AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION	
	REGISTRATION NO.
SECURITIES AND EXCHANGE COMMISSIC WASHINGTON, D.C. 20549	
FORM S-2 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933	
BIOTIME, INC. (Exact name of Registrant as specified in	n charter)
CALIFORNIA (State or other jurisdiction of incorporation or organization)	94-3127919 (I.R.S. Employer Identification Number)
935 PARDEE STREET BERKELEY, CALIFORNIA 94710 (510) 845-9535 (Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)	JUDITH SEGALL, VICE PRESIDENT AND SECRETARY BIOTIME, INC. 935 PARDEE STREET BERKELEY, CALIFORNIA 94710 (510) 845-9535 (Name, address, including zip code, and telephone number, including area code, of agent for service)
COPIES OF ALL COMMUNICATIONS, INCLUDING ALL COMMUNICATIONS SERVICE, SHOULD BE SENT TO: RICHARD S. SOROKO, ESQ. LIPPENBERGER, THOMPSON, WELCH, SOROKO & GI 201 TAMAL VISTA BLVD. CORTE MADERA, CALIFORNIA 94925 TEL. (415) 927-5200	
Approximate date of commencement of proposed sale to practicable after this Registration Statement becomes ef	
If any of the securities being registered on this Fo a delayed or continuous basis pursuant to Rule 415 under 1933 check the following box: [X]	
If the registrant elects to deliver its latest annua nolders, or a complete and legible facsimile thereof, pu of this Form, check the following box. []	
If this Form is filed to register additional securit oursuant to Rule 462(b) under the Securities Act, please and list the Securities Act registration statement numbe effective registration statement for the same offering.	e check the following box er of the earlier
If this Form is a post-effective amendment filed pur under the Securities Act, check the following box and li registration statement number of the earlier effective r for the same offering. []	st the Securities Act
If this Form is a post-effective amendment filed pur under the Securities Act, check the following box and li registration statement number of the earlier effective r for the same offering. []	st the Securities Act
If delivery of the prospectus is expected to be made please check the following box. []	e pursuant to Rule 434,
CALCULATION OF REGISTRATION FEE	

----- PROPOSED AMOUNT
PROPOSED MAXIMUM
AMOUNT OF TITLE OF
EACH CLASS OF TO BE
MAXIMUM OFFERING
AGGREGATE
REGISTRATION
SECURITIES TO BE
REGISTERED REGISTERED

PRICE PER UNIT (1)
OFFERING PRICE(1) FEE
OFFERING PRICE(1) FEE
Common Share
Subscription
Rights 13,654,949
Common Shares, no par
value(2)
value(2) 1,706,869 \$1.40
\$2,389,616.60 \$193.32 Warrants to Purchase
Warrants to Purchase
Common Shares(2)
853,434 Common Shares no nar
Common Shares, no par value(3) 853,434 \$1.40
853,434 \$1.40
\$1,194,807.60 \$96.66
Warrants to Purchase
Common Shares(3)
426,717 Common Shares, no par
value(4)
428,571 \$1.40
\$600,000 \$48.54
Warrants to Purchase
Common Shares(4)
214,285
Warrants to Purchase
Common Shares(4) 250,000
Warrants to Purchase
Common Shares(5)
500,000
Common Shares, no par
value(6) 1,071,428 \$1.40
1,071,428 \$1.40
\$1,500,000 \$121.35 Warrants to Purchase
Common Shares(6)
535.714
Common Shares, no par
Common Shares, no par value(7) 2,780,150 \$2.00
2,780,150 \$2.00
\$5,560,300 \$449.83 -
Total Registration Fee
\$909 70
\$909.70

- (1) Estimated solely for the purpose of calculating the registration fee.
- (2) Issuable upon the exercise of the Common Share Subscription Rights.
- (3) Issuable to fill Excess Over-Subscriptions.
- (4) Issuable to the Guarantors.
- (5) Issuable to Participating Debenture Holders.
- (6) Issuable in exchange for Debenture.
- (7) Issuable upon the exercise of the Warrants.

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

BIOTIME, INC.

- 1,706,869 UNITS ISSUABLE UPON THE EXERCISE OF SUBSCRIPTION RIGHTS
 853,434 UNITS ISSUABLE TO FILL EXCESS OVER-SUBSCRIPTIONS
 428,571 UNITS OFFERED TO THE GUARANTORS
- 1,071,428 UNITS ISSUABLE IN EXCHANGE FOR SERIES 2001-A DEBENTURES 2,780,150 COMMON SHARES ISSUABLE UPON EXERCISE OF WARRANTS EACH UNIT CONSISTS OF ONE COMMON SHARE AND ONE-HALF OF A WARRANT

BioTime, Inc. ("BioTime") is issuing new securities called "rights." The rights will entitle you to subscribe for and purchase one "unit" for every eight rights you hold. The subscription price is \$1.40 per unit. Each unit will consist of one BioTime common share and one-half of a warrant to purchase one common share. Each full warrant will entitle you to purchase one common share of BioTime for \$2.00 per share. You will receive a right from BioTime if you owned BioTime shares as of the close of business on , 2003, which has been set as the record date. You will receive one right for each common share that you owned on the record date. If your shares were held in the name of Cede & Co. as nominee for The Depository Trust Company, or in the name of any other depository or nominee, on the record date, you will also receive rights.

