Government Regulation."

The time frame in which the Company will be able to proceed with the clinical testing necessary to file an New Drug Application ("NDA") for FDA approval depends in part upon the ability of the Company to obtain sufficient financing for that purpose, as well as a manufacturer willing to produce the solution in compliance with FDA "good manufacturing practices." The Company is seeking to obtain the necessary financing from one or more pharmaceutical companies that would be capable of manufacturing Hextend(TM) for commercial distribution when FDA approval is obtained. See "BUSINESS - Manufacturing;" and "Government Regulation."

To reduce the capital costs and delays inherent in acquiring or establishing a pharmaceutical manufacturing facility and establishing a marketing organization, the Company will seek contract, licensing or joint venture arrangements with one or more pharmaceutical companies for the production and marketing of the Company's products. If such arrangements cannot be made on acceptable terms, the Company would be required to obtain additional capital to construct or acquire its own manufacturing facilities and establish its own marketing organization. There is no assurance that the Company would be able to raise sufficient capital for those purposes.

The Company was incorporated under the laws of the State of California on November 30, 1990. The Company's principal office is located at 935 Pardee Street, Berkeley, California 94710. It telephone number at such office is (510) 845-9535.

# The Offering

11,400 Common Shares held by the Selling Shareholders, 60,000 Common Shares that may be issued upon the exercise of the Warrants, and 76,073 Common Shares that may be issued upon the exercise of the Underwriter's Securities Offered....

Warrants.

Risk Factors.....

An investment in the Common Shares involves a high degree of risk. The Common Shares should be purchased only by investors who can afford the loss of their entire investment. See "Risk Factors."

NASDAQ Symbol..... BTIM

Boston Stock

Exchange Symbol.....

BTM

Plan of Distribution..

Common Shares held by the Selling Shareholders and Common Shares issued upon the exercise of the Warrants or Underwriter's Warrants may be sold by the holders thereof from time to time at prices and on terms then prevailing, or at prices related to the then current market price, or in negotiated transactions.

# SUMMARY FINANCIAL INFORMATION

The following table sets forth certain summary financial information of the Company for the periods indicated. This information should be read in conjunction with the Company's financial statements (including notes thereto) appearing elsewhere in this Prospectus.

Statement of	Year Ended June 30,					Nine Months E	Period from Inception (November 30, 1990) to March 31,	
Operations Data:	1991(1)	1992	1993	1994	1995	1995	1996	1996
EXPENSES: Research and development	\$ (115,043)	\$ (383,705)	\$ (562,746)	\$ (777,668)	\$(1,791,698)	\$(1,196,340)	\$ (793,769)	\$(4,424,629)
General and administrative	(146,624)	(406,130)	(774, 101)	(931, 439)	(808, 432)	(631,390)	(528, 519)	(3,595,245)
Total expenses	(261,667)	(789,835)	(1,336,847)	(1,709,107)	(2,600,130)	(1,827,730)	(1,322,288)	(8,019,874)
INCOME: Interest	3,472	57,568	119,592	152,438	218,416	156,877	105,296	656,782
Other	2,586	22,608	8,087	9,716	3,967	2,307	2,960	49,924
Total Income	6,058	80,176	127,679	162,154	222,383	159,184	108,256	706,706
Net loss	\$ (255,609)	\$ (709,659)	\$(1,209,168)	\$(1,546,953)	\$(2,377,747)	\$(1,668,546)	\$(1,214,032)	\$(7,313,168) =======
Net loss per share	\$ ( .24)	\$ ( .55)	\$ (.69)	\$ (.76)	\$ (.90)	\$ (.63)	\$ (.47)	\$ (3.82)
Shares used in calculating per share data		1,301,581	1,746,614	2,046,445	2,633,464	2,644,042	2,591,581	1,914,056

	June 30,						March 21
	1991 1992 1993 1994 1995			March 31, 1996			
Balance Sheet Data:							
Cash, cash equivalents and short term investments	\$87,085	\$4,756,734	\$ 3,404,927	\$ 5,719,046	\$ 3,440,896	\$	1,777,887
Working Capital	116,129	4,668,393	3,424,951	5,780,949	3,180,200		1,975,432
Total assets	167,250	4,849,786	3,519,268	5,909,050	3,610,330		2,166,169
Shareholders' equity	90,489	4,628,426	3,419,258	5,799,379	3,231,603		2,004,878

<sup>(1)</sup> Represents the period from inception (November 30, 1990) to June 30, 1991

### RISK FACTORS

AN INVESTMENT IN THE COMMON SHARES INVOLVES A HIGH DEGREE OF RISK. THE COMMON SHARES SHOULD BE PURCHASED ONLY BY INVESTORS WHO CAN AFFORD TO LOSE THEIR ENTIRE INVESTMENT. BEFORE DECIDING TO PURCHASE ANY OF THE COMMON SHARES OFFERED HEREBY, PROSPECTIVE INVESTORS SHOULD CONSIDER THE FOLLOWING FACTORS, AMONG OTHERS SET FORTH HEREIN, WHICH COULD MATERIALLY ADVERSELY AFFECT THE PROPOSED OPERATIONS AND PROSPECTS OF THE COMPANY AND THE VALUE OF AN INVESTMENT IN THE COMPANY.

### Development Stage Company

The Company is in the development stage, and, to date, has been principally engaged in research and development activities. The Company has not generated a significant amount of operating revenue and, as reflected in the financial statements, at March 31, 1996, the Company had incurred operating losses since inception of \$7,313,168. The Company has incurred additional losses since that date, and as a result of the developmental nature of its business can be expected to sustain substantial additional operating losses. The likelihood of the success of the Company must be considered in light of the expenses, difficulties and delays frequently encountered in starting a new business, particularly since the Company will be engaged in the research, development, production and marketing of new products and technologies which will utilize new and unproven methods and which may require many years and substantial expenditures to complete. There can be no assurance that the Company will be successful in developing, manufacturing or marketing (directly or through third parties) any products or technology. Even if the Company is able to successfully develop new products or technologies, there can be no assurance that the Company will generate sufficient revenues from the sale or licensing of such products and technologies to be profitable. See "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS" and "BUSINESS" and the financial statements included in this Prospectus.

### Additional Financing Required

The Company believes that its cash on hand will be sufficient to permit it to continue in operation for approximately 12 months. In addition to raising funds for research and working capital purposes, the Company needs to raise substantial additional financing to conduct clinical testing of its first product, Hextend(TM). Additional financing may also be required for production and marketing of Hextend(TM) and any other Company products that may be approved by the FDA or foreign regulatory authorities. Because of the developmental nature of the Company's business, it is highly unlikely that in the foreseeable future the Company will be able to generate internally the funds necessary to carry on its planned operations. There can be no assurance that the Company will be able to raise additional funds on favorable terms or at all, or that such funds, if raised, will be sufficient to permit the Company to develop and market its products. Unless the Company is able to raise additional funds when needed, it is likely that it will be unable to continue its planned activities, notwithstanding the progress of its research and

development projects. See "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS."

No Assurance of Proceeds to the Company

The Company will not receive any of the proceeds from the sale of Common Shares offered for the account of the Selling Shareholders. Although the Company would receive \$8.00 per Common Share issued upon the exercise of the Warrants, and \$7.81 per Common Share issued upon the exercise of the Underwriter's Warrants, it will be economical for the holders of Warrants and Underwriter's Warrants to exercise the Warrants or Underwriter's Warrants only if the Common Shares are trading in the public market at a price greater than the sum of the relevant exercise price plus any broker/dealer fees, commissions and discounts and other transaction costs that would be incurred by such holders in connection with the sale of Common Shares issued upon such exercise. There can be no assurance that the Common Shares will be trade at such prices. The Warrants will expire on the earlier of the date 30 calendar days after the date of this Prospectus or June 30, 1996 (unless the expiration date is extended to a later date by the Company), or the day immediately preceding the date on which the Warrants are redeemed by the Company, and the Underwriter's Warrants will expire on March 4, 1997, and may not be exercised after the applicable expiration date.

Uncertainty as to Results of Research and Development; Unproven Products

The Company's business involves the attempt to develop new medical products and technologies. Such experimentation is inherently costly, time consuming and uncertain as to its results. If the Company is successful in developing a new technology or product, refinement of the new technology or product and definition of the practical applications and limitations of the technology or product may take years and require the expenditure of large sums of money. Hextend(TM) must be clinically tested and receive governmental approval prior to commercialization, and the Company's other proposed blood substitute and organ preservation solutions will require significant laboratory testing and development before applications for permission to commence clinical testing can be filed with the FDA. The Company does not expect its products to be available for commercial use or sale for at least two years. There can be no assurance that the Company's products will prove to be safe and efficacious in clinical trials, be produced in commercial quantities at reasonable prices, or be successfully marketed. See "BUSINESS--Government Regulation."

Uncertainty as to Human Application of Products

Hextend(TM) and the Company's other experimental products and technologies have not been applied in human medicine and have only been used in laboratory studies on animals. Because human physiology differs substantially from that of laboratory animals, the products and application protocols presently being used by the Company may have to be reformulated or modified for use in human medical procedures. There is no assurance that the Company will be successful in developing products and technologies for human medical procedures. Due to the high degree of risk associated with the application of new technologies and products in the

field of human medicine, the technologies or products developed by the Company for human application will have to undergo extensive successful trials, even after government approvals for use are obtained, before such technologies and products receive acceptance in the medical profession. See "BUSINESS--Research and Development Strategy."

# FDA and Other Regulatory Approvals Required

Preclinical and clinical trials and manufacturing and marketing of BioTime's medical products will be subject to the rigorous testing and approval processes of the FDA and corresponding foreign regulatory authorities. The regulatory process, which includes preclinical, clinical and post-clinical testing of each product to establish its safety and efficacy, can take several years to complete and require the expenditure of substantial time and funds. Data obtained from preclinical and clinical activities are susceptible to varying interpretations which could delay, limit or prevent FDA regulatory approval. In addition, delays or rejections may be encountered as a result of changes in FDA policy during the period of product development and FDA regulatory review of each submitted new product application. Similar delays may also be encountered in foreign countries. There can be no assurance that, even after substantial expenditures of time and money, regulatory approval will be obtained for any products developed by the Company. Moreover, even if regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which the product may be marketed. After regulatory approval is obtained, the approved product, the manufacturer and the manufacturing facilities are subject to continual review and periodic inspections, and a later discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on such product or manufacturer, including withdrawal of the product from the market. Failure to comply with the applicable regulatory approvals, product recalls, operating restrictions and criminal prosecution. Additional government regulation may be established which could prevent or delay regulatory approval of the Company's products. See "BUSINESS--Government Regulation."

## Availability of Raw Materials

Most of the blood substitute and organ preservation solutions being developed by the Company contain ingredients that are readily obtainable from multiple sources. However, Hextend, (TM) Pentalyte(TM) and other products being developed by the Company contain hydroxyethyl starch supplied to the Company by a pharmaceutical manufacturer that produces the same component under a contract with a third party for use in a plasma extender with which Hextend(TM) or one of the Company's other products might compete. BioTime is pursuing discussions with that pharmaceutical company and other manufacturers for the purpose of obtaining a source of supply. If such discussions are not fruitful, the Company may have to find a new source of the ingredient, and the new supplier would have to be approved by the FDA in order for the ingredient to be used in the commercial manufacture of blood substitute products in the United States. There is no assurance that any such alternate supply sources will be available on commercially reasonable terms, if at all. If commercially reasonable alternate supply sources are not available, the Company might decide to pursue development of other

versions of its solution that contain a chemically similar component that is more readily available from FDA approved sources, or the Company might decide to manufacture the ingredient. There is no assurance that the Company would have the financial or technical resources to establish a facility to manufacture the ingredient. See "BUSINESS--Manufacturing--Raw Materials."

Absence of Manufacturing and Marketing Capabilities

In order to obtain FDA approval for the sale of Hextend(TM) and other products, the Company will be required to conduct a portion of its clinical trials using solutions manufactured under "good manufacturing practices" required by the FDA. Accordingly, the Company will need to enter into product manufacturing arrangements with an established pharmaceutical company or will have to acquire or establish its own pharmaceutical manufacturing facilities before seeking FDA approval for the sale of its products. If any of the Company's products receive FDA approval, such products will then have to be manufactured in compliance with applicable federal and state regulatory requirements, in commercial quantities and at an acceptable cost and with sufficient stability to withstand the distribution process. The Company presently does not have adequate facilities or resources to manufacture its products in commercial quantities or in compliance with FDA standards. In order to reduce the capital costs and delays inherent in acquiring or establishing new pharmaceutical manufacturing facilities and establishing a marketing organization, the Company intends to seek contract, licensing or joint venture arrangements with one or more pharmaceutical companies for the production and marketing of the Company's products. If such arrangements cannot be made on acceptable terms, the Company would then be required to construct or acquire its own manufacturing facilities and establish its own marketing organization, which would entail significant expenditures of time and money. No assurance can be given that the Company will be successful in the establishment of contractual relationships with pharmaceutical companies for the manufacture and marketing of the Company's products, or, alternatively, in obtaining sufficient capital for the establishment of its own manufacturing and marketing capabilities. See "BUSINESS--Manufacturing;--Marketing."

### Competition

There are other companies and academic institutions that are seeking, or may seek, to develop products that may be competitive with the Company's proposed products. Many of these competitors have substantially greater financial, technical, research, clinical, production and marketing resources than the Company. The Company's competitors may succeed in developing products that are safer or more effective than those of the Company or that obtain FDA approval in less time than the Company's products. Developments by others could render the Company's products and technologies obsolete or noncompetitive. See "BUSINESS--Competition."

Uncertainty of Patent Protection

The Company has obtained patents in the United States, and has filed patent applications in  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

certain foreign countries, for certain products, including its blood substitute and organ preservation solutions. No assurance can be given that any foreign patents will be issued to the Company, or that, if issued, those patents and the Company's United States patents will provide the Company with meaningful patent protection, or that others will not successfully challenge the validity or enforceability of any patent issued to the Company. The costs required to uphold the validity and prevent infringement of any patent issued to the Company could be substantial, and the Company might not have the resources available to defend its patent rights. See "BUSINESS--Patents and Trade Secrets."

Uncertainty of Health Care Reimbursement and Reform

The Company's ability to successfully commercialize its products may depend in part on the extent to which reimbursement for the cost of such products and related treatment will be available from government health administration authorities, private health coverage insurers and other organizations. Significant uncertainty exists as to the pricing, availability of distribution channels and reimbursement status of newly approved health care products and there can be no assurance that adequate third party coverage will be available to enable the Company to maintain price levels sufficient for realization of an appropriate return on its investment in product development. In certain foreign markets, pricing or profitability of health care products is subject to government control. In the United States, there have been a number of federal and state proposals to implement similar government controls, and new proposals are likely to be made in the future.