A group of private investors (the "Guarantors") and certain holders of BioTime Series 2001-A debentures (the "Participating Debenture Holders") have agreed to purchase units that remain unsold at the conclusion of the rights offering, excluding units that we have authorized to issue to fill over-subscriptions and subject to a maximum purchase obligation of \$2,250,000. The Participating Debenture Holders will purchase their portion of any unsold units by exchanging a principal amount Series 2001-A debentures equal to the purchase price of the units.

THE RIGHTS WILL EXPIRE AT 5:00 P.M. NEW YORK CITY TIME ON , 2003

By exercising your rights, you will be able to purchase BioTime shares at a price below market, without incurring broker's commissions. By over-subscribing, you may be able to purchase any units that are left over by shareholders who fail to exercise their rights. BioTime may also issue up to 853,434 additional units to fill over-subscriptions.

In addition to the units that may be issued through the exercise of the rights and units that may be sold to fill excess over-subscriptions, we will offer and sell up to an additional 428,571 units at the subscription price directly to the Guarantors and their designees. The Guarantors will not be obligated to purchase any of these additional units, and we will not pay underwriting fees or commissions with respect to any of the additional units sold in this manner.

We are also offering all holders of our Series 2001-A debentures the opportunity to exchange up to \$1,500,000 of those debentures for units at the subscription price per unit. The Participating Debenture Holders have agreed to exchange all of their debentures for units, subject to proration in the event the total amount of debentures exchanged exceeds \$1,500,000, if the rights offer is over-subscribed so that BioTime issues all of the units reserved to fill excess over-subscriptions, and if the Guarantors purchase all 428,571 additional units offered to them.

The common shares are authorized for trading on the American Stock Exchange ("AMEX") under the symbol BTX. The rights will be transferable and are expected to be approved for trading on the AMEX under the symbol BTXR. The warrants and common shares issuable upon the exercise of the rights will be immediately tradeable apart from the units. We have applied to list the warrants on the AMEX under the symbol BTXW.

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" ON PAGE 9.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

GUARANTORS' FEE AND PARTICIPATING PRICE TO DEBENTURE PROCEEDS TO THE THE PUBLIC HOLDERS' FEE COMPANY(1) --

Subscription Rights Exercise Price Per
Unit.......\$ 1.40 \$ 0.088 \$ 1.31 Price Per
Unit Offered to the Guarantors......\$
1.40 -- \$ 1.40 Price Per Unit Offered to Debenture
Holders(2)........\$ 1.40 -- \$ 1.40 Total

(3)..... \$4,184,424.11 \$150,000 \$4,034,424.11

- (1) Before deducting expenses of the Rights offer which are estimated to be \$
- (2) Payable by tendering Series 2001-A Debentures in exchange for units.
- (3) Assumes all of the Rights are exercised, 853,434 units are sold to fill excess over-subscriptions, and all 428,571 units offered to the Guarantors are sold. Does not include the exchange of up to \$1,500,000 of Series 2001-A

debentures for units.

The date of this prospectus is

, 2003

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PROSPECTUS SUMMARY

The following summary explains only some of the information in this prospectus. More detailed information and financial statements appear elsewhere in this prospectus or in the documents incorporated by reference into this prospectus. Statements contained in this prospectus that are not historical facts may constitute forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those discussed. Words such as "expects," "may," "will," "anticipates," "intends," "plans," "believes," "seeks," "estimates," and similar expressions identify forward-looking statements. See "Risk Factors."

THE COMPANY

BioTime, Inc. is a development stage company engaged in the research and development of synthetic solutions that can be used as blood plasma volume expanders, blood replacement solutions during hypothermic (low temperature) surgery, and organ preservation solutions. Plasma volume expanders are used to treat blood loss in surgical or trauma patients until blood loss becomes so severe that a transfusion of packed red blood cells or other blood products is required. We are also developing a specially formulated hypothermic blood substitute solution that would have a similar function and would be used for the replacement of very large volumes of a patient's blood during cardiac surgery, neurosurgery and other surgeries that involve lowering the patient's body temperature to hypothermic levels.

Our first product, Hextend(R) is a physiologically balanced blood plasma volume expander for the treatment of hypovolemia. Hypovolemia is a condition caused by low blood volume, often from blood loss during surgery or from injury. Hextend maintains circulatory system fluid volume and blood pressure and keeps vital organs perfused during surgery. Hextend, approved for use in major surgery, is the only blood plasma volume expander that contains a medically approved form of starch called hetastarch, lactate, multiple electrolytes and glucose. Hextend is designed to compete with and to replace products that have been used to maintain fluid volume and blood pressure during surgery. These competing products include albumin and other colloid solutions, and crystalloid solutions. Albumin is a solution that contains a protein processed from human blood. Other colloid solutions contain proteins or a starch that keep the fluid in the patient's circulatory system in order to maintain blood pressure. Crystalloid solutions generally contain salts and may also contain other electrolytes, and are not as effective as Hextend, albumin and other colloids on a per unit basis in maintaining a patient's circulatory system fluid volume and pressure. Hextend is also completely sterile to avoid risk of infection. Health insurance reimbursements and HMO coverage now include the cost of Hextend used in surgical procedures.

Hextend is being sold in the United States and Canada by Abbott Laboratories under an exclusive license from the Company. Abbott also has a right to obtain licenses to manufacture and sell other BioTime products. During March 2003, BioTime granted to CJ Corp. an exclusive license to manufacture and sell Hextend and another of our plasma volume expanders, PentaLyte, (R) in South Korea. CJ Corp. will have to obtain regulatory approval before sales can begin. CJ Corp. will be responsible for obtaining the regulatory approvals required to manufacture and market Hextend and PentaLyte, including conducting any clinical trials that may be required, and will bear all related costs and expenses.

Abbott has announced its intension to spin-off a substantial portion of its hospital products business into a new company. Abbott's Hospital Products Division presently markets Hextend and Abbott has informed us that it is likely that its license to manufacture and market Hextend will be assigned to the new company. According to information disclosed by Abbott, Abbott had global sales of approximately \$17.7 billion during 2002 and has over 70,000 employees, and the new hospital products company is expected to have global sales of approximately \$2.5 billion and will employ approximately 14,000 people world-wide. Abbott believes that the new company will be the only company of its size focused solely on sales to hospitals. The spin-off is expected to be completed during the first half of 2004.

Various colloid and crystalloid products are being marketed by other companies for use in maintaining patient fluid volume in surgery and trauma care, but those solutions do not contain the unique comprehensive combination of electrolytes, glucose, lactate and hydroxyethyl starch found in Hextend. The use of competing solutions may contribute to patient morbidity, including conditions such as hypovolemia, fluid accumulation in

body tissues, impaired blood clotting, and a disturbance of the delicate chemical balances on which most of the body's chemical reactions depend. One of these competing products is 6% hetastarch in saline solution. The FDA has required the manufacturers of 6% hetastarch in saline solutions to change their product labeling by adding a warning stating that those products are not recommended for use as a cardiac bypass prime solution, or while the patient is on cardiopulmonary bypass, or in the immediate period after the pump has been disconnected. We have not been required to add that warning to the labeling of Hextend

Another competing product is albumin produced from human plasma. Albumin is more expensive than Hextend and is subject to supply shortages. An FDA warning has cautioned physicians about the risk of administering albumin to seriously ill patients.

We are also developing two other blood volume replacement products, Pentalyte, and HetaCool(R) that, like Hextend, have been formulated to maintain the patient's tissue and organ function by sustaining the patient's fluid volume and physiological balance.

In order to commence clinical trials for regulatory approval of new products, or new therapeutic uses of Hextend, it will be necessary for us to prepare and file with the FDA an Investigational New Drug Application ("IND") or an amendment to expand the present IND for additional clinical studies. Filings with foreign regulatory agencies will be required to commence clinical trials oversess

We have completed a Phase I clinical trial of PentaLyte involving a small number of subjects and we have submitted our findings to the FDA. We plan to test PentaLyte for the treatment of hypovolemia in surgery. PentaLyte contains a lower molecular weight hydroxyethyl starch than Hextend, and is more quickly metabolized. PentaLyte is designed for use when short lasting volume expansion is desirable. Our ability to commence and complete our clinical studies of PentaLyte depends on our cash resources and the costs involved, which are not presently determinable.

We are also continuing to develop solutions for low temperature surgery and trauma care. A number of physicians have reported using Hextend to treat hypovolemia under mild hypothermic conditions during cardiac surgery. Additional cardiac surgeries have been performed at deeper hypothermic temperatures. In one case, Hextend was used to treat hypovolemia in a cancer patient operated on under deep hypothermic conditions in which the heart was arrested. Once a sufficient amount of data from successful low temperature surgery has been compiled, we plan to seek permission to conduct trials using Hextend as a complete replacement for blood under near-freezing conditions. We currently plan to market Hextend for complete blood volume replacement at very low temperatures under the trade mark "HetaCool(R)" after FDA approval is obtained.

The cost of preparing regulatory filings and conducting clinical trials is not presently determinable, but could be substantial. It will be necessary for us to obtain additional funds in order to complete any clinical trials that we may conduct for our new products or for new uses of Hextend.

In addition to developing clinical trial programs, we plan to continue to provide funding for laboratory testing programs at selected universities, medical schools and hospitals for the purpose of developing additional uses of Hextend, PentaLyte, HetaCool, and other new products, but the amount of research that will be conducted at those institutions will depend upon our financial status.

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

 $\mbox{Hextend,(R)}$ PentaLyte,(R) and $\mbox{HetaCool}(R)$ are registered trademarks of $\mbox{BioTime, Inc.}$

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PURPOSE OF THE RIGHTS OFFER

We have determined that it is necessary for us to raise additional capital at this time to finance our operations, including:

- Costs of conducting additional clinical trials of BioTime products;
- Costs associated with seeking regulatory approval of our products;
- Continued research and product development; and
- General and administrative expenses.

We are issuing the rights to raise additional capital without significant dilution of the ownership interests of existing shareholders who exercise their rights. Shareholders who exercise their rights will be able to purchase shares at a price below market without incurring broker's commissions.