### Potential Disputes Over Ownership of Technology

Because certain officers and directors of the Company were employees of Cryomedical Sciences, Inc. ("CMSI") prior to founding the Company, it is possible that CMSI might claim an ownership interest in products and technologies developed by the Company based upon the scope of research conducted by such persons while they were employed by CMSI, or based upon the terms of certain agreements between such scientists and CMSI with respect to the ownership of technology and products. To date, no such claims have been asserted against the Company by CMSI. CMSI holds patents with respect to certain low temperature blood substitute solutions. No assurance can be given that CMSI will not claim that the Company's products infringe upon CMSI's patents. The Company has obtained a non-exclusive license to use certain experimental low temperature blood substitute solutions developed by CMSI. The license is not assignable or transferable and is subject to termination under certain circumstances, including a sale of control of the Company. However, the Company is no longer using, and does not intend to pursue the commercialization of, the CMSI solutions. See "BUSINESS--Licensed Products and Technology," "MANAGEMENT" and "CERTAIN TRANSACTIONS."

## Dependence Upon Key Personnel

The Company depends to a considerable degree on the continued services of Paul Segall, Hal Sternberg and Harold Waitz. Although the Company maintains key man life insurance in the amount of \$1,000,000 on the life of Dr. Segall, the loss of the services of any of these

individuals could have a material adverse effect on the Company. In addition, the success of the Company will depend, among other factors, upon successful recruitment and retention of additional highly skilled and experienced management and technical personnel. See "BUSINESS--Employees" and "MANAGEMENT."

### No Dividends

The Company has not paid any dividends on its Common Shares. For the foreseeable future it is anticipated that earnings, if any, which may be generated from the Company's proposed operations will be used to finance the growth of the Company and that cash dividends will not be paid to holders of Common Shares. See "DIVIDEND POLICY."

### Possible Volatility of Market for Common Shares

The Common Shares are traded on the NASDAQ Small Cap Market System and on the Boston Stock Exchange. The market price of the Common Shares, like that of the common stock of many biotechnology companies, has been highly volatile. The price of such securities may rise rapidly in response to certain events, such as the commencement of clinical trials of an experimental new drug, even though the outcome of those trials and the likelihood of ultimate FDA approval remains uncertain. Similarly, prices of such securities may fall rapidly if unfavorable results are encountered in clinical trials or if FDA approval is not obtained or is delayed. In the event that the Company achieves earnings from the sale of products, securities analysts may begin predicting quarterly earnings. The failure of the Company's earnings to meet analysts' expectations could result in a significant rapid decline in the market price of the Company's Common Shares. In addition, the stock market has experienced and continues to experience extreme price and volume fluctuations which have affected the market price of the equity securities of many biotechnology companies and which have often been unrelated to the operating performance of these companies. Such broad market fluctuations, as well as general economic and political conditions, may adversely affect the market price of the Common Shares.

# Requirements for Continued Listing of Securities on the NASDAQ System

The Company's Common Shares are traded on the NASDAQ Small Cap Market System and on the Boston Stock Exchange. Both the Automated Quotation System of the National Association of Securities Dealers, Inc. ("NASDAQ") and the Boston Stock Exchange have adopted rules that establish criteria for initial and continued listing of securities. Under the NASDAQ rules for continued listing, a company must maintain at least \$2,000,000 in total assets, at least \$1,000,000 in net worth and a minimum bid price of \$1.00 per share. There is no assurance that future losses from operations will not cause the Company's total assets or net worth to decline below those criteria in the future. If the Common Shares are delisted by NASDAQ, trading in the Common Shares would thereafter be conducted on the Boston Stock Exchange and in the over-the-counter market on an electronic bulletin board established for securities that do not meet the NASDAQ listing requirements. The Common Shares could also be delisted on the Boston Stock Exchange if the Company fails to maintain \$1,000,000 in total assets and \$500,000 in shareholders' equity. As a result, an investor could find it more difficult

to dispose of, or to obtain  $% \left( 1\right) =\left( 1\right) +\left( 1\right)$ 

In addition, if the Common Shares were delisted from NASDAQ, they would be subject to the so-called penny stock rule that imposes additional sales practice requirements on broker-dealers who sell such securities to persons other than established customers and accredited investors (generally defined as an investor with a net worth in excess of \$1,000,000 or individual annual income exceeding \$200,000, or joint annual income with a spouse exceeding \$300,000). For transactions covered by this rule, the broker-dealer must make a special suitability determination for the purchaser and must have received the purchaser's written consent to the transaction prior to sale. Consequently, delisting, if it occurred, could affect the ability of shareholders to sell their Common Shares in the secondary market. See "DESCRIPTION OF SECURITIES."

The Securities and Exchange Commission (the "Commission") has adopted regulations that define a "penny stock" to be any equity security that has a market price (as defined) of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require the delivery, prior to the transaction, of a disclosure schedule relating to the penny stock market. The broker-dealer also must disclose the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and, if the broker-dealer is the sole market-maker, the broker-dealer must disclose this fact and the broker-dealer's presumed control over the market. Finally, monthly statements must be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

Boston Stock Exchange and NASDAQ listed securities are exempt from the definition of "penny stock" for most purposes, except that transactions in a NASDAQ-listed security having a market price of less than \$5.00 per share are exempt from all but the sole market-maker provision only for (i) issuers who have \$2,000,000 in tangible assets (\$5,000,000 if the issuer has not been in continuous operation for three years), (ii) transactions in which the customer is an institutional accredited investor, and (iii) transactions that are not recommended by the broker-dealer. In addition, transactions in a NASDAQ listed security directly with a NASDAQ market-maker for such securities would be subject only to the sole market-maker disclosure, and the disclosure with respect to commissions to be paid to the broker-dealer and the registered representative.

Finally, all NASDAQ-listed securities would be exempt if NASDAQ raised its requirements for continued listing so that any issuer with less than \$2,000,000 in net tangible assets or shareholders' equity would be subject to delisting. These criteria are more stringent than the current NASDAQ maintenance requirements.

Shares Eligible for Future Sale

Sale of substantial additional amounts of Common Shares in the public market could have an adverse effect on the price of the Common Shares. The Company had 2,591,014 Common Shares issued and outstanding on March 25, 1996, of which 1,983,261 shares are presently

freely transferable without restriction under the Securities Act of 1933, as amended (the "Act"). In addition, the Common Shares offered and sold by the Selling Shareholders through this Prospectus and the Common Shares issuable upon the exercise of the Warrants and Underwriter's Warrants will also be freely transferable without restriction under the Act. The remaining 607,753 Common Shares outstanding at such date are eligible for sale under Rule 144 under the Act. See "SHARES ELIGIBLE FOR FUTURE SALE."

## MARKET PRICE OF COMMON SHARES

The Company's Common Shares are traded in the over-the-counter market on the NASDAQ Small Cap Market System under the symbol BTIM, and on the Boston Stock Exchange under the symbol BTM. The closing price of the Company's Common Shares on the NASDAQ Small Cap Marker System on April 30, 1996 was \$ 16.50.

The following table sets forth the range of high and low bid prices for the Common Shares for the fiscal years ended June 30, 1994 and 1995, and for the subsequent quarters through March 31, 1996, based on transaction data as reported on the NASDAQ Small Cap Market System.

Quarter Ended	High	Low
September 30, 1993	9 7/8	8 1/8
December 31, 1993	9 3/4	7 3/8
March 31, 1994	7 3/8	4 3/8
June 30, 1994	5	2 3/4
September 30, 1994	3 1/8	2
December 31, 1994	2 3/8	1 3/4
March 31, 1995	1 15/16	1 3/8
June 30, 1995	1 7/8	1 3/8
September 30, 1995	5 3/8	1 1/4
December 31, 1995	4 3/8	2 3/8
March 31, 1996	10 1/8	2 5/8

As of March 25, 1996,  $\,$  there were 140 shareholders of the Common Shares based upon information from the Registrar and Transfer Agent.

## DIVIDEND POLICY

The Company has not paid any cash dividends on its Common Shares, and it is unlikely that any cash dividends will be declared or paid on the Common Shares in the foreseeable future. Instead, the Company plans to retain its cash for use in financing its future operations and growth.

# CAPITALIZATION

The following table summarizes the capitalization of the Company as of March 31, 1996.

	March 31, 1996
Common Shares, subject to rescission, no par value; issued and outstanding 37,392 shares	\$ 67,300
Shareholders' Equity:  Preferred Shares, no par value; undesignated as to series; 1,000,000  shares authorized; no shares issued or outstanding  Common Shares, no par value; 5,000,000 shares authorized;  2,553,622 shares issued and outstanding(1)  Contributed capital  Deficit accumulated during development stage	9,248,905 93,972 (7,337,999)
Total shareholders' equity  Total capitalization	2,004,878  \$2,072,178

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<sup>(1)</sup> Does not give effect to the potential issuance of an aggregate of 663,073 Common Shares consisting of (a) 60,000 shares issuable upon the exercise of the Warrants, (b) 76,073 shares issuable upon the exercise of the Underwriter's Warrants, (c) 240,000 shares issuable upon the exercise of other outstanding warrants, and (d) 287,000 shares issuable upon the exercise of options granted under the Company's 1992 Stock Option Plan.

## SELECTED FINANCIAL INFORMATION

The selected financial information as of June 30, 1994 and 1995 and for three years ended June 30, 1995 presented below have been derived from the audited financial statements of the Company which have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing elsewhere herein (which expresses an unqualified opinion and includes an explanatory paragraph related to the development stage of the Company's operations). The selected financial information as of June 30, 1991, 1992 and 1993 and for the years ended June 30, 1991 and 1992 has been derived from audited financial statements of the Company not included herein. The selected financial information as of March 31, 1996 and for the nine months ended March 31, 1995 and 1996, and the period from inception (November 30, 1990) to March 31, 1996 have been derived from the unaudited financial statements of the Company which, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to present fairly the financial information for such periods. The selected financial information should be read in conjunction with the Company's financial statements and notes thereto and "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS" included elsewhere in this Prospectus.

Shahamanh of	Year Ended June 30,					Nine Months E	Period from Inception (November 30, 1990) to	
Statement of Operations Data:	1991(1)	1992	1993	1994	1995	1995	1996	March 31, 1996
EXPENSES: Research and development	\$ (115,043)	\$ (383,705)	\$ (562,746)	\$ (777,668)	\$(1,791,698)	\$(1,196,340)	\$ (793,769)	\$(4,424,629)
General and administrative	(146,624)	(406,130)	(774,101)	(931,439)	(808,432)	(631,390)	(528,519)	(3,595,245)
Total expenses	(261,667)	(789,835)	(1,336,847)	(1,709,107)	(2,600,130)	(1,827,730)	(1,322,288)	(8,019,874)
INCOME: Interest	3,472	57,568	119,592	152,438	218,416	156,877	105,296	656,782
0ther	2,586	22,608	8,087	9,716	3,967	2,307	2,960	49,924
Total Income	6,058	80,176	127,679	162,154	222,383	159,184	108,256	706,706
Net loss	\$ (255,609)	\$ (709,659)	\$(1,209,168)	\$(1,546,953)	\$(2,377,747)	\$(1,668,546)	\$(1,214,032)	\$(7,313,168)
Net loss per share	\$ ( .24)	\$ ( .55)	\$ (.69)	\$ (.76)	\$ (.90)	\$ (.63)	\$ (.47)	\$ (3.82)
Shares used in calculating per share data	1,082,114	1,301,581	1,746,614	2,046,445	2,633,464	2,644,042	2,591,581	1,914,056 ======

	June 30,					
	1991	1992	1993	1994	1995	March 31, 1996
Balance Sheet Data:						
Cash, cash equivalents and short term investments	\$87,085	\$4,756,734	\$ 3,404,927	\$ 5,719,046	\$ 3,440,896	\$ 1,777,887
Working Capital	116,129	4,668,393	3,424,951	5,780,949	3,180,200	1,975,432
Total assets	167,250	4,849,786	3,519,268	5,909,050	3,610,330	2,166,169
Shareholders' equity	90,489	4,628,426	3,419,258	5,799,379	3,231,603	2,004,878

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<sup>(1)</sup> Represents the period from inception (November 30, 1990) to June 30, 1991

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

### Overview 0

Since its inception in November 1990, the Company has been engaged primarily in research and development activities. The Company has not yet generated significant operating revenues, and as of March 31, 1996 the Company had incurred a cumulative net loss of \$7,313,168.

Most of the Company's research and development efforts have been devoted to the development of Hextend(TM) and PentaLyte(TM). Clinical trials of Hextend(TM) in human patients are now being planned. The costs of such clinical trials will be substantial, and it will be necessary for the Company to obtain additional financing in order to complete clinical trials.

The Company plans to continue to provide funding for its laboratory testing programs at selected medical schools and hospitals for the purpose of developing additional uses of Hextend(TM), PentaLyte(TM) and other new products, but the amount of research that will be conducted at those institutions will depend upon the extent to which the Company can raise sufficient capital for research in addition to the funding required for the Hextend(TM) clinical testing program. If funding for collaborative research at medical schools and hospitals is curtailed, the Company will have to rely on in-house research, using small laboratory animals and less sophisticated surgical procedures.

To address its anticipated need for manufacturing and marketing resources, the Company is continuing to identify domestic and international pharmaceutical companies that, based upon their current product lines and resources, might be able to manufacture and market the Company's products if and when the necessary regulatory approvals are obtained.

Because the Company's research and development expenses, clinical trial expenses, and production and marketing expenses will be charged against earnings for financial reporting purposes, management expects that losses from operations will continue to be incurred for the foreseeable future.

Nine Months Ended March 31, 1996 and March 31, 1995

From inception (November 30, 1990) through March 31, 1996, the Company generated \$706,706 of revenues, comprised of \$49,924 from the sale of products and services, and \$656,782 in interest. For the nine months ended March 31, 1996, the Company generated \$108,256 of revenues, including \$2,960 from the sale of products and services, and \$105,296 in interest. For the nine months ended March 31, 1995, the Company generated \$159,184 of revenues, including \$2,307 from the sale of products and services, and \$156,877 in interest. The decrease in interest income is attributable to the decrease in cash and cash equivalents from 1995 to 1996. Limited test marketing of the Company's laboratory research equipment, through advertisements in trade publications, has resulted in sales of a small number of microcannulas. Although the Company may continue to test market its laboratory research equipment, and to promote its ability to perform research services, the Company's ability to generate substantial operating revenue depends upon its success in developing and marketing its blood substitute and organ preservation solutions and technology for medical use.

From inception (November 30, 1990) through March 31, 1996, the Company incurred \$4,424,629 of research and development expenses, including salaries, supplies and other expense items. Research and development expenses decreased to \$793,769 for the nine months ended March 31, 1996, from \$1,196,340 for the nine months ended March 31, 1995. The decrease in research and development expenses is attributable to a decrease in the number and scope of research collaborations the Company is sponsoring, since there has been a shift in the focus of the Company from research to clinical studies. It is expected that research and development expenses will increase as the Company commences clinical testing of Hextend(TM).