Generally, shareholders who exercise their rights in full will be able to maintain their prorata share of BioTime's outstanding common shares. However, if the rights offer is oversubscribed and we issue additional units to fill over-subscriptions, shareholders who do not purchase their prorata portion of those additional units by over-subscribing would experience a reduction in their percentage interests in BioTime's outstanding shares. Shareholders could also experience a reduction in their percentage interest in BioTime if they fail to exercise their warrants in the future. The distribution of the rights to shareholders will also afford those shareholders who choose not to exercise their rights the potential of receiving a cash payment upon the sale of their rights. Therefore, the receipt of rights by shareholders who chose not to exercise their rights may be viewed as compensation for the possible dilution.

TERMS OF THE OFFER

Securities Offered.....

The rights will entitle you to subscribe for and purchase one "unit" for every eight rights you hold. Each 'unit' will consist of one new common share and one-half of a warrant to purchase an additional common share. Fractional warrants will not be issued, so rights holders must exercise at least 16 rights to receive a full warrant.

Each full warrant entitles the holder to purchase one common share at a price of \$2.00 per share. The number of common shares and the exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination or similar recapitalization of the common shares. The warrants will expire on , 2006 and may not be exercised after that date.

BioTime may redeem the warrants by paying \$.05 per warrant if the closing price of the common shares on the AMEX or any other national securities exchange or the Nasdaq Stock Market exceeds 200% of the exercise price of the warrants for any 20 consecutive trading days. BioTime will give the warrant holders 20 days written notice of the redemption, setting the redemption date, and the warrant holders may exercise the warrants prior to the redemption date. The warrants may not be exercised after the last business day prior to the redemption date.

Subscription Price.....

The subscription price per unit is \$1.40.

Over-Subscription Privilege...

Shareholders who fully exercise the rights initially issued to them will be entitled to the additional privilege of subscribing for and purchasing any units not acquired by other holders of rights. See "The Rights Offer -- Over-Subscription Privilege."

How to Exercise Rights.....

The rights will be evidenced by subscription certificates, which will be distributed to shareholders. You may exercise your rights by completing the subscription certificate and delivering it, together with payment of the subscription price, to the subscription agent, American Stock Transfer & Trust Company, 59 Maiden Lane, New York, New York 10038. Payment may be made either by check drawn on a United States bank, or by notice of guaranteed delivery, as explained under "The Rights Offer -- Payment for Units." Rights must be exercised no later than the expiration date. You may not rescind a purchase after exercising your rights.

Sale of Rights.....

The rights are transferable until the last business day prior to the expiration date. A business day is a day on which the AMEX trades. The rights are expected to be authorized for trading on the AMEX. Trading of the rights will be conducted on a regular-way basis from , 2003 through the last business day prior to the expiration date. Any commissions in connection with the sale of rights will be paid by the selling rights holder. BioTime and the subscription agent cannot assure that a market for the rights will develop, or the prices at which rights may be sold if a market does develop.

Participation by Officers and Directors and Certain Financial Consultants......

Officers and directors of BioTime who own, in the aggregate, 720,095 common shares, have informed BioTime that they intend to purchase up to 90,011 units through the exercise of rights distributed to them, provided that suitable financial arrangements can be made, but they are not legally bound to do so. Alfred Kingsley, an affiliate of our financial advisor who beneficially owns 2,753,919 outstanding common shares, is a Guarantor and a Participating Debenture Holder.

Foreign Restrictions.....

Subscription certificates will not be mailed to shareholders whose addresses of record are outside the United States. The rights will be held by the subscription agent for foreign shareholders' accounts until instructions are received to exercise, sell or transfer the rights. If no instructions are received by 5:00 p.m., New York time on , 2003, which is three business days prior to the expiration date, the subscription agent will use its best efforts to sell the rights of foreign shareholders. The net proceeds, if any, from such a sale will be paid to the foreign shareholders on a prorata basis. See "The Rights Offer -- Foreign Shareholders."

Important Dates to Remember...

Record Date: , 2003 Expiration Date: , 2003 Last Date of Guaranteed Delivery: , 2003

Amendment, Extension or Termination of the Rights Offer.....

BioTime may, in its sole discretion: (a) terminate the rights offer prior to delivery of the units for which rights holders have subscribed; (b) extend the expiration date to a later date; (c) change the record date prior to the distribution of the rights to shareholders; or (d) amend or modify the terms of the rights offer.

Sale of Additional Units to the Guarantors.....

We will offer the Guarantors the opportunity to purchase an additional 428,571 until 30 days after the Expiration Date of the rights offer. The additional Units will be offered at \$1.40 per unit.

Mandatory Retirement of Debentures.....

The Participating Debenture Holders have agreed to exchange \$1,500,000 of their debentures for Units if the rights offer is fully over-subscribed and the Guarantors or their designees purchase all of the additional units offered to them. If that occurs we will use proceeds of rights offer and the sale of units to the Guarantors offer to pay off the remaining debentures.

We have also offered all holders of our Series 2001-A Debentures the opportunity to voluntarily exchange their debentures for units at the subscription price. We will accept up to \$1,500,000 of debentures from all debenture holders.

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RISK FACTORS

AN INVESTMENT IN THE UNITS INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD PURCHASE THE UNITS ONLY IF YOU CAN AFFORD TO LOSE YOUR ENTIRE INVESTMENT. BEFORE DECIDING TO PURCHASE ANY OF THE UNITS OFFERED BY THIS PROSPECTUS, YOU SHOULD CONSIDER THE FOLLOWING FACTORS WHICH COULD MATERIALLY ADVERSELY AFFECT THE PROPOSED OPERATIONS AND PROSPECTS OF BIOTIME AND THE VALUE OF AN INVESTMENT IN BIOTIME. THERE MAY BE OTHER FACTORS THAT ARE NOT MENTIONED HERE OR OF WHICH WE ARE NOT PRESENTLY AWARE THAT COULD ALSO AFFECT BIOTIME'S OPERATIONS.

WE MAY NOT SUCCEED IN MARKETING OUR PRODUCTS DUE TO THE AVAILABILITY OF COMPETING PRODUCTS

Our ability to generate operating revenue depends upon our success in developing and marketing our products. We may not succeed in marketing our products and we may not receive sufficient revenues from product sales to meet our operating expenses or to earn a profit. In this regard, sales of Hextend to date have not been sufficient to generate an amount of royalties or licensing fees sufficient to cover our operating expenses. Factors that affect the marketing of our products include the following:

- Hextend and our other plasma expander products will compete with other products that are commonly used in surgery and trauma care and sell at low prices.
- In order to compete with other products, particularly those that sell at lower prices, BioTime products will have to provide medically significant advantages.
- Physicians and hospitals may be reluctant to try a new product due to the high degree of risk associated with the application of new technologies and products in the field of human medicine.
- Competing products are being manufactured and marketed by established pharmaceutical companies. For example, B. Braun/McGaw presently markets Hespan, an artificial plasma volume expander, and Abbott and Baxter International, Inc. manufacture and sell a generic equivalent of Hespan.
- There also is a risk that our competitors may succeed in developing safer or more effective products that could render our products and technologies obsolete or noncompetitive.

WE WILL SPEND A SUBSTANTIAL AMOUNT OF OUR CAPITAL ON RESEARCH AND DEVELOPMENT BUT WE MIGHT NOT SUCCEED IN DEVELOPING PRODUCTS AND TECHNOLOGIES THAT ARE USEFUL IN MEDICINE

- We are attempting to develop new medical products and technologies.
- Many of our experimental products and technologies have not been applied in human medicine and have only been used in laboratory studies on animals. These new products and technologies might not prove to be safe and efficacious in the human medical applications for which they were developed.
- The experimentation we are doing is costly, time consuming and uncertain as to its results. We incurred research and development expenses amounting to \$1,103,490 during 2002, \$436,140 during the first six months of 2003, and \$23,170,148 in total from BioTime's inception on November 30, 1990 through June 30, 2003.
- If we are 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. For example, we spent approximately \$5,000,000 on research and development of Hextend before commencing clinical trials on humans during October 1996. The cost of completing the Hextend clinical trials and preparing our FDA application was approximately \$3,000,000. These costs exclude corporate overhead included in general and administrative costs in our financial statements.
- Future clinical trials of new products such as PentaLyte may take longer and may be more costly than our Hextend clinical trials. The FDA permitted us to proceed directly into a Phase III clinical trial of Hextend involving only 120 patients because the active ingredients in Hextend had already been approved for use by the FDA in other products. Because PentaLyte contains a starch that has not been approved by the FDA

for use in a plasma volume expander, we have had to complete a Phase I clinical trial of PentaLyte, and we may have to complete a Phase II clinical trial in addition to a Phase III trial, or a combined Phase II/ Phase III trial, that will involve more patients than our Hextend trials. We do not yet know the scope or cost of the clinical trials that the FDA will require for PentaLyte or the other products we are developing.

WE HAVE INCURRED OPERATING LOSSES SINCE INCEPTION AND WE DO NOT KNOWN IF WE WILL ATTAIN PROFITABILITY

From November 1990, the date BioTime was incorporated, through June 30, 2003 we incurred \$35,121,171 of cumulative losses. Our net losses for the fiscal years ended December 31, 2000, 2001 and 2002 were \$4,925,024, \$3,658,825, and \$2,844,932, respectively. During the first six months of 2003 we had an operating loss of \$1,506,001. Our ability to generate sufficient operating revenue to earn a profit depends upon our success in developing and marketing or licensing our products and technology for medical use.

WE MIGHT NOT BE ABLE TO RAISE ADDITIONAL CAPITAL NEEDED TO PAY OUR OPERATING EXPENSES

We plan to continue to incur substantial research, product development, and regulatory expenses, and we will need to raise additional capital to pay operating expenses until we are able to generate sufficient revenues from product sales, royalties, and license fees. We have not received an amount of royalties and licensing fees from the sale of Hextend sufficient to cover our operating expenses. As of June 30, 2003, we had \$650,395 of cash and cash equivalents on hand. At our current rate of spending, those funds along with \$1,000,000 of insurance proceeds received during August, 2003 on the key man life insurance policy we held on the life of our former Chairman and Chief Executive Officer, and license fees receivable and anticipated royalties from Abbott, will last approximately 12 months. The amount and pace of research and development work that we can do or sponsor, and our ability to commence and complete clinical trials required to obtain FDA and foreign regulatory approval of our products, depends upon the amount of money we have. Future research costs are not presently determinable due to many factors, including the inherent uncertainty of those costs and the uncertainty as to the timing, source, and amount of capital that will become available for those projects. We have already curtailed the pace of our product development efforts due to the limited amount of funds available, and we may have to postpone further laboratory and clinical studies, unless our cash resources increase through a growth in revenues or additional equity investment or borrowing. In addition, during August 2004 we must repay the portion of \$3,350,000 of debenture indebtedness that is not exchanged for units. Although we will continue to seek licensing fees from pharmaceutical companies for licenses to manufacture and market our products abroad, it is likely that additional sales of equity or debt securities will be required to meet our short-term capital needs and to pay our debenture indebtedness. Sales of additional equity securities could result in the dilution of the interests of present shareholders. We may not be able to raise a sufficient amount of additional funds to permit us to develop and market our products. Unless we are able to generate sufficient revenue or raise additional funds when needed, it is likely that we will be unable to continue our planned activities, even if we are making progress with our research and development projects.