From inception (November 30, 1990) through March 31, 1996, the Company incurred \$3,595,245 of general and administrative expenses. General and administrative expenses decreased to \$528,519 for the nine months ended March 31, 1996, from \$631,390 for the nine months ended March 31, 1995. This decrease is attributable to a general focus of resources and personnel on development and testing of the Company's products. From inception through March 31, 1996, the Company has incurred approximately \$146,613 in fees payable to a local firm of certified public accountants for advice and assistance in accounting and financial reporting matters, and the preparation of tax returns. The Company believes that, for the near future, obtaining such accounting services on an as needed basis will be a more economical use of corporate resources than the hiring of permanent accounting personnel.

Years Ended June 30, 1995 and June 30, 1994

For the year ended June 30, 1995, the Company generated total revenues of \$222,383, comprised of \$3,967 from the sale of microcannulas and solutions for research purposes, and \$218,416 in interest. For the year ended June 30, 1994, the Company had total revenues of \$162,154, comprised of \$9,716 from the sale of products and services, and \$152,438 in interest. During March 1994, the Company completed a second public offering of its common shares. The increase in interest income in fiscal year 1995 over fiscal year 1994 is attributable to the

increase in cash from the public offering and investment of the offering proceeds.

Research and development expenses increased to \$1,791,698 for the year ended June 30, 1995, from \$777,668 for the year ended June 30, 1994. The increase in research and development expenses is attributable to an increase in the scope of Company sponsored research collaborations, the manufacturing of two lots of Hextend(TM) solution under "good manufacturing practices" (GMP), and the initiation of stability, toxicology and pharmacology studies needed for filing of the Company's first Investigational New Drug application (IND).

General and administrative expenses decreased to \$808,432 for the year ended June 30, 1995 from \$931,439 for the year ended June 30, 1994. The decrease in general and administrative expenses is due largely to a focus of resources and personnel to development and testing of the Company's products.

Year Ended June 30, 1994 and June 30, 1993

For the year ended June 30, 1994, the Company had total revenues of \$162,154, comprised of \$9,716 from the sale of products and services, and \$152,438 in interest. For the year ended June 30, 1993, the Company had total revenues of \$127,679, comprised of \$8,087 from the sale of products and services, and \$119,592 in interest. The increase in interest income during fiscal 1994 is a result of the increase in cash from the public offering and investment of the offering proceeds. The increase in sales revenue from 1993 to 1994 is attributable to a continuation of advertising of the Company's laboratory research products.

For the years ended June 30, 1994 and 1993, the Company incurred \$777,668 and \$562,746, respectively, of research and development expenses, including salaries, supplies and costs incurred in conducting animal experiments at a privately owned veterinary surgical research facility and at certain hospital research laboratories. The increase in research and development expenses during fiscal 1994 is attributable to the increases in the salaries of certain employees, payments to consultants and an increase in the number of research collaborations sponsored by the Company.

General and administrative expenses were \$931,439 for the year ended June 30, 1994 and were \$774,101 for the year ended June 30, 1993. The increase in general and administrative expenses is due largely to increases in the general operations of the Company.

## Taxes

At June 30, 1995, the Company had a cumulative net operating loss carryforward of \$6,069,000 for federal income tax purposes.

## Liquidity and Capital Resources

Because of the developmental nature of the Company's business, it is unlikely that in the near future the Company will be able to generate internally the funds necessary to carry on its planned operations. Since inception, the Company has financed its operations through the sale of equity securities. Presently, the Company is seeking financing from pharmaceutical and medical device companies that may be interested in licensing or otherwise acquiring marketing rights to Hextend(TM) and other BioTime products. Financing may also be obtained through additional public or private offerings of equity and debt securities. The Company expects the money remaining from the net proceeds from the second public offering will be sufficient to finance the Company's operations for the next 12 months. Additional capital will be needed at an earlier date if the Hextend(TM) clinical testing program begins.

The future availability and terms of equity and debt financings and collaborative arrangements with industry partners cannot be predicted. The unavailability or inadequacy of financing to meet future capital needs could force the Company to modify, curtail, delay or suspend some or all aspects of its planned operations.

#### Overview 0

BioTime Inc. is a development stage company engaged in the research and development of aqueous based synthetic solutions that can be used as plasma expanders, blood substitutes during hypothermic (low temperature) surgery, and organ preservation solutions. These products are intended for several important medical applications, including: the emergency treatment of blood loss due to traumatic injury or during surgery; cardio-pulmonary bypass surgery; the replacement of very large volumes of a patient's blood during cardiac surgery and neurosurgery that involve lowering the patient's body temperature to hypothermic levels; the preservation of body organs and tissues awaiting transplant; cancer treatment; and other biomedical applications. Because the Company's solutions are synthetic, rather than human blood by-products, use of the solutions would not pose the risk of transmitting AIDS, hepatitis or other blood borne infectious diseases, and would not have to be matched to a patient's blood type.

The Company's first two blood replacement products are Hextend(TM) and PentaLyte(TM), which are composed of different hydroxyethyl starches, electrolytes, sugar and a buffer. The Company believes that a solution that sustains the patient's fluid volume and physiological balance, thereby maintaining tissue and organ function, can reduce or eliminate the need for supplemental whole blood and blood plasma. Based upon the results of its laboratory research, the Company has determined that in many emergency care and surgical applications, it is not necessary for the solution to include special oxygen carrying molecules to replace red blood cells. Therefore, the Company has devoted its efforts to the development of formulations that do not rely upon the use of recombinant DNA or other complex technologies to synthesize and assimilate into solution costly and potentially toxic oxygen carrying molecules such as hemoglobin and perfluorocarbons.

The Company has filed an Investigational New Drug Application ("IND") with the FDA for permission to commence clinical trials of Hextend(TM) in human patients. Because of the proven safety of the components of Hextend(TM) in other pharmaceutical products, the Company plans to conduct its first clinical trial as a Phase III trial involving fewer than 100 patients. Clinical trials may begin during the late summer or early fall of 1996. Although BioTime has conducted pharmacology and toxicology testing of Hextend(TM), and has compiled a significant amount of data demonstrating the safety and efficacy of Hextend(TM) in laboratory testing using animal subjects, the outcome of human trials cannot be predicted with certainty.

The proposed clinical trials have been designed to test Hextend(TM) as a blood plasma volume expander in surgical procedures that often involve a large amount of blood loss. A sufficient quantity of Hextend(TM) for the first clinical trials has been obtained, but before clinical trials can begin at any hospital or medical center, the trials must be approved by the institutional review board ("IRB") of that institution. See "Government Regulation."

The time frame in which the Company will be able to proceed with the clinical testing necessary to file an New Drug Application ("NDA") for FDA approval depends in part upon the ability of the Company to obtain sufficient financing for that purpose, as well as a manufacturer willing to produce the solution in compliance with FDA "good manufacturing practices." The Company is seeking to obtain the necessary financing from one or more pharmaceutical

companies that would be capable of manufacturing Hextend(TM) for commercial distribution when FDA approval is obtained. See "Manufacturing" and "Government Regulation."

To reduce the capital costs and delays inherent in acquiring or establishing a pharmaceutical manufacturing facility and establishing a marketing organization, the Company will seek contract, licensing or joint venture arrangements with one or more pharmaceutical companies for the production and marketing of the Company's products. If such arrangements cannot be made on acceptable terms, the Company would be required to obtain additional capital to construct or acquire its own manufacturing facilities and establish its own marketing organization. There is no assurance that the Company would be able to raise sufficient capital for those purposes.

The Company was incorporated under the laws of the State of California on November 30, 1990. The Company's principal office is located at 935 Pardee Street, Berkeley, California 94710. It telephone number at such office is (510) 845-9535.

The Market for Plasma Expanders, Blood Substitutes and Organ Preservation Solutions

The transfusion of human blood is presently the traditional and only commercially available means for treating patients suffering from severe blood loss requiring the replacement of more than 30% of their blood volume. The transfusion market in the United States consists of two principal segments. The acute blood loss segment, which comprises approximately 60 percent of the transfusion market, includes transfusions required in connection with trauma, surgery and unexpected blood loss. The chronic blood loss segment represents approximately 40 percent of the transfusion market includes transfusions in connection with general medical applications and chronic anemias. Approximately 14 million units of blood were transfused in the United States in 1992, of which approximately 8.5 million units were administered to patients suffering the effects of acute blood loss. Patient charges for the units of blood used in the United States in 1992 for the treatment of acute blood loss were approximately \$2.5 billion.

The use of whole blood or human blood products presents a number of medical risks and logistical problems that could be reduced or eliminated if a safe and effective synthetic plasma expander or blood substitute were available. Transfused blood can only be used in recipients having a blood type compatible with that of the donor. Delays in treatment resulting from the necessity of blood typing prior to transfusion, together with the limited shelf life of blood and the limited availability of certain blood types, impose constraints on the rapid availability of compatible blood for transfusion. Accident victims, wounded soldiers and persons with rare blood types may die while awaiting compatible blood. In addition, clerical error continues to result in transfusion related deaths. The problem of blood type compatibility and availability could be eliminated by the use of a universally compatible synthetic blood plasma. A synthetic product with a long shelf life that could be stored at room temperature would also resolve problems of perishability of whole blood products.

The past decade has seen an increase in the incidence of blood-borne infectious diseases, such as AIDS and hepatitis B, C, D, E, and F which has heightened the awareness of both

health professionals and patients to the inherent risk from blood transfusions. Although new tests have been developed, such tests have not entirely eliminated the risk of infectious blood-borne disease transmission. In addition, despite improved testing standards, human error still results in the release of contaminated units of blood. Furthermore, some infectious diseases are known to contaminate the blood supply but cannot be avoided because no reliable or cost effective diagnostic tests exist. New infectious agents can suddenly appear in the blood supply, and it can take years to develop a reliable test for such agents. Several years elapsed between the appearance of AIDS and the development of a reliable test, and numerous patients contracted AIDS from transfusions during that time. A synthetic blood plasma or blood substitute not derived from human blood products would be advantageous because it could be used without exposing the patient to the risk of infection by a blood-borne disease.

The current blood supply is dependent upon volunteer donors. Increasingly stringent donor-screening criteria have caused the donor pool, and therefore the potential supply of blood, to contract. As a consequence, the cost and intricacy of collecting, testing and storing blood has greatly increased in recent years, and many blood banks have experienced inventory shortages. An improved synthetic blood plasma volume expander that can be manufactured at an economical price would help alleviate the blood shortage problems that arise from dependence upon donated blood.

Organ transplant surgery is a growing field. Approximately 5,000 donors donate organs, and approximately an additional 5,000 donors donate skin, bone and other tissues in the United States each year. As more surgeons have gained the necessary expertise and surgical methods have been refined, the number of transplant procedures has increased, as has the percentage of successful transplants. Organ transplant surgeons and their patients face two major obstacles, namely the shortage of available organs from donors, and the limited amount of time that a transplantable organ can be kept viable between the time it is harvested from the donor and the time it is transplanted into the recipient.

The scarcity of transplantable organs makes them too precious to lose and increases the importance of effective preservation technology and products. Current organ removal and preservation technology generally requires multiple preservation solutions to remove and preserve effectively different groups of organs, and limits preservation times of those organs for transplant use. BioTime is seeking to address this problem by developing a more effective organ preservation solution that will permit surgeons to harvest all transplantable organs from a single donor. The Company believes that preserving the viability of all transplantable organs and tissues simultaneously, at low temperatures, would extend by several hours the time span in which the organs can be preserved prior to transplant.

### The Products

Products for Surgery, Plasma Replacement and Emergency Care

Background. Severe blood loss during surgery or from trauma injuries caused by blunt or penetrating force can cause fatal shock. Whole blood or packed red cells generally cannot be administered to a patient until the patient's blood serum has been typed and sufficient units of compatible blood or red cells can be located. The use of human blood products also poses the risk of exposing the patient to blood borne diseases such as AIDS and hepatitis. While some fluid needs can be temporarily met by various colloid and crystalloid plasma extenders, those solutions are generally not used to replace more than 30% of a patient's blood. The solutions being developed by the Company are intended to be more complete synthetic plasma volume expanders that can replace more than 30% of a patient's blood volume and can provide more of the components necessary to prevent physiological shock during emergency care and surgical procedures.

Synthetic Blood Plasma Expander. The Company is developing Hextend, (TM) PentaLyte(TM) and other synthetic plasma expander solutions to treat acute blood loss that occurs during many kinds of surgery, particularly cardiac, orthopedic and gastro-intestinal operations. The solutions could also be used by emergency room physicians or by paramedics while the patient is being transported to the hospital to treat acute blood loss in trauma victims. Because BioTime's solutions are synthetic, they could be used without matching the patient's blood type and would not pose the risk of transmitting AIDS, hepatitis or other blood borne infectious diseases.

Hextend,(TM) PentaLyte(TM) and BioTime's other solutions contain constituents that may prevent or reduce the physiological imbalances that can impair or inhibit blood clotting and cardiac function in acute blood loss patients. Hextend(TM) and PentaLyte(TM) are similar formulations, except that Hextend(TM) uses a high molecular weight hydroxyethyl starch (hetastarch) whereas PentaLyte(TM) uses a low molecular weight hydroxyethyl starch (pentastarch). The higher molecular hetastarch is retained in the blood longer than the lower molecular weight pentastarch, which may make Hextend(TM) the product of choice when a larger volume of plasma expander or blood substitute for low temperature surgery is needed or where the patient's ability to regenerate his own blood after surgery is compromised. PentaLyte,(TM) with its lower molecular weight pentastarch, would be eliminated from the blood faster than Hextend(TM) and might be used when less plasma expander is needed or where the patient is more capable of quickly regenerating lost blood.

BioTime has not attempted to synthesize potentially toxic and costly oxygen carrying molecules such as hemoglobin because the loss of fluid volume and physiological balance may contribute as much to shock as the loss of the oxygen carrying component of the blood. Surgical and trauma patients are routinely given supplemental oxygen and retain a substantial portion of their own red blood cells, so the lack of oxygen carrying molecules in the Company's solutions should not pose a significant contraindication to use.

Experiments by BioTime scientists have demonstrated that laboratory animals are able to survive at normal temperatures and without supplemental oxygen when more than two-thirds of their circulating blood volume is replaced by BioTime's artificial plasma solution, Hextend(TM) and PentaLyte(TM). When animals are placed in an oxygen rich environment, they are able to survive at normal temperatures when even more of their circulating blood volume is replaced by Hextend(TM).

BioTime has a cooperative research program with the Department of Surgery at the Metropolitan Hospital Center in New York City to test the potential usefulness of one of Hextend(TM) and Pentalyte(TM) as trauma care products. In a series of laboratory animal experiments, researchers at Metropolitan Hospital have shown the ability of Hextend(TM) and Pentalyte(TM) to replace blood lost due to severe bleeding. Results from certain of these tests indicate that Hextend(TM) and Pentalyte(TM) may prove more effective at maintaining blood calcium levels than a leading commercially available plasma extender when used to replace large volumes of blood. Calcium can be a significant factor in regulating blood clotting and cardiac function. Results from other in vitro tests of Hextend(TM) indicate that Hextend(TM) does not alter the activity of a number of specific blood clotting factors, other than by simple hemodilution.

## Products for Hypothermic Surgery

Background. Approximately 400,000 coronary bypass and other open heart surgeries are performed in the United States annually, and approximately 18,000 aneurysm surgeries and 4,000 arterio-venous malformation surgeries were performed in the United States during 1989. Those procedures often require the use of cardio-pulmonary bypass equipment to do the work of the heart and lungs during the surgery. During open heart surgery and surgical procedures for the treatment of certain cardiovascular conditions such as large aneurysms, cardiovascular abnormalities and damaged blood vessels in the brain, surgeons must temporarily interrupt the flow of blood through the body. Interruption of blood flow can be maintained only for short periods of time at normal body temperatures because many critical organs, particularly the brain, are quickly damaged by the resultant loss of oxygen. As a result, certain surgical procedures are performed at low temperatures because lower body temperature helps to minimize the chance of damage to the patient's organs by reducing the patient's metabolic rate, thereby decreasing the patient's needs during surgery for oxygen and nutrients which normally flow through the blood.

Current technology limits the degree to which surgeons can lower a patient's temperature and the amount of time the patient can be maintained at a low body temperature because blood, even when diluted, cannot be circulated through the body at near-freezing temperatures. As a result, surgeons face severe time constraints in performing surgical procedures requiring blood flow interruption, and those time limitations prevent surgeons from correcting certain cardiovascular abnormalities.

Cardio-Pulmonary Bypass Solution. BioTime plans to test the use of Hextend(TM) as cardio-pulmonary bypass circuit priming solutions. In order to perform heart surgery, the

patient's heart must be stopped and mechanical apparatus is used to oxygenate and circulate the blood. The cardio-pulmonary bypass apparatus requires a blood compatible fluid such as Hextend(TM) to commence and maintain the process of diverting the patient's blood from the heart and lungs to the mechanical oxygenator and pump.

BioTime believes that Hextend(TM) will maintain blood pressure and physiological balance better than the solutions presently used as bypass priming solutions. Approximately 1.5 to 2 liters of Hextend(TM) would be used for each bypass operation. Based upon the number of coronary bypass operations performed, the potential market for Hextend(TM) as bypass circuit priming solutions in the United States would be 600,000 to 800,000 liters annually.

Low Temperature Blood Substitute Solution. The Company is also developing Hextend(TM) as a low temperature blood substitute that will be used to replace all of a patient's circulating blood volume to permit the rapid and profound cooling of patients in the performance of surgery in hypothermic bloodless conditions. Although surgeons are already using other solutions to supplement the blood during the performance of certain limited surgical procedures, the Company is not aware of any complete blood-substitution procedures in current surgical practice.

Hextend(TM) would be introduced into the patient's body during the cooling process. Once the patient's body temperature is near ice cold levels, and the heart and brain are temporarily arrested, the surgeon would perform the operation. During the surgery, the solutions may be circulated throughout the body in place of blood, or the patient's circulation may be arrested for a period of time if an interruption of fluid circulation is required in order to perform the surgical procedure. Upon completion of the surgery, the patient would be slowly warmed, the patient's blood would be reintroduced into the patient's vascular system and then warmed further.

The Company believes that low temperature bloodless surgery would be primarily suitable for open heart operations, operations to repair major vascular disorders such as aneurysms, and removal of tumors from the brain, head, neck or heart. Based upon laboratory studies using baboons and dogs, BioTime has developed protocols for using Hextend(TM) to replace all of the subject's blood for one to four hours at temperatures ranging from 10oC to 1oC. BioTime has begun a series of laboratory studies testing the use of the solution in low temperature open chest cardiac surgery in dogs. The purpose of these studies is to develop protocols for aortic surgery and other cardio-vascular procedures in human patients.

Minimally Invasive Cardiac Surgery. Cardiac surgeons are working to develop procedures to repair damaged coronary arteries and heart valves using optically guided instruments that can be inserted into the heart through blood vessels or small incisions, without the need to open the patient's chest cavity. BioTime believes that Hextend(TM) may be useful in these minimally invasive closed chest cardiac procedures because the solution is transparent and if it were used to completely replace blood at low temperatures it would permit surgeons to use their optically guided instruments inside the heart or blood vessels without having their view obstructed by red blood. BioTime intends to conduct a series of laboratory studies using animal subjects to test the utility of Hextend(TM) as a low temperature blood substitute in such procedures.

### Organ Transplant Products

Background. Organ transplant surgery is a growing field. Approximately 5,000 donors donate organs, and approximately an additional 5,000 donors donate skin, bone and other tissues in the United States each year. As more surgeons have gained the necessary expertise and surgical methods have been refined, the number of transplant procedures has increased, as has the percentage of successful transplants.

A significant problem that arises frequently in the field of organ transplant surgery is the inability to recover more than a few viable organs from a donor. Currently, surgeons use different preservation solutions for different organs or different groups of organs. As a result, a separate procedure using a different preservation solution is required to preserve and remove each organ, or system of related organs. The removal of one organ can impair the viability of other organs. Available technology does not permit surgeons to keep the remaining organs viable within the donor's body for a significant time after the first organ is removed.

Another problem in the field of organ transplant surgery is the timely matching and delivery of compatible organs from donors to recipients. Currently, an organ available for transplant is flushed with an ice cold solution during the removal process to deactivate the organ and preserve its tissues, and then the organ is transported on ice to the donee. The ice cold solutions currently used, together with transportation on ice, keep the organ healthy for only a short period of time. For example, the storage time for hearts is limited to approximately six hours. Because of the short time span available for removal and transplant of an organ, potential organ donees often fail to receive the needed organs.

Multi-Organ Preservation. The Company is seeking to develop Hextend(TM) for use as a single solution that can simultaneously preserve all of a single donor's organs. When used as an organ preservation solution, Hextend(TM) would be perfused into the donor's body while the body is chilled, thereby eliminating an undesirable condition called "warm ischemia," caused when an organ is warm while its blood supply is interrupted. The use of Hextend(TM) in conjunction with the chilling of the body should help to slow down the process of organ deterioration by a number of hours so that a surgeon can remove all organs for donation and transplant. The Company's current estimates are that each such preservation procedure could require as much as 50 to 100 liters of Hextend(TM).

The Company believes that the ability to replace an animal's blood with the Company's solution, to maintain the animal at near freezing temperatures for several hours, and then revive the animal, would demonstrate that the solution could be used for multi-organ preservation. Company scientists have revived animals after more than six hours of cold blood-substitution, and have observed heart function in animals maintained cold and blood-substituted for more than eight hours. An objective of the Company's research and development program is to extend the time span in which animal subjects can be maintained in a cold, blood-substituted state before revival or removal of organs for transplant purposes. Organ transplant procedures using animal subjects could then be conducted to test the effectiveness of Hextend(TM) as an organ preservative.

## Other Potential Uses of BioTime Solutions

Long-term Tissue and Organ Banking. The development of marketable products and technologies for the preservation of tissues and vital organs for weeks and months is a long-range goal of the Company's research and development plan. To permit such long-term organ banking the Company may attempt to develop products and technologies that can protect tissues and organs from the damage that occurs when human tissues are subjected to subfreezing temperatures. Proprietary solutions and protocols have already been developed by the Company which allow liquid nitrogen storage of full thickness rat and hamster skin grafts with subsequent survival following transplantation to host animals.

Cold-Protected Chemotherapy. Isolated regional perfusion of anti-cancer drugs has been used to treat melanoma of the limbs, and inoperable tumors of the liver. The Company believes that employing such a procedure while the patient is kept in ice-cold blood-substitution may allow high doses of toxic anti-cancer drugs to be directed at disseminated, inoperable tumors within vital organs. Keeping the rest of the patient in a cold, blood substituted state may reduce or eliminate the circulation of the toxic drugs to healthy tissues.

BioTime considers such surgical techniques to be a longer range goal of its research and development program for hypothermic surgery products. Use of this complex technology in the practice of oncology can occur only after ice-cold blood-substitution has advanced to an appropriate level of safety and effectiveness.

### Research and Development Strategy

From inception through March 31, 1996, the Company has spent \$4,424,629 on research and development. The greatest portion of BioTime's research and development efforts have been devoted to the development of Hextend(TM) and other solutions for multi-organ preservation, low temperature surgery, conventional surgery and emergency care. A lesser portion of the Company's research and development efforts have been devoted to developing solutions and protocols for storing organs and tissues at subfreezing temperatures. In the future the Company may explore other applications of its products and technologies, including cancer chemotherapy. As the first products achieve market entry, more effort will be expended to bring the next tier of products to maturity.

One major focus of the Company's research and development effort has been on products and technology to extend the time animals can be kept cold and blood-substituted, and then revived without physical impairment. An integral part of that effort has been the development of techniques and procedures or "protocols" for use of the Company's products. A substantial amount of data has been accumulated through animal tests, including the proper drugs and anesthetics, the temperatures at which blood should be removed and restored, solution volume, the temperature range for maintaining circulatory arrest, and the rate at which the subject should be rewarmed.

Experiments intended to test the efficacy of the Company's blood substitute solutions and protocols for surgical applications involve replacing the animal's blood with low temperature blood substitute solution, maintaining the animal in a cold blood-substituted state for a period of time, and then attempting to revive the animal. Experiments for multi-organ preservation involve the maintenance of the animal subjects at cold temperatures for longer periods of time than would be required for many surgical applications, followed by transplant procedures to test the viability of one or more of the subject's vital organs.

The Company is now conducting experiments, using both small and large animals, at hospital and medical school research facilities. These collaborative research programs are testing solutions and protocols developed in the Company's laboratories and, in some cases, comparing the efficacy of the Company's blood substitute solutions with commercially available FDA approved products manufactured by other companies. The Company intends to continue to foster relations with research hospitals and medical schools for the purpose of conducting collaborative research projects because it believes that such projects will introduce the Company's potential products to members of the medical profession and provide the Company with objective product evaluations from independent research physicians and surgeons.

It is the Company's policy to retain all patent and intellectual property rights to its products, including any improvements that may be derived or refined from Company financed research programs. However, to obtain funding for additional research and development for pre-clinical and clinical studies, the Company may seek to enter into joint venture, licensing, or other collaborative arrangements with pharmaceutical companies. There is no assurance that any such arrangements can be made.

## Manufacturing

## Facilities Required

The Company has sufficient equipment, space and personnel needed to synthesize the quantities of Hextend(TM) used in its research activity, but the Company does not have facilities to manufacture the solution in commercial quantities, or under "good manufacturing practice" required by the FDA. Any products that are approved by the FDA will have to be manufactured according to "good manufacturing practices" in commercial quantities, and with sufficient stability to withstand the distribution process, and in compliance with such federal and state regulatory requirements as may be applicable. The active ingredients and component parts of the products must be either USP or themselves manufactured according to "good manufacturing practices". In order to obtain FDA approval for the sale of its synthetic blood plasma volume expander, blood substitute and organ preservation solutions, the Company will be required to conduct clinical trials using products manufactured according to good manufacturing practices, at a facility that has passed FDA inspection. Accordingly, the Company will need to enter into product manufacturing arrangements with an established pharmaceutical company.

Through an agreement with McGaw, Inc., a subsidiary of IVAX Corporation, BioTime has obtained approximately 6,000 liters of Hextend(TM) for use in human clinical trials and in stability, pharmacology and toxicology testing. The Company plans to purchase additional quantities of Hextend(TM) from McGaw for clinical testing purposes. Discussions are continuing with McGaw regarding the commercial manufacture and marketing of Hextend(TM), PentaLyte(TM) and other BioTime blood plasma volume expander and blood replacement products.

Acquiring a manufacturing facility would involve significant expenditure of time and money for design and construction of the facility, purchasing equipment, hiring and training a production staff, purchasing raw material and attaining an efficient level of production. To avoid the incurrence of those expenses and delays, the Company is seeking contract, licensing or joint venture arrangements with established pharmaceutical companies for the production of the Company's products. In joint ventures or licensing arrangements that include marketing rights, the participating pharmaceutical company would be entitled to a large portion of the profits from sales to end users or would pay the Company a royalty on net sales.

If contractual arrangements for the manufacture of the Company's products cannot be made on terms acceptable to the Company, the Company would be required to establish its own production facilities. Although the Company has not determined the cost of constructing production facilities that meet FDA requirements, it expects that the cost would be substantial, and that the Company would need to raise additional capital in the future for that purpose. There can be no assurance that the Company will be able to obtain the capital required for the acquisition of production facilities, or that satisfactory arrangements will be made with third parties to manufacture and distribute any products.

## Raw Materials

Most ingredients in the products being developed by the Company are readily obtainable from multiple sources. However, most of laboratory data collected by the Company has come from tests of Hextend(TM) and PentaLyte(TM) containing hydroxyethyl starch supplied to the Company by McGaw, Inc., a pharmaceutical manufacturer that produces the same hydroxyethyl starch under a contract with a third party for use in a plasma expander with which one or more of the Company's solutions might compete. BioTime currently has a production agreement with McGaw, Inc. for limited quantities of Hextend(TM) for clinical trials only, but the Company is pursuing discussions for a supply and/or production agreement. If such discussions are not fruitful, the Company may have to find a new source of the hydroxyethyl starch, and that starch would have to be shown to be manufactured according to "good manufacturing practices", in order for the starch to be used in clinical trials and in the commercial manufacture of Hextend(TM) and PentaLyte(TM) in the United States. The Company knows of only a few potential sources that currently manufacture hydroxyethyl starch. If the Company is unable to secure a supply agreement with one of those manufacturers, the Company would have to reformulate its solution to use a chemically similar component that is more readily available. However, the Company would have to perform new laboratory testing to determine whether one or more alternative ingredients could be used in a safe and effective synthetic plasma, blood substitute or organ

preservation solution. If needed, such testing would be costly to conduct and would delay the Company's product development program, and there is no certainty that any such testing would demonstrate that an alternative ingredient, even if chemically similar to the one currently used by BioTime, would be as safe or effective in BioTime's solutions.

### Marketing

The Company has not established a marketing and sales organization, but it may need to do so if it obtains FDA approval for commercial production of its products. The Company's proposed products and services are intended for sale to hospitals, medical centers and scientists engaged in the practice of specific areas of medicine or medical research, including transplantation, neurosurgery, cardiovascular surgery, anesthesiology, oncology, emergency room and trauma care, critical care, and biomedical research.

The Company intends to seek contract, licensing or joint venture arrangements with established pharmaceutical companies for marketing the Company's products. Although such arrangements could permit the Company to receive revenues from the sale of its products expeditiously and with lower costs, the Company would have to share those revenues with the participating pharmaceutical companies. There can be no assurance that any pharmaceutical companies will be willing to enter into marketing arrangements on terms acceptable to the Company.