IF WE ARE UNABLE TO ENTER INTO ADDITIONAL LICENSING OR MANUFACTURING ARRANGEMENTS, WE MAY HAVE TO INCUR SIGNIFICANT EXPENSE TO ACQUIRE MANUFACTURING FACILITIES AND A MARKETING ORGANIZATION

We presently do not have adequate facilities or resources to manufacture our products and the ingredients used in our products. We plan to enter into arrangements with pharmaceutical companies for the production and marketing of our products. We have granted Abbott an exclusive license to manufacture and market Hextend in the United States and Canada, and we have granted CJ Corp. an exclusive license to manufacture and market Hextend and PentaLyte in Korea. Abbott's obligation to pay royalties on sales of Hextend will expire in the United States or Canada when all patents protecting Hextend in the applicable country expire and any third party obtains certain regulatory approvals to market a generic equivalent product in that country. CJ Corp. will not be able to commence sales of Hextend or PentaLyte in Korea until they obtain regulatory approval to do so. CJ Corp's obligation to pay royalties on sales of Hextend and PentaLyte, respectively, will expire when the patents protecting those products in Korea expire. Although a number of other pharmaceutical companies have expressed their interest in obtaining licenses to manufacture and market our products in other countries, we might

not be successful in negotiating other licensing arrangements. If licensing or manufacturing arrangements cannot be made on acceptable terms, we will have to construct or acquire our own manufacturing facilities and establish our own marketing organization, which would entail significant expenditures of time and money.

OUR BUSINESS COULD BE ADVERSELY AFFECTED IF WE LOSE THE SERVICES OF THE KEY PERSONNEL UPON WHOM WE DEPEND

We recently lost our Chairman and Chief Executive Officer, Paul Segall, who passed away in June. The loss of the services of any of our other executive officers could have a material adverse effect on us. We do not presently have long term employment agreements with any of our executive officers because our present financial situation precludes us from making long term compensation commitments in amounts commensurate with prevailing salaries of executive officers of similar companies in the San Francisco Bay Area. This may also limit our ability to engage a new Chief Executive Officer. In addition, our success will depend, among other factors, upon successful recruitment and retention of additional highly skilled and experienced management and technical personnel.

RISKS RELATED TO OUR INDUSTRY

We will face certain risks arising from regulatory, legal, and economic factors that affect our business and the business of other pharmaceutical development companies. Because we are a small company with limited revenues and limited capital resources, we may be less able to bear the financial impact of these risks than larger companies that have substantial income and available capital.

IF WE DO NOT RECEIVE FDA AND OTHER REGULATORY APPROVALS WE WILL NOT BE PERMITTED TO SELL OUR PRODUCTS

The products that we develop cannot be sold until the FDA and corresponding foreign regulatory authorities approve the products for medical use. We have received FDA and Canadian approvals to market Hextend in the United States and Canada only. We have completed a Phase I clinical trial of PentaLyte that provided us with data concerning the safety of PentaLyte, but we do not presently have sufficient funds for the Phase II or later stage clinical trials that will be necessary to demonstrate that PentaLyte can be used safely and effectively as a plasma volume expander in surgery.

The need to obtain regulatory approval to market a new product means that:

- We will have to conduct expensive and time consuming clinical trials of new products.
- We will incur the expense and delay inherent in seeking FDA and foreign regulatory approval of new products. For example, 12 months elapsed between the date we filed our application to market Hextend and the date on which our application was approved. Approximately 36 months elapsed between the date we filed our application for approval to market Hextend in Canada, and the date on which our application was approved, even though we did not have to conduct any additional clinical trials. We also have an application pending in Sweden to market Hextend there. We filed that application during August 2000 and we responded to the latest request for information by the Swedish authorities in August 2002.
- A product that is approved may be subject to restrictions on use.
- The FDA can recall or withdraw approval of a product if problems arise.
- We will face similar regulatory issues in foreign countries.

OUR PATENTS MAY NOT PROTECT OUR PRODUCTS FROM COMPETITION

We have patents in the United States, Canada, the European Union countries, Australia, Israel, Russia, South Africa, South Korea, Japan, Hong Kong, and Singapore, and have filed patent applications in other foreign countries, for certain products, including Hextend, HetaCool, and PentaLyte. We might not be able to obtain any additional patents, and any patents that we do obtain might not be comprehensive enough to provide us with

meaningful patent protection. Also, there will always be a risk that our competitors might be able to successfully challenge the validity or enforceability of any patent issued to us. The costs required to uphold the validity and prevent infringement of any patent issued to us could be substantial, and we might not have the resources available to defend our patent rights.