If the Company does not enter into licensing or other arrangements for the sale of its products by one or more pharmaceutical companies, the Company would have to establish its own marketing organization. Due to the complexity of the technologies being developed by the Company, prospective end-users will have to be trained in the proper use of products that the Company may develop.

In order to market any new products it may develop, the Company also plans to publish studies in scientific journals, and to present studies and the results of its work at meetings of medical and scientific professional organizations. BioTime also will continue to seek opportunities to conduct research in collaboration with well-known institutions and to demonstrate its work at scientific conventions.

## Government Regulation

The FDA will regulate the Company's proposed products as drugs, biologicals, or medical devices, depending upon such factors as the use to which the product will be put, the chemical composition and the interaction of the product on the human body. Products that are intended to be introduced into the body, such as blood substitute solutions for low temperature surgery and plasma expanders, will be regulated as drugs but will also be reviewed by the FDA staff responsible for evaluating biologicals.

The Company's human drug products will be subject to rigorous FDA review and approval procedures. After testing in animals, an Investigational New Drug (IND) application must be filed with the FDA to obtain authorization for human testing. Extensive clinical testing, which is generally done in three phases, must then be undertaken to demonstrate optimal use, safety and efficacy of each product in humans. Each clinical study is conducted under the auspices of an independent Institutional Review Board ("IRB"). The IRB will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution. The time and expense required to perform this clinical testing can far exceed the time and expense of the research and development initially required to create the product. No action can be taken to market any therapeutic product in the United States until an appropriate New Drug Application ("NDA") has been approved by the FDA. Even after initial FDA approval has been obtained, further studies may be required to provide additional data on safety or to gain approval for the use of a product as a treatment for clinical indications other than those initially targeted. In addition, use of these products during testing and after marketing could reveal side effects that could delay, impede or prevent FDA marketing approval, resulting in a FDA ordered product recall, or in FDA imposed limitations on permissible uses.

The FDA also regulates the manufacturing process of pharmaceutical products and requires that a portion of the clinical trials for new products be conducted using products produced in compliance with "good manufacturing practices." See "Manufacturing."

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from country to country. Even if FDA approval has been obtained, approval of a product by comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing the product in those countries. The time required to obtain such approval may be longer or shorter than that required for FDA approval.

The FDA approval process is costly and time consuming and may substantially delay, or even preclude, the commercial manufacture and sale of the Company's products. The Company may not have sufficient funds to finance the laboratory and clinical trials and other costs associated with the FDA application and approval process for Hextend(TM) or any other products that the Company may develop. Therefore, the future ability of the Company to market its products may depend in part upon its ability to obtain additional financing or to enter into licensing or joint venture arrangements with other companies to finance the FDA application and approval process.

# Patents and Trade Secrets

On April 18, 1995, the Company was granted a United States Patent which protects methods for using BioTime's proprietary solutions, including the use of Hextend(TM) and PentaLyte(TM) to replace blood. Claims include the use of the solutions at normal and hypothermic (below normal) body temperatures as plasma expanders, and for increasing circulation of a hypovolemic (acute blood loss) patient. Additional patent applications have been filed in the

United States and certain other countries for Hextend(TM) and other solutions. These patent applications include claims for patent protection of the composition of the Company's solutions and patent protection of methods of using the solutions. The Company also holds a United States Patent on its microcannula.

There is no assurance that any additional patents will be issued, or that any patents now held or later obtained by the Company will not be successfully challenged by third parties and declared invalid or infringing of third party claims. Further, the enforcement of patent rights often requires the prosecution of litigation against third party infringers, and such litigation can be costly to pursue.

While the Company believes that the protection of patents and licenses is important to its business, the Company also will rely on trade secrets, know-how and continuing technological advancement to maintain its competitive position. The Company has entered into intellectual property, invention and non-disclosure agreements with its employees and it is the Company's practice to enter into confidentiality agreements with its consultants. There can be no assurance, however, that these measures will prevent the unauthorized disclosure or use of the Company's trade secrets and know-how or that others may not independently develop similar trade secrets and know-how or obtain access to the Company's trade secrets, know-how or proprietary technology. If, in the future, the techniques for use of the Company's products become widely known through academic instruction or publication, patent protection would become more important as a means of protecting the Company's market share for its products.

### Licensed Products and Technology

The Company has obtained from Cryomedical Sciences, Inc. ("CMSI") a royalty free, non-exclusive license to make, have made, use and sell certain experimental hypothermic blood substitute solutions for cryonics, cancer and AIDS research and treatment. The licensed solutions were developed by three of BioTime's scientists while they were employed by CMSI before BioTime was founded. The license granted by CMSI will terminate if Paul Segall, Harold Waitz, Hal Sternberg, Judith Segall, Lawrence Cohen, Donna Cohen, Victoria Bellport, Alan Gelband, Trans Time, Inc. (a corporation in which certain officers and directors of BioTime own an interest) and Ronald Barkin in the aggregate do not own at least 33-1/3% of the Company's Common Shares which are not sold to the public or otherwise owned by public shareholders (the "Insiders' Shares"). As of March 31, 1996, such persons owned an aggregate of 596,165 shares, representing 98% of the Insiders' Shares. The license is not assignable or transferable.

The technology and solutions licensed from CMSI were used by the Company's scientists in its initial experiments. However, the Company has developed its own patented blood substitute and organ preservation solutions, and is no longer using CMSI's solutions in its research and development program and does not intend to pursue the commercial exploitation of those licensed solutions.

### Competition

If successfully developed, the Company's solutions will compete with the plasma volume expanders and organ preservation solutions presently manufactured by established pharmaceutical companies, and with human blood products. For example, DuPont Pharmaceuticals presently markets Hespan(TM), an artificial plasma volume expander, and Viaspan(TM), a solution for use in the preservation of kidneys, livers and pancreases for surgical transplant. Other blood plasma replacement products are being developed, and clinical trials have either begun or are expected to begin in the near future for some of these products, including Pentaspan(TM) (a solution used for the collection of red blood cells from patients) and a genetically engineered human albumin. To compete with new and existing plasma expanders, the Company is developing products that contain constituents that may prevent or reduce the physiological imbalances that can affect the patient's tissue and organ function. To compete with existing organ preservation solutions, the Company is seeking to develop a solution that can be used to preserve all organs simultaneously and for long periods of time.

CMSI, which was founded by four of the Company's executive officers and directors, is attempting to develop blood substitution and cold protecting solutions for low temperature surgery, for organ preservation and for the treatment of trauma victims. Somatogen, Inc. is developing a synthetic hemoglobin blood substitute that may also have application in bloodless surgery, in treatment of trauma victims, and in organ preservation. A number of other companies are known to be developing artificial hemoglobin and other synthetic red blood cell substitutes and technologies that may compete directly with the products and technologies that the Company is developing. In general, red cell substitutes are more expensive to produce and potentially more toxic than Hextend(TM) and Pentalyte(TM). Some of these competing companies have substantially larger research facilities and technical staffs and greater financial and marketing resources than BioTime.

Generic plasma expanders intended to compete with Hespan(TM) have recently been introduced in the United States market. As a result, competition in the plasma expander market has intensified and wholesale prices have declined. Competition in the areas of business targeted by the Company is likely to intensify as new products and technologies reach the market. Superior new products are likely to sell for higher prices and generate higher profit margins once acceptance by the medical community is achieved. Those companies that are successful in introducing new products and technologies to the market first may gain significant economic advantages over their competitors in the establishment of a customer base and track record for the performance of their products and technologies. Such companies will also benefit from revenues from sales which could be used to strengthen their research and development, production, and marketing resources. All companies engaged in the medical products industry face the risk of obsolescence of their products and technologies as more advanced or cost effective products and technologies are developed by their competitors. As the industry matures, companies will compete based upon the performance and cost effectiveness of their products.

### Employees

As of March 31, 1996, the Company employed nine persons on a full-time basis and two persons on a part-time basis. Three of the full-time employees hold Ph.D. or Masters Degrees in one or more fields of science.

### Facilities

The Company presently occupies an approximately 5,200 square foot office and laboratory facility in Berkeley, California under a lease that will expire on May 31, 1997, subject to the Company's option to renew the lease for an additional 24 month period. The current rent is \$4,900 per month. The rent will increase to \$5,000 on June 1, 1996. If the Company exercises its renewal option, rent during the option period will be \$5,300 per month, plus the cost of utilities. This facility serves as the Company's principal executive office and laboratory for small animal experiments.

The Company uses, on a fee per use basis, facilities for surgical research on animals at an unaffiliated privately run research center located in Winters, California. Contracting for the use of research facilities has enabled the Company to initiate its research projects without the substantial capital cost, overhead costs and delay associated with the acquisition and maintenance of a modern animal surgical research facility.

### Legal Proceedings.

The Company is not presently involved in any material litigation or proceedings, and to the Company's knowledge no such litigation or proceedings are contemplated.

### MANAGEMENT

### Directors and Executive Officers

The names  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) +\left( 1\right) \left( 1\right) +\left( 1\right) +\left$ 

Name	Age	Position
Paul Segall, Ph.D.	53	President, Chief Executive Officer and Director
Lawrence Cohen	51	Chairman of the Board and Director
Judith Segall	42	Secretary, Vice President of Technology and Director
Victoria Bellport	30	Chief Operating and Financial Officer, Vice President of Operations, Treasurer and Director
Hal Sternberg, Ph.D.	42	Vice President of Research and Director
Harold Waitz, Ph.D.	54	Vice President of Engineering and Director
Ronald S. Barkin	50	Director

Paul Segall, Ph.D., 53, is President and Chief Executive Officer of BioTime and has served as a director of the Company since 1990. He was a research scientist for Cryomedical Sciences, Inc. ("CMSI") and a member of its Board of Directors from 1987 to December 1990, serving as Director of Research and Vice President of Research for CMSI, from April 1988 until 1989. Dr. Segall received a Ph.D. in Physiology from the University of California at Berkeley in 1977.

Lawrence Cohen, 51, became Chairman of the Board of BioTime during July 1991 and has been a director of the Company since 1990. Mr. Cohen served as Chairman of the Board of Directors of Cars Buy Computer, Inc., a discount new automobile dealer, from August 1991 until April 1992. From September 1988 until November 1990, he served as President and Chief Executive Officer of Hawk Marine Power, Inc., a manufacturer of high performance marine engines. Mr. Cohen founded CMSI in 1987 and served as its President until June 1988.

Victoria Bellport, 30, is Chief Financial Officer and Executive Vice President of BioTime and has been a director of the Company since 1990. Ms. Ms. Bellport received a B.A. in Biochemistry from the University of California at Berkelev in 1988.

Hal Sternberg, Ph.D., 42, is Vice President of Research of BioTime and has been a director of the Company since 1990. He was a research scientist for CMSI from 1987 to December 1990, serving as Vice President of Biochemistry for CMSI from November 1987 to 1989. Dr. Sternberg was a visiting scientist and research Associate at the University of California at Berkeley from 1985-1988, where he supervised a team of researchers studying Alzheimer's Disease. Dr. Sternberg received his Ph.D. from the University of Maryland in Biochemistry in 1982.

Harold Waitz, Ph.D., 54, is Vice President of Engineering of BioTime and has been a director of the Company since 1990. He was a research scientist for CMSI from 1987 to December 1990, serving as Vice President of Technology for CMSI from November 1987 to 1989. From 1986-1988, Dr. Waitz served as Vice President of Research at the Winters Institute, a non-profit biomedical research institution, at which Dr. Waitz studied arteriosclerosis in primates. He received his Ph.D. in Biophysics and Medical Physics from the University of California at Berkeley in 1983.

Ronald S. Barkin, 50, has been a director of the Company since 1990. Mr. Barkin is an attorney with a background in civil and corporate law. He is an active member of the California Bar, and has practiced in that state since 1971.

Judith Segall, 42, has been Vice President of Technology and Secretary of BioTime since 1990 and has been a director since 1996. Ms. Segall previously served as a director of the Company from 1990 through 1994. Ms. Segall received a B.S. in Nutrition and Clinical Dietetics from the University of California at Berkeley in 1989.

There are no family relationships among the directors or officers of the Company, except that Paul Segall and Judith Segall are husband and wife.

Directors' Meetings, Compensation and Committees of the Board

The Board of Directors does not have a standing Audit Committee, Compensation Committee, or Nominating Committee. Nominees to the Board of Directors are selected by the entire Board.

The Board of Directors has a Stock Option Committee that administers the Company's 1992 Stock Option Plan and makes grants of options to key employees, consultants, scientific advisory board members and independent contractors of the Company. The members of the Stock Option Committee are Lawrence Cohen, Victoria Bellport and Paul Segall. The Stock Option Committee was formed during September 1992.

During the fiscal year ended June 30, 1995, the Board of Directors met nine times. No director attended fewer than 75% of the meetings of the Board or any committee on which they served.

Directors of the Company and members of committees of the Board of Directors who are employees of the Company are not compensated for serving as directors or attending meetings of the Board or committees of the Board. Directors are entitled to reimbursements for their out-of-pocket expenses incurred in attending meetings of the Board or committees of the Board. Directors who are employees of the Company are also entitled to receive compensation in such capacity. Ronald S. Barkin, the only director who is not an employee of the Company, received a fee of \$200 per hour for attending meetings of the Board and for performing other duties as a director and consultant to the Company.

### **Executive Compensation**

None of the Company's executive officers received compensation from the Company in excess of \$100,000 during the fiscal year ended June 30, 1995. The Board of Directors of the Company has approved a new five-year employment agreement (the "Employment Agreement") for Paul Segall, the President and Chief Executive Officer of the Company. The Employment Agreement will expire on December 31, 2000 but may terminate prior to the end of the term if Dr. Segall (1) dies, (2) leaves the Company, (3) becomes disabled for a period of 90 days in any 150 day period, or (4) is discharged by the Board of Directors for failure to carry out the reasonable policies of the Board, persistent absenteeism, or a material breach of a covenant. Under his Employment Agreement, Dr. Segall is presently receiving an annual salary of \$85,000. Dr. Segall will receive a one-time cash bonus of \$25,000 if the Company receives at least \$1,000,000 of equity financing from a pharmaceutical company. Dr. Segall will be entitled to seek a modification of his Employment Agreement before the expiration of the five year term if the market value of the Company's outstanding capital stock exceeds \$50,000,000.

In the event of Dr. Segall's death during the term of his Employment Agreement, the Company will pay his estate his salary for a period of six month or until December 31, 2000, whichever first occurs. In the event that Dr. Segall's employment terminates, voluntarily or involuntarily, after a change in control of the Company through an acquisition of voting stock, an acquisition of the Company's assets, or a merger or consolidation of the Company with another corporation or entity, Dr. Segall will be entitled to severance compensation equal to the greater of (a) 2.99 times his average annual compensation for the preceding five years and (b) the balance of his base salary for the unexpired portion of the term of his Employment Agreement.