THE PRICE AND SALE OF OUR PRODUCTS MAY BE LIMITED BY HEALTH INSURANCE COVERAGE AND GOVERNMENT REGULATION

Success in selling our products may depend in part on the extent to which health insurance companies, HMOs, and government health administration authorities such as Medicare and Medicaid will pay for the cost of the products and related treatment. Presently, most health insurance plans and HMOs will pay for Hextend when it is used in a surgical procedure that is covered by the plan. However, until we actually introduce a new product into the medical market place we will not know with certainty whether adequate health insurance, HMO, and government coverage will be available to permit the product to be sold at a price high enough for us to generate a profit. In some foreign countries, pricing or profitability of health care products is subject to government control which may result in low prices for our products. 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.

RISKS PERTAINING TO OUR COMMON SHARES

Before purchasing BioTime Common Shares, investors should consider the price volatility of our shares and the fact that we do not pay dividends.

BECAUSE WE ARE A DRUG DEVELOPMENT COMPANY, THE PRICE OF OUR STOCK MAY RISE AND FALL RAPIDLY

The market price of BioTime shares, like that of the common stock of many biotechnology companies, has been highly volatile. The following table illustrates the range of closing price of BioTime common shares on the AMEX for the fiscal years ended December 31, 2001 and 2002, and the first two quarters of 2003, based on transaction data as reported by the AMEX.

QUARTER ENDED HIGH LOW March 31,
2001
11.10 6.23 June 30,
8.50 6.40 September 30,
2001
2001
6.15 4.22 March 31, 2002
4.70 3.00 June 30,
3.10 2.15 September 30,
2002
2.20 1.10 December 31, 2002
1.90 0.85 March 31,
2003
2003
2.79 1.60

The price of BioTime shares 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 BioTime shares may fall rapidly in response to certain events such as unfavorable results of clinical trials or a delay or failure to obtain FDA approval. The failure of our earnings to meet analysts' expectations could result in a significant rapid decline in the market price of our 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. Broad market fluctuations, as well as general economic and political conditions, may adversely affect the market price of the common shares.

BECAUSE BIOTIME CURRENTLY DOES NOT MEET CERTAIN EXCHANGE CONTINUED LISTING REQUIREMENTS THE SHARES COULD BE DELISTED IN THE FUTURE

The Company is presently not in compliance with some of the AMEX continued listing standards in that it has shareholder's equity of less than \$2,000,000 and has incurred losses during each of the last three years, which could lead the AMEX to determine to delist the Company's shares. The Company plans to use its best efforts to maintain the AMEX listing of its common shares, but if the common shares were to be delisted by the AMEX the market value and liquidity for the common shares would be adversely affected and it could be more difficult for the Company to raise capital in the future. If the common shares were no longer traded on the AMEX they could be traded in the over-the-counter market on an electronic bulletin board established for securities that do not meet the listing requirements of the Nasdaq stock market or the major national securities exchanges. Also, if our common shares were to be delisted by the AMEX, the warrants would be delisted as well.

BECAUSE WE DO NOT PAY DIVIDENDS, OUR STOCK MAY NOT BE A SUITABLE INVESTMENT FOR ANYONE WHO NEEDS TO EARN DIVIDEND INCOME

We do not pay cash dividends on our common shares. For the foreseeable future we anticipate that any earnings generated in our business will be used to finance the growth of BioTime and will not be paid out as dividends to our shareholders. We have also agreed not to declare or pay any cash dividends on our capital stock or to redeem or repurchase any shares of our capital stock, until we have paid off our \$3,350,000 of debenture indebtedness in full with interest. This means that our stock may not be a suitable investment for anyone who needs to earn income from their investments.

THERE HAS PREVIOUSLY BEEN NO PUBLIC MARKET FOR THE WARRANTS AND THERE IS NO ASSURANCE THAT A PUBLIC MARKET FOR THE WARRANTS WILL DEVELOP

Although we have applied to list the warrants on the AMEX, there is no assurance that the warrants will be approved for listing. Even if the warrants are listed for trading on the AMEX, there is no way of predicting whether an active market for trading in the warrants will develop. The absence of an active public market would make it difficult for warrant holders to sell their warrants and would aversely affect the value of the warrants.

THE RIGHTS OFFER

ISSUANCE OF RIGHTS

We are issuing rights to subscribe for units consisting of common shares and warrants. The rights will be issued to shareholders who owned BioTime shares as of the close of business on , 2003, which has been set as the record date. Beneficial owners of shares held in the name of Cede & Co. as nominee for The Depository Trust Company, or in the name of any other depository or nominee, on the record date will also be receive rights. Each shareholder will be issued one transferable Right for each common share owned on the record date. No fractional rights will be issued. The rights entitle the holders to acquire one common share and one-half of a warrant for each eight rights held by paying the subscription price. Any shareholder who is issued fewer than eight Rights may subscribe for one full common share at the subscription price. Fractional warrants will not be issued, so rights holders must exercise at least 16 rights to receive a full warrant. The rights will be evidenced by subscription certificates (see Appendix A) which will be mailed to shareholders other than foreign shareholders whose record addresses are outside the United States. The United States includes the fifty states, the District of Columbia, U.S. territories and possessions.