The Board of Directors has also approved employment agreements that contain the same or similar change of control severance benefits for the other executive officers of the Company.

Dr. Segall has also executed an Intellectual Property Agreement which provides that the Company is the owner of all inventions developed by Dr. Segall during the course of his employment.

The following table summarizes certain information concerning the compensation paid to Dr. Segall during the last three fiscal years.

### SUMMARY COMPENSATION TABLE

	Long-Term			
				Compensation
Name				
and				Stock
Principal				Options
Position	Year	Salary(\$)	Bonus	(Shares)
Paul Segall	1995	\$67,500		
Chief Executive	1994	\$63,796	\$25,000	
Officer	1993	\$58,170	-	21,000 Shares

### Stock Option Plan

During 1992, the Company adopted the 1992 Stock Option Plan and granted to Paul Segall options to purchase 21,000 Common Shares at \$9.22 per share. The options granted to Dr. Segall will expire five years after the date of grant, and will become exercisable in three equal annual installments. No options were granted to any of the Company's executive officers during the last fiscal year.

The following table provides information with respect to Dr. Segall concerning the exercise of options during the last fiscal year and unexercised options held as of June 30, 1995.

Aggregated Options Exercised in Last Fiscal Year, and Fiscal Year-End Option Values

Number of Shares Acquired Value on Realized			Number Unexercised June 30,	Options at	Value of Unexercised In-the-Money Options at June 30, 1995(1)		
Name 	Exercise	(\$)	Exercisable	Unexercisable	Exercisable	Unexercisable	
Paul Segall	0		14,000	7,000		_	

<sup>(1)</sup> Based on the average of the high and low bid prices of a Common Share (\$1.69) as reported on the NASDAQ Small Cap Market System on such date.

### PRINCIPAL SHAREHOLDERS

The following table sets forth information as of April 30, 1996 concerning beneficial ownership of Common Shares by each shareholder known by the Company to be the beneficial owner of 5% or more of the Company's Common Shares, and the Company's executive officers and directors:

	Number of Shares (1)	Percent of Total (1)
Paul and Judith Segall (2)	217,235	8.3 %
Spinnaker Technology Fund, L.P. SoundView Asset Management, Inc.(3) 22 Gatehouse Road		
Stamford, Connecticut 06902	192,300	7.4
Harold D. Waitz (4)	153,790	5.9
Hal Sternberg (5)	145,890	5.6
Lawrence and Donna Cohen (6)	76,695	3.0
Victoria Bellport	59,445	2.3
Ronald S. Barkin(7)	31,670	1.2
All officers and directors as a group (7 persons)(8)	684,725	25.4%

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- (1) Assumes that outstanding options and warrants are not exercised.
- (2) Includes 128,690 shares held of record by Paul Segall and 58,345 shares held of record by Judith Segall. Includes 9,000 Common Shares issuable upon the exercise of certain warrants and 21,000 Common Shares issuable upon the exercise of certain options.
- (3) SoundView Asset Management, Inc. is the general partner of Spinnaker Technology Fund, L.P. and has disclaimed beneficial ownership of such shares.
- (4) Includes 8,400 Common Shares issuable upon the exercise of certain warrants and 21,000 Common Shares issuable upon the exercise of certain options.
- (5) Includes 6,000 Common Shares issuable upon the exercise of certain warrants and 21,000 Common Shares issuable upon the exercise of certain options.
- (6) Includes 67,695 shares held of record by Donna Cohen, and 4,000 shares held of record by Donna Cohen as custodian for the minor children of Lawrence and Donna Cohen.
- (7) Includes 15,000 shares issuable upon the exercise of certain options.
- (8) Includes 23,400 Common Shares issuable upon the exercise of certain warrants and 78,000 Common Shares issuable upon the exercise of certain options.

### CERTAIN TRANSACTIONS

During the twelve months ended June 30, 1995, \$81,043 in fees for legal and consulting services was paid to Ronald S. Barkin, a member of the Board of Directors.

### DESCRIPTION OF SECURITIES

### Common Shares

The Company is authorized to issue 5,000,000 Common Shares, no par value, of which 2,591,014 shares were outstanding at March 25, 1996 and held by 140 persons based upon the share position listings for the Common Shares. Each holder of record is entitled to one vote for each outstanding Common Share owned by him on every matter properly submitted to the shareholders for their vote.

Subject to the dividend rights of holders of any of the preferred shares that may be issued from time to time, holders of Common Shares are entitled to any dividend declared by the Board of Directors out of funds legally available for such purpose. The Company has not paid any cash dividends on its Common Shares, and it is unlikely that any cash dividends will be declared or paid on any Common Shares in the foreseeable future. Instead, the Company plans to retain its cash for use in financing its future operations and growth.

Subject to the prior payment of the liquidation preference to holders of any preferred shares that may be issued, holders of Common Shares are entitled to receive on a pro rata basis all remaining assets of the Company available for distribution to the holders of Common Shares in the event of the liquidation, dissolution, or winding up of the Company. Holders of Common Shares do not have any preemptive rights to become subscribers or purchasers of additional shares of any class of the Company's capital stock.

### Preferred Shares

The Company's Articles of Incorporation currently authorize the issuance of up to 1,000,000 preferred shares, no par value. Preferred shares may be issued by the Company in one or more series, at any time, with such rights, preferences, privileges and restrictions as the Board of Directors may determine, all without further action of the shareholders of the Company. Any series of preferred shares which may be authorized by the Board of Directors in the future may be senior to and have greater rights and preferences than the Company has no present plan, arrangement or commitment to issue any preferred shares.

### Warrants

The Warrants entitle the holders thereof to purchase an aggregate of 60,000 Common Shares at an initial exercise price of \$8.00 per share. The Warrants expire if not exercised by the earlier of 5:00

p.m. Pacific Standard Time on the earlier of the date 30 calendar days after the date of this Prospectus or June 30, 1996 (unless the expiration date is extended to a later date by the Company), or the day immediately preceding the date on which the Warrants are redeemed by the Company. The number of Common Shares issuable upon the exercise of the Warrants, and the exercise price per share, are subject to prorata adjustment in the event of a split-up, stock dividend, combination, or other recapitalization of the Common Shares.

The Warrants are subject to redemption by the Company at a redemption price of \$0.01 per Warrant upon 30 days notice. However, the Company may not call the Warrants for redemption unless the closing price (or the average bid price if there is no closing price) of the Common Shares on a national securities exchange or in the over-the-counter market has equalled or exceeded 150% of the Exercise Price for any period of 20 consecutive trading days. If the Warrants are called for redemption, Warrant holders who fail to exercise their Warrants prior to the redemption date will receive only \$0.01 per Warrant and will lose the right to exercise their Warrants.

#### Underwriter's Warrants

The Company issued the Underwriter's Warrants to Emanuel and Company at the closing of the Company's initial public offering of Common Shares during March 1992. The Underwriter's Warrants entitle the holders to purchase up to 76,073 Common Shares at an exercise price of \$7.81 per share, as adjusted. The Underwriter's Warrants became exercisable on March 5, 1993 and will expire if not exercised by 5:00 p.m. Eastern Standard Time on March 4, 1997. The number of Common Shares issuable upon the exercise of the Underwriter's Warrants, and the exercise price per share, are subject to pro rata adjustment to prevent dilution in the event of a split-up, stock dividend, combination, or other recapitalization of the Company, or in the event that the Company issues or sells any Common Shares, or any options, warrants or other securities exchangeable for or convertible into Common Shares, for an effective price per Common Share less than the exercise price, subject, however, to certain exceptions for employee compensation and benefit plans and sales of Common Shares upon the exercise of the Warrants and certain outstanding options. The Underwriter's Warrants were not transferrable prior to March 12, 1993 except to officers of Emanuel and Company or certain successors in interest through merger, liquidation or other reorganization. If, after March 12, 1993, the Underwriter's Warrants are transferred to a person other than an officer, director or shareholder of Emanuel and Company, other than by will or the laws of descent, the Underwriter's Warrants so transferred will expire unless exercised immediately upon such transfer.

The foregoing description of the Warrants and Underwriter's Warrants is only a summary and is qualified in all respects to the full text of the form of Warrant and Underwriter's Warrant, a copy of which is on file with the Company and the Securities and Exchange Commission.

Transfer Agent and Registrar

The Transfer Agent and Registrar for the Common Shares is American Stock Transfer and Trust Company, 40 Wall Street, New York, New York 10005.

#### SHARES ELIGIBLE FOR FUTURE SALE

At March 25, 1996, the Company had 2,591,014 Common Shares outstanding. Of those shares, 1,983,261 Common Shares are presently freely transferable without restriction under the Act, unless they are held by "affiliates" of the Company as that term is used under the Act and the regulations promulgated thereunder. In addition, when offered and sold as provided in this Prospectus, the 147,473 Common Shares offered hereby, including 60,000 Common Shares issuable upon exercise of the Warrants and 76,073 Common Shares issuable upon exercise of the Underwriter's Warrants, will be freely transferrable without restriction under the Act.

The remaining 607,753 Common Shares held by approximately 63 shareholders of the Company were sold by the Company in reliance on exemptions from the registration requirements of the Act and are "restricted" securities within the meaning of Rule 144 under the Act and are eligible for sale under Rule 144. In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated), including an affiliate, who has beneficially owned shares for at least two years (including, in certain cases, the holding period of any prior owner other than an affiliate) is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of (i) 1% of the then outstanding Common Shares (25,910 shares at March 25, 1996) or (ii) the average weekly trading volume in the Common Shares during the four calendar weeks preceding such sale, subject to the filing of a Form 144 with respect to such sale and certain other limitations and restrictions. In addition, a person who is not deemed to have been an affiliate of the Company at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least three years, would be entitled to sell such shares under Rule 144(k) without regard to the requirements described above.

### SELLING SHAREHOLDERS

This Prospectus relates to 11,400 Common Shares that were acquired by certain Selling Shareholders on March 12, 1992 through the automatic conversion of 11,400 Series A Preferred Shares of the Company. The Series A Preferred Shares converted into Common Shares automatically at the closing of the Company's sale of Common Shares in an initial public offering. This Prospectus also relates to 60,000 Common Shares that may be issued by the Company upon the exercise of the Warrants, and 76,073 Common Shares that may be issued by the Company upon exercise of the Underwriter's Warrants. See "DESCRIPTION OF SECURITIES -- Warrants; and--Underwriter's Warrants."

The Preferred Shares and the Warrants were offered and sold by the Company in units (each unit consisting of two Preferred Shares and one Warrant) without registration under the Act in reliance upon certain exemptions. In connection with the sale of the Preferred Shares and Warrants and the Underwriter's Warrants, the Company agreed to register for sale under the Act the Common Shares issuable upon the conversion of the Preferred Shares, and the Common Shares issuable upon the exercise of the Warrants and Underwriter's Warrants. The Company is bearing all expenses of registering the Common Shares for sale under the Act and under applicable state securities laws, but

the Selling Shareholders will bear any and all commissions, fees, and discounts of brokers and dealers, and all transfer taxes and fees is connection with any sales of Common Shares. The Company has agreed to use its best efforts to keep the registration statement, of which this Prospectus is a part, effective until the later of the second anniversary of the last sale of the Preferred Shares (December 9, 1994) or the expiration or redemption date of the Warrants.

The following table presents certain information pertaining to the Common Shares owned by the Selling Shareholders and the holders of the Underwriter's Warrants and is derived from the Company's stock transfer records and from information furnished to the Company by the Selling Shareholders and the holders of the Underwriter's Warrants.

Name	Shares Owned(1)(2)	Shares Offered For Sale(1)(2)	Shares Owned After Sale(1)
Ernest Berez	5,000	5,000	0
Keith Fleischman	4,000	4,000	0
Edward Thorp	2,400	2,400	0
Emanuel and Company(3)	19,507	19,507	0
Eric D. Emanuel(3)	19,507	19,507	0
Sheldon Kraft(3)	19,507	19,507	0
Jerome Feldman(3)(4)	17,552	17,552	0

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- (1) Excludes Common Shares issuable upon the exercise of the Warrants.
- (2) Includes Common Shares issuable upon the exercise of the Underwriter's Warrants.
- (3) The shares offered for sale are issuable upon the exercise of Underwriter's Warrants.
- (4) Excludes Common Shares owned by H.J. Meyers & Co., Inc., as to which Mr. Feldman disclaims beneficial ownership. Mr. Feldman is a Vice President of H.J. Meyers, & Co., Inc. Mr. Feldman owns other warrants to purchase 16,200 Common Shares.

### PLAN OF DISTRIBUTION

The Selling Shareholders may sell some or all of their Common Shares through NASDAQ or otherwise at prices and on terms then prevailing, or at prices related to the then current market price, or in negotiated transactions. The Selling Shareholders may sell some or all of their Common Shares in transactions involving broker-dealers who may act as agent or who may acquire Common Shares as principal.

During such time as the Warrants and Underwriter's Warrants are exercisable, broker-dealers also may acquire Warrants or Underwriter's Warrants from the holders thereof at prices based upon the difference between the then current market price of the Common Shares (or prices related to the then current market price of the Common Shares) and the exercise price of the Warrants or Underwriter's Warrants, but subject to discounts or selling concessions. Such broker-dealers may then exercise the Warrants or Underwriter's Warrants for their own accounts and sell the Common Shares as principals. Alternatively, broker-dealers may, subject to applicable laws and regulations pertaining to margin transactions, finance the exercise of the Warrants or Underwriter's Warrants by the holders thereof and then purchase and sell as principals, or sell as agents, the Common Shares.

Any broker-dealers participating in such transactions as agents may receive commissions from Selling Shareholders and from the holders of Warrants or Underwriter's Warrants (and, if they act as agents for the purchasers of such Common Shares, from such purchasers). Usual and customary brokerage fees will be paid by the Selling Shareholders and holders of Warrants and Underwriter's Warrants who are not broker-dealers. Broker-dealers may agree with Selling Shareholders to sell a specified number of Common Shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for the Selling Shareholders, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to the Selling Shareholders. Broker-dealers who acquire Common Shares as principals may thereafter resell such Common Shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) through NASDAQ or on the Boston Stock Exchange, in negotiated transactions or otherwise, at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such Common Shares usual and customary commissions.

Each Selling Shareholder and each holder of Warrants and Underwriter's Warrants has advised the Company that during such time as such Selling Shareholder or holder of Warrants or Underwriter's Warrants may be engaged in a distribution of the Common Shares, such person will: (a) not engage in any stabilization activity in connection with the Company's securities; (b) cause to be furnished to each broker through whom Common Shares included herein may be offered such copies of this Prospectus as may be required by such broker; and (c) not bid for or purchase any securities of the Company or any rights to acquire the Company's securities, or attempt to induce any person to purchase any of the Company's securities or rights other than as permitted under the Securities Exchange Act of 1934. The Selling Shareholders, the holders of Warrants and Underwriter's Warrants, and any broker-dealers who participate in the sale of Common Shares, may be deemed to be "underwriters" as defined in the Act. Any commissions paid or any discounts or concessions allowed to any such broker-dealers and, if any such broker-dealers purchase Common Shares as principals, any profits received on the resale of such Common Shares may be deemed to be underwriting discounts and commissions under the Act.

### LEGAL MATTERS

The validity of the Common Shares will be passed upon for the Company by Lippenberger, Thompson, Welch & Soroko LLP, San Francisco, California. A member of Lippenberger, Thompson,

### **EXPERTS**

The financial statements of BioTime, Inc. as of June 30, 1994 and 1995 and for each of the three fiscal years in the period ended June 30, 1995 included in this Prospectus have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which express an unqualified opinion and includes an explanatory paragraph related to the development stage of the Company's operations) included herein and has been so included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

### ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. a Registration Statement on Form S-1 under the Securities Act of 1933, as amended, for the registration of the securities offered hereby. This Prospectus, which is part of the Registration Statement, does not contain all of the information contained in the Registration Statement. For further information with respect to the Company and the securities offered hereby, reference is made to the Registration Statement, including the exhibits thereto, which may be inspected, without charge, at the Office of the Securities and Exchange Commission, or copies of which may be obtained from the Commission in Washington, D.C. upon payment of the requisite fees. Statements contained in this Prospectus as to the content of any contract or other document referred to are not necessarily complete, and in each instance reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference.

### INDEX TO FINANCIAL STATEMENTS

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Board of Directors and Shareholders BioTime, Inc. Berkeley, California

We have audited the accompanying balance sheets of BioTime, Inc. (a development stage company) as of June 30, 1995 and 1994, and the related statements of operations and cash flows for each of the three years in the period ended June 30, 1995, and the statements of shareholders' equity for the period from November 30, 1990 (inception) to June 30, 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of BioTime, Inc. as of June 30, 1995 and 1994, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 1995 in conformity with generally accepted accounting principles.

The Company is in the development stage as of June 30, 1995. As discussed in Note 1 to the financial statements, successful completion of the Company's product development program and ultimately the attainment of profitable operations is dependent upon future events, including maintaining adequate financing to fulfill its development activities, obtaining regulatory approval for products ultimately developed, and achieving a level of sales adequate to support the Company's cost structure.

DELOITTE & TOUCHE LLP Oakland, California August 25, 1995

### BALANCE SHEETS

	June 30, 1994	June 30, 1995	March 31, 1996
ASSETS			(unaudited)
CURRENT ASSETS Cash and cash equivalents (Note 2) Short term investments (Note 2) Research and development supplies Prepaid expenses and other current	\$ 719,046 5,000,000	\$ 3,440,896	200,000
assets	104,274	50,731	91,536
Total Current Assets	5,823,320	3,491,627	2,069,423
EQUIPMENT, Net of accumulated depreciation of \$31,470, \$62,681, and \$89,219 (Notes 2 and 3)	80,242	108,655	87,046
ORGANIZATION COSTS, Net of accumulated amortization of \$3,008, \$3,848 and \$4,196 (Note 2)	1,188	348	
DEPOSITS	4,300	9,700	9,700
TOTAL ASSETS		\$ 3,610,330 =======	
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES Accounts payable	\$ 42,371	\$ 311,427	\$ 93,991
COMMON SHARES, subject to rescission, no par value, issued and outstanding 37,392 shares (Note 5)		67,300	67,300
COMMITMENTS AND CONTINGENCIES (Notes 3 and 4)			
SHAREHOLDERS' EQUITY: Preferred Shares, no par value, undesignated as to series, authorized 1,000,000 shares; none outstanding (Note 5) Common Shares, no par value, authorized 5,000,000 shares; issued and outstanding 2,644,422, 2,559,822 and 2,553,622			
shares (Note 2)	9,451,627 93,972	9,261,598 93,972	9,248,905 93,972
stage		(6,123,967)	(7,337,999)
Total shareholders' equity	5,799,379	3,231,603	
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 5,909,050		\$ 2,166,169 ======

See notes to financial statements

# STATEMENTS OF OPERATIONS

Period From

		ear Ended June		Nine Mon Marc	Inception (November 30, 1990) to	
		1994		1995	1996	March 31, 1996
					(unaudited)	(unaudited)
EXPENSES:						
Research and development (Note 2,3 and 4)	\$ (562,746)	\$ (777,668)	\$(1,791,698)	\$(1,196,340)	\$ (793,769)	\$(4,424,629)
General and administrative (Notes 2,3,4 and 6)	(774,101)	(931,439)	(808, 432)	(631,390)	(528,519)	(3,595,245)
Total Expenses	(1,336,847)	(1,709,107)	(2,600,130)	(1,827,730)	(1,322,288)	(8,019,874)
INCOME:						
Interest	119,592	152,438	218,416	156,877	105,296	656,782
Other	8,087	9,716	3,967	2,307	2,960	49,924
Total Income	127,679	162,154	222,383	159,184	108,256	706,706
NET LOSS	\$(1,209,168) =======	\$(1,546,953) =======	\$(2,377,747) =======	, , ,	\$(1,214,032) =======	\$(7,313,168) =======
NET LOSS PER SHARE (Note 2)	\$ (.69) ======	\$ (.76) ======	\$ (.90) =====	\$ (.63) ======	, ,	\$ (3.82) ======
NUMBER OF SHARES USED FOR CALCULATION OF NET LOSS PER SHARE (Note 2)	1,746,614 ======	2,046,445 ======		, ,	2,591,581 ======	1,914,056 ======

See notes to financial statements

# STATEMENTS OF SHAREHOLDERS' EQUITY

	Series A Convertible Preferred Shares		Common			Deficit Accumulated During
	Number of Shares		Number of Shares	Amount	Contributed Capital	Development Stage
BALANCE, November 30, 1990 (date of inception)						
NOVEMBER 1990 - 437,587 common shares issued for cash (\$0.0006 per share)			437,587	\$ 263		
DECEMBER 1990: 350,070 common shares issued for stock of a separate entity at fair value of \$.39 per share			350,070	137,400		
Contributed equipment at appraised value					\$16,425	
Contributed cash (Note 3)					77,547	
MAY 1991: 33,725 common shares issued for cash (\$1.80 per share), less offering costs of \$6,237 (Note 5)			33,725	54,463		
33,340 common shares issued or stock of a separate entity at fair value of \$1.80 per share (Note 6)			33,340	60,000		
NET LOSS						(255,609)
BALANCE AT JUNE 30, 1991			854,722	252,126	93,972	(255,609)
JULY 1991: 10,000 common shares issued for services performed (\$1.80 per share) (Note 6)			10,000	18,000		
AUGUST 1991: 36,000 preferred shares issued for cash (\$5.00 per share) less offering costs of \$39,851	. 36,000	\$140,149				
SEPTEMBER 1991: 8,000 preferred shares issued for cash (\$5.00 per share) less offering costs of \$4,856	. 8,000	35,144				
OCTOBER 1991: 26,400 preferred shares issued for cash (\$5.00 per share) less offering costs of \$28,134	. 26,400	103,866				

See notes to financial statements.

(Continued)

# STATEMENTS OF SHAREHOLDERS' EQUITY

	Series A Convertible Preferred Shares		Common	Shares		Deficit Accumulated
	Number of Shares		Number of Shares	Amount	Contributed Capital	During Development Stage
NOVEMBER 1991: 42,300 preferred shares issued for cash (\$5.00 per share), less offering costs of \$45,079	42,300	166,421				
DECEMBER 1991: 7,300 preferred shares issued for cash (\$5.00 per share), less offering costs of \$7,780	7,300	28,720				
MARCH 1992: 724,500 common shares issued for cash (\$8.00 per share), less offering costs of \$1,015,873			724,500	4,780,127		
120,000 preferred shares converted into 120,000 common shares	(120,000)	(474,300)	120,000	474,300		
Dividends declared and paid on preferred shares						(24,831)
NET LOSS						(709,659)
BALANCE AT JUNE 30, 1992			1,709,222	5,524,553	93,972	(990,099)
NET LOSS						(1,209,168)
BALANCE AT JUNE 30, 1993				5,524,553	93,972	(2,199,267)
MARCH 1994: 935,200 common shares issued for cash (\$5.125 per share), less offering costs of \$865,826			935,200	3,927,074		
NET LOSS						(1,546,953)
BALANCE AT JUNE 30, 1994			2,644,422	9,451,627	93,972	(3,746,220)
AUGUST 1994: 7,000 common shares repurchased with cash			(7,000)	(20,613)		
SEPTEMBER 1994: 4,400 common shares repurchased with cash			(4,400)	(10,438)		
OCTOBER 1994: 23,500 common shares repurchased with cash			(23,500)	(55,926)		

(Continued)

# STATEMENTS OF SHAREHOLDERS' EQUITY

	Series A Convertible Preferred Shares			Common Sha	ıres		Deficit Accumulated During
	Number of Shares	Amount	Number	of Shares	Amount	Contributed Capital	Development Stage
DECEMBER 1994:							
18,000 common shares repurchased with cash				(18,000)	(43,812)		
JANUARY 1995: 21,000 common shares repurchased							
with cash				(21,000)	(38, 145)		
FEBRUARY 1995: 6,000 common shares repurchased				(6,000)	(12,022)		
with cash	•			(6,000)	(12,932)		
JUNE 1995: 4,700 common shares repurchased							
with cash	•			(4,700)	(8,163)		
NET LOSS							(2,377,747)
BALANCE AT JUNE 30, 1995			2	,559,822	9,261,598	93,972	(6,123,967)
JULY 1995: 4,200 common shares repurchased with cash (unaudited)				(4,200)	(8,032)		
,	•			(4,200)	(0,032)		
AUGUST 1995: 1,700 common shares repurchased with cash (unaudited)				(1,700)	(3,805)		
SEPTEMBER 1995: 300 common shares repurchased							
with cash (unaudited)				(300)	(856)		
NET LOSS (unaudited)							(1,214,032)
BALANCE AT MARCH 31, 1996							
(unaudited)				,553,622 ======	\$9,248,905 ======	\$93,972 =====	\$(7,337,999) =======

(Concluded)

See notes to financial statements.

## BIOTIME, INC. (A Development Stage Company) STATEMENTS OF CASH FLOWS

	,	Year Ended June	30,	Nine Mon Marc	Period from Inception November 30, 1990) to March 31,	
	1993	1994	1995	1995	1996	1996
				(unaudited)	(unaudited)	(unaudited)
OPERATING ACTIVITIES  Net loss	\$(1,209,168)	\$(1,546,953)	\$(2,377,747)	\$(1,668,546)	\$(1,214,032)	\$(7,313,168)
Depreciation and amortization	9,466	29,500	32,051	23,108	26,886	105,616
Common shares issued for services						18,000
Research and development supplies Inventory					(200,000)	(200,000)
current assets	(1,850)	(51,540)	53,543 (5,400)	(6,137) (5,400)	(40,805)	(91,536) (9,700)
Organizational Costs Accounts Payable		9,661	267,326	40,375	(215,709)	(4,196) 93,990
Net cash used in operating activities	(1,255,909)		(2,030,227)		(1,643,660)	(7,400,994)
INVESTING ACTIVITIES: Sale of investments Purchase of short-term						197,400
investments	(1,946,203)	(5,000,000)	(3,000,000)	(3,000,000)		(9,946,203)
investments		1,934,000	8,000,000	5,000,000		9,934,000
Purchase of equipment and furniture	(41,440)	(41,420)	(59,624)	(59,626)	(4,929)	(159,840)
Net cash provided by (used in) investing activities	(1,987,643)	(3,107,420)	4,940,376	1,940,374	(4,929)	25,357

(Continued)

# STATEMENTS OF CASH FLOWS

	Year Ended June 30,		Nine Months Ended December 31,		Period from Inception November 30, 1990) to	
	1993	1994	1995	1995 1996		March 31, 1996
				(unaudited)	(unaudited)	(unaudited)
FINANCING ACTIVITIES: Issuance of preferred shares for cash Preferred shares placement costs						600,000
Issuance of common shares for						(125,700)
cash  Common shares placement costs  Contributed capital - cash  Dividends paid on preferred	(54,458)	4,792,900 (865,826)				10,710,926 (1,881,699) 77,547
shares			(188, 299)	(181,866)	(14,420)	(24,831) (202,719)
Net cash provided by (used in) financing activities	(54, 458)	3,927,074	(188, 299)	(181,866)	(14,420)	9,153,524
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(3,298,010)	(739,678)	2,721,850	141,908	(1,663,009)	1,777,887
CASH AND CASH EQUIVALENTS: At beginning of period	4,756,734	1,458,724	719,046	719,046	3,440,896	
At end of period	\$1,458,724 =======	\$ 719,046 =======	\$3,440,896 =======	\$ 860,954 ======	\$1,777,887 =======	\$1,777,887 =======
NON CASH FINANCING AND INVESTING ACTIVITIES:						
Receipt of contributed equipment Issuance of common shares in exchange for shares of common stock of Cryomedical Sciences,						\$ 16,425
Inc. in a stock-for-stock transaction						\$ 197,400 \$ 54,458
Accrued common shares repurchase			\$ 1,730			\$ 1,730
See notes to financial statements.						(Concluded)

### NOTES TO FINANCIAL STATEMENTS

(All information with respect to the periods ended March 31, 1995 and 1996 and the period from inception (November 30, 1990) to March 31, 1996, and as of March 31, 1996, is unaudited)

### GENERAL AND DEVELOPMENT STAGE ENTERPRISE

General - BioTime, Inc. (the Company) was organized November 30, 1990 as a California corporation. The Company is a biomedical organization, currently in the development stage, which is engaged in research, development and marketing of synthetic plasma expanders, blood substitute solutions, and organ preservation solutions, for use in surgery, trauma care, organ transplant procedures, and other areas of medicine.

Development Stage Enterprise - Since inception, the Company has been engaged in research and development activities in connection with the development of synthetic blood substitute and organ preservation products. The Company has not had any significant operating revenues and has incurred operating losses of \$7,313,168 from inception to March 31, 1996. The successful completion of the Company's product development program and, ultimately, achieving profitable operations is dependent upon future events including maintaining adequate capital to finance its future development activities, obtaining regulatory approvals for products that may be ultimately developed and achieving a level of sales adequate to support the Company's cost structure.

While the Company successfully completed two public offerings of its common stock and, at March 31, 1996, had remaining financial resources of over \$1,700,000 resulting therefrom, management believes that additional funds may be required for the successful completion of its product development activities.

### 2. SIGNIFICANT ACCOUNTING POLICIES

Cash and cash equivalents include cash, money market funds, and U.S. Government securities with original maturities of three months or less.

Short-term investments include debt securities at June 30, 1994. These investments have maturities greater than three months but less than twelve months. Those debt securities are carried at amortized cost and had a market value of \$4,984,400 at June 30, 1994, based on quoted market prices.

Equipment is stated at cost or, in the case of donated equipment, at fair market value. Equipment is being depreciated using the straight-line method over a period of sixty months.

Organizational costs are amortized over a period of sixty months.

Patent costs associated with obtaining patents on products being developed are expensed as research and development expenses when incurred. These costs totaled \$83,430 for the year ended June 30, 1995, \$60,777 for the year ended June 30, 1994, \$23,494 for the year ended June 30, 1993, and cumulatively, \$181,019 for the period from inception (November 30, 1990) to June 30, 1995.

Research and development costs, consisting principally of salaries, payroll taxes, research and laboratory fees, are expensed as incurred.

Income Taxes: At June 30, 1995, the Company has not realized any taxable income since its inception and has federal and state loss carryforwards of 6,069,000 and 3,035,000 for both financial statement and tax purposes as follows:

Year of		
Expiration	Federal	State
2006	\$ 255,000	\$ 128,000
2007	710,000	355,000
2008	1,209,000	604,000
2009	1,547,000	774,000
2010	2,348,000	1,174,000
Total	\$6,069,000	\$3,035,000
	========	========

In the event of a significant change in the ownership of the Company, the utilization of such loss carryforwards could be substantially limited.

Net Loss Per Share is based on the weighted average number of common shares outstanding during the periods presented. For purposes of computing weighted average number of common shares outstanding, all common shares and preferred shares issued prior to the initial public offering, and those options issued in October 1991, were assumed to be outstanding for the periods ending June 30, 1992 and 1991 in accordance with rules of the Securities and Exchange Commission relating to stock issued within one year of an initial public offering. For all periods presented, all unexercised warrants and options are considered to be antidilutive and were not included in the computation.

Unaudited Data: The Balance Sheet as of March 31, 1996, the Statements of Operations for the nine month periods ended March 31, 1995 and 1996, the Statement of Shareholders' Equity for the nine month period ended March 31, 1996, and the Statements of Cash Flows for the nine month periods ended March 31, 1995 and 1996 have been prepared by the Company without audit. In the opinion of management, all adjustments, consisting of normal recurring accruals, necessary to present fairly the financial position at March 31, 1996, and the results of operations and cash flows for all periods presented have been made.

### 3. COMMITMENTS AND CONTINGENCIES

The Company has employment agreements with five officers/shareholders for the three-year period commencing February 1, 1993 that provide for compensation at \$60,000 for the first year, \$65,000 for the second year, and \$70,000 for the third year. These officers/shareholders have signed an intellectual property agreement with the Company as a condition of their employment.

The Company has an employment agreement with the Chairman of the Board/shareholder for the three year period commencing April 25, 1994 that provides for compensation at \$60,000 for the first year, \$100,000 for the second year, and \$105,000 for the third year. The Chairman has signed an intellectual property agreement with the Company as a condition of his employment.

In December 1990, the Company was granted a fully paid, royalty-free worldwide irrevocable nonexclusive license to make, have made, use and sell CMSI's hypothermic blood substitute solution that exists in CMSI's patent application. The license granted by CMSI will terminate if certain officers/shareholders in the aggregate do not own at least 33 1/3% of the interest in the Company not sold to the public or otherwise owned by public shareholders. At June 30, 1995 the license is still in effect.

### 4. LEASES

In June 1993, the Company entered into a two-year lease agreement for its principal office and research facilities. Rent expense totaled \$53,388 for the year ended June 30, 1995, \$25,200 for the year ended June 30, 1994, \$15,600 for the year ended June 30, 1993. During July 1994, the lease was amended to include additional space and to extend the expiration period to May 31, 1997, subject to the Company's option to renew the lease for an additional 24 month period. Rent for the initial term of the new lease is \$4,500 per month for the first year, \$4,900 per month for the second year, and \$5,000 per month for the third year. If the Company exercises its option to renew the lease, rent during the option period will be \$5,300 per month, plus the cost of utilities.

The Company utilized additional facilities owned by officers/shareholders. Rent and utilities are charged to the Company and totaled \$5,300 for the year ended June 30, 1995 \$10,300 for the year ended June 30, 1994, \$11,400 for the years ended June 30, 1993.

### 5. SHAREHOLDERS' EQUITY

In May 1991, the Company received \$121,763, net of offering costs of \$6,237, in a private placement offering in exchange for 71,117 common shares. The investors in certain states where this investment has been offered may have the right to rescind their investment in 37,392 shares purchased. If these investors choose to do so, the maximum amount that must be repaid by the Company to these investors is \$67,300. Accordingly, 37,392 shares and related amounts have been excluded from shareholders' equity in the financial statements.

In December 1991, the Company completed the private placement of 60,000 units (120,000 preferred shares and 60,000 warrants) at \$10.00 per unit. Offering costs (consisting of commissions of \$60,000 and other costs of \$65,700), have been charged against the proceeds of the private placement on a pro rata basis. Each preferred share was automatically converted into one common share upon the closing of the initial public offering in March 1992. Each warrant is exercisable for one common share at \$8.00 until the earlier of the date 30 calendar days after the date of this Prospectus or June 30, 1996 (unless the expiration date is extended to a later date by the Company), or the day immediately preceding the

date on which the Warrants are redeemed by the Company.

In March 1992, the Company completed an underwritten initial public offering of 724,500 common shares, at an initial price to the public of \$8.00 per share. The net proceeds to the Company, after deducting expenses of the offering, was \$4,780,127.

Under the terms of the underwriting agreement for the public offering, the Company sold to the underwriter, for \$60, warrants to purchase 61,889 common shares at an exercise price of \$9.60 per share, subject to adjustment to prevent dilution. The underwriter's warrants will expire on March 4, 1997.

In March 1994, the Company completed a second underwritten public offering of 935,200 common shares, at an initial price to the public of \$5.125 per share. The net proceeds to the Company, after deducting expenses of the offering, was \$3,927,074. Under the terms of the underwriting agreement for the public offering, the Company sold to the underwriter, for \$5, warrants to purchase 90,000 common shares at an exercise price of \$7.18 per share, subject to adjustment to prevent dilution. The underwriter's warrants will expire on March 4, 2000.

The Board of Directors of the Company adopted the 1992 Stock Option Plan (the "Plan") in September 1992, which was approved by the shareholders at the 1992 Annual Meeting of Shareholders, on December 1, 1992. Under the Plan, as amended, the Company has reserved 400,000 Common Shares for issuance under options granted to eligible persons. No options may be granted under the Plan more than ten years after the date the Plan was adopted by the Board of Directors, and no options granted under the Plan may be exercised after the expiration of ten years from the date of grant.

Under the Plan, options for the purchase of 287,000 shares have been granted to eligible persons including employees, officers and directors, members of the scientific advisory board and certain consultants to the Company as of March 31, 1996. Such options are exercisable at prices ranging from \$1.99 to \$10.79 beginning from one to two years after the grant date and expire after five to ten years from the grant date. Certain options require the achievement of performance criteria. At March 31, 1996 224,498 options were exercisable at prices ranging from \$1.99 to \$10.79. No granted options have been exercised as of March 31, 1996.

In October 1995, the Financial Accounting Standards Board issued SFAS No. 123, "Accounting for Stock-Based Compensation," which requires the Company to adopt the disclosure provisions of that accounting standard for fiscal year 1997. Pursuant to the new standard, companies are encouraged, but are not required, to adopt the fair value method of accounting for employee stock-based transactions. Companies are also permitted to continue to account for such transactions under Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," but would be required to disclose pro forma results of operations in a note to the financial statements and, if presented, per share amounts as if the company had applied the new method of accounting. The Company has not yet determined if it will elect to change to the fair value method, nor has it determined the effect the new standard will have on operating results and related per share amounts should it elect to make such change. Adoption of the new standard will have no effect on the Company's cash flows.

In June 1994, the Board of Directors authorized management to repurchase up to 200,000 shares of the Company's common shares at market price at the time of purchase. As of March 31, 1996, 90,800 shares have been repurchased and retired.

### 6. RELATED PARTY TRANSACTIONS

In December 1990, three officers/shareholders transferred 137,400 shares of CMSI common stock to the Company in exchange for 350,070 common shares of the Company. The Company simultaneously sold these shares back to CMSI for \$137,400 in cash.

In May 1991, Trans Time, Inc. transferred 60,000 shares of CMSI common stock to the Company in exchange for 33,340 common shares of the Company valued at \$1.80 per share. The Company simultaneously sold these shares back to CMSI for \$60,000 in cash. Certain officers and directors of the Company own in the aggregate approximately 25.4% of the total Trans Time, Inc. common stock outstanding at March 31, 1996.

In July 1991, the Company issued 10,000 common shares to the Chairman of the Board as consideration for services performed on behalf of the Company. The issuance of such shares, valued at \$1.80 per share, resulted in a charge to compensation expense of \$18,000 during the year ended June 30, 1992.

During the year ended June 30, 1995, \$81,043 in fees for legal and consulting services was paid to a shareholder/member of the Board of Directors. During the nine months ended March 31, 1995 and 1996, the Company paid \$71,742 and \$14,880, respectively, to such shareholder/director for legal and consulting services rendered.

### 7. QUARTERLY RESULTS (UNAUDITED)

Summarized results of operations for each quarter of fiscal 1993, 1994 and 1995 are as follows:

1993	First	Second	Third	Fourth	Total
	Quarter	Quarter	Quarter	Quarter	Year
Net loss	\$275,530	\$344,010	\$248,044	\$341,584	\$1,209,168
Net loss per share	\$ .16	\$ .20	\$ .14	\$ .19	\$ .69
1994  Net loss Net loss per share	\$318,717 \$ .18	\$431,161 \$ .25	\$301,441 \$ .15	\$495,634 \$ .18	\$1,546,953 \$ .76
1995  Net loss Net loss per share	\$483,737 \$ .18	\$631,714 \$ .24	\$553,095 \$ .21	\$709,201 \$ .27	\$2,377,747 \$.90

No dealer, salesperson or other person has been authorized in connection with this offering to give any information or to make any representations other than those contained in this Prospectus. This Prospectus does not constitute an offer or a solicitation in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create an implication that there has been no change in the circumstances of the Company or the facts herein set forth since the date hereof.

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BIOTIME, INC.

147,473 Common Shares

PROSPECTUS

MAY 14, 1996

### PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Indemnification of Directors and Officers.

Section 317 of the California Corporations Code permits indemnification of directors, officers, employees and other agents of corporations under certain conditions and subject to certain limitations. In addition, Section 204(a)(10) of the California Corporations Code permits a corporation to provide, in its articles of incorporation, that directors shall not have liability to the corporation or its shareholders for monetary damages for breach of fiduciary duty, subject to certain prescribed exceptions. Article Four of the Articles of Incorporation of the Registrant (Exhibit 3(a)) contains provisions for the indemnification of directors, officers, employees and other agents within the limitations permitted by Section 317 and for the limitation on the personal liability of directors permitted by Section 204(b)(10), subject to the exceptions required thereby.

Item 16. Exhibits and Financial Statement Schedules.

Exhibit Numbers	Description
3 (a)	Articles of Incorporation as Amended.+
(c)	By-Laws, As Amended.#
4 (a)	Specimen of Common Share Certificate.+
(b)	Form of Warrant.#
(c)	Form of Underwriter's Warrant.#
(d)	Form of Underwriter's Warrant.**
5	Opinion of Counsel#
10 (a)	Lease Agreement dated July 1, 1994 between the Registrant and Robert and Norah Brower, relating to principal executive offices of the Registrant.*
10 (b)	Employment Agreement dated February 1, 1993 between the Company and Paul Segall.^
10 (c)	Employment Agreement dated February 1, 1993 between the Company and Hal Sternberg.^
10 (d)	Employment Agreement dated February 1, 1993 between the Company and Harold Waitz.^

- 10 (e) Employment Agreement dated February 1, 1993 between the Company and Judith Segall.^
- 10 (f) Employment Agreement dated February 1, 1993 between the Company and Victoria Bellport.^
- 10 (g) Intellectual Property Agreement between the Company and Paul Segall.+
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- 10 (m) Agreement for Trans Time, Inc. to Exchange CMSI Common Stock for BioTime, Inc. Common Shares.+
- 10 (n) 1992 Stock Option Plan, as amended.^
- 10 (o) Employment Agreement dated April 1, 1994 between the Company and Lawrence Cohen.\*
- 10 (p) Intellectual Property Agreement between the Company and Lawrence Cohen.  $^{\wedge}$
- 23 (a) Consent of Deloitte & Touche LLP++
- 27 Financial Data Schedule++
- + Incorporated by reference to Registration Statement on Form S-1, File Number 33-44549 filed with the Securities and Exchange Commission on December 18, 1991, and Amendment No. 1 and Amendment No. 2 thereto filed with the Securities and Exchange Commission on February 6, 1992 and March 7, 1992, respectively.
- # Previously filed.
- $^{\wedge}$  Incorporated by reference to the Company's Form 10-K for the fiscal year ended June 30, 1993.
- \*\* Incorporated by reference to Registration Statement on Form S-1, File Number 33-73256 filed with the Securities and Exchange Commission on December 22, 1993, and Amendment No.1 thereto filed with the Securities and Exchange Commission on February 24, 1994.
- $^{\star}$  Incorporated by reference to the Company's Form 10-K for the fiscal year ended June 30, 1994.
- ++ Filed herewith.

### Item 17. Undertakings.

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 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 final adjudication of such issue.

The undersigned registrant hereby undertakes:

- (1) To file during any period in which offers or sales are made, a post-effective amendment to this registration statement:
- (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate represent a fundamental change in the information set forth in the registration statement;
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment 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.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this PostEffective Amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Berkeley, State of California on May 9, 1996.

BIOTIME, INC.

Ву	Paul Segall
	Paul Segall, President

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

Signature	Title	Date 
LAWRENCE COHEN	Chairman of the Board of Directors	May, 1996
Paul Segall PAUL SEGALL	President and Director (Principal Executive Officer)	May 9, 1996
Harold Waitz HAROLD WAITZ	Vice President and Director	May 9, 1996
Hal Sternberg HAL STERNBERG	Vice President and Director	May 9, 1996
Victoria BellportVICTORIA BELLPORT	Chief Financial Officer and Director (Principal Financial and Accounting Officer)	May 9, 1996
Judith Segall JUDITH SEGALL	Secretary and Director	May 9, 1996
Ronald S. Barkin RONALD S. BARKIN	Director	May 9, 1996

### EXHIBIT INDEX

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- ++ Filed herewith.

### INDEPENDENT AUDITORS' CONSENT

### BioTime Inc.:

We consent to the use in this Post-Effective Amendment No. 3 to Registration Statement No. 33-48717 of BioTime, Inc. on Form S-1 of our report dated August 25, 1995, appearing in the Prospectus, which is a part of this Registration Statement and to the reference to us under the heading "Experts" in such Prospectus.

DELOITTE & TOUCHE LLP Oakland, California May 14, 1996