The rights issued to foreign shareholders will be held by the subscription agent for their accounts until instructions are received to exercise (if permissible under applicable foreign or state securities laws), sell, or transfer those rights. If no instructions have been received by 12:00 noon, New York City time, three business days prior to the expiration date, the subscription agent will use its best efforts to sell the rights of those foreign

shareholders on the AMEX. The net proceeds from the sale of those rights will be paid to the foreign shareholders. See "Sale of Rights."

Officers and directors of BioTime who own, in the aggregate, 720,095 common shares, have informed BioTime that they intend to purchase up to 90,011 common shares through the exercise of the rights distributed to them, provided that suitable financial arrangements can be made, but they are not legally bound to do so. Any common shares acquired by officers, directors and other persons who are "affiliates" of BioTime, as that term is defined under the Securities Act of 1933, may only be sold in accordance with Rule 144 under the Securities Act or pursuant to an effective registration statement under the Securities Act. In general, under Rule 144, as currently in effect, an "affiliate" of BioTime is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of 1% of the then-outstanding common shares or the average weekly reported trading volume of the common shares during the four calendar weeks preceding such sale. Sales under Rule 144 are also subject to certain restrictions on the manner of sale, to notice requirements and to the availability of current public information about BioTime.

PURPOSE OF THE RIGHTS OFFER

The Board of Directors of BioTime has determined that it is necessary for BioTime to raise additional capital at this time to finance its operations, including:

- Costs of conducting additional clinical trials of BioTime products;
- Costs of seeking regulatory approval of our products;
- Continued research and product development; and
- General and administrative expenses.

Until we begin to receive sufficient revenues from product sales and licensing fees from Abbott or other companies that may obtain a license to sell our products, we will have to finance our operations with our cash on hand, the funds received from shareholders who exercise of their rights, and any additional capital raised through other sales of equity securities.

The rights offer provides an opportunity for us to raise additional capital without diluting the ownership interests of existing shareholders who exercise their rights. Shareholders who exercise their rights will be able to purchase BioTime shares at a price below market, without incurring broker's commissions. Generally, shareholders who exercise their rights in full will be able to maintain their prorata share of BioTime's outstanding common shares. However, the rights offer is oversubscribed and BioTime issues additional common shares and warrants to fill over-subscriptions, shareholders who do not purchase their prorata portion of those additional shares and warrants through the over-subscription privilege would experience a reduction in their percentage interests in BioTime's outstanding shares. Similarly, shareholders who do not exercise their warrants in full could experience a reduction of their percentage interests in BioTime's outstanding shares. The distribution of the rights to shareholders will also afford those shareholders who choose not to exercise their rights the potential of receiving a cash payment upon the sale of their rights. Therefore, the receipt of rights by shareholders who chose not to exercise their rights may be viewed as compensation for the possible dilution of their interest in BioTime.

We considered other financing alternatives, including a private placement or underwritten public offering of newly issued shares. Those alternatives would have entailed the payment of commissions and fees to broker-dealers, and would also have been dilutive to BioTime shareholders because the shares would have been sold to new investors. In the case of a private placement, the sale would probably have been made at a discount to market. In contrast, the sale of shares through the rights and warrants will permit BioTime to incur lower transaction fees in raising capital and will permit the shareholders who exercise their rights and warrants to enjoy the price discount that might otherwise have been realized by new investors. During January and February 1997, and during February and March 1999, BioTime conducted similar subscription rights offers that were over-subscribed, leading BioTime to conclude that the rights offer might be a better alternative to the other sources of financing.

THE SUBSCRIPTION PRICE

The subscription price for the units to be issued pursuant to the rights offer is \$1.40. We announced the rights offer on , 2003. The last reported sale price of the common shares on the AMEX on , 2003 and , 2003 was \$ and \$, respectively.

EXPIRATION OF THE RIGHTS OFFER

The rights offer will expire at 5:00 p.m., New York City time, on , 2003, the expiration date. Rights will expire on the expiration date and may not be exercised after that date.

EXERCISE OF RIGHTS

In order to exercise your rights you must do all of the following:

- Fill in and sign the reverse side of the subscription certificate which accompanies this prospectus;
- Deliver the completed and signed subscription certificate to the subscription agent with your payment in full for the common shares you wish to purchase. You may use the enclosed envelope to mail the subscription certificate and payment to the subscription agent or you may arrange for one of the alternative methods of delivery described below.
- The method of making payment for your shares is described below under "Payment for Units."
- Properly completed and executed subscription certificates must be received by the subscription agent at the offices of the subscription agent at the address set forth below prior to 5:00 p.m., New York City time, on the expiration date, unless payment is effected by means of a notice of guaranteed delivery as described below under "Payment for Units."
- Rights may also be exercised through a broker, who may charge you a servicing fee.

You should send your signed subscription certificates, accompanied by payment of the subscription price, to American Stock Transfer & Trust Company, the subscription agent, by one of the methods described below:

(1) BY HAND:

American Stock Transfer & Trust Company 59 Maiden Lane, Plaza Level New York, New York 10038

(2) BY MAIL, EXPRESS MAIL OR OVERNIGHT COURIER:

American Stock Transfer & Trust Company Exchanges and Tenders 59 Maiden Lane New York, New York 10038

(3) BY FACSIMILE (TELECOPIER):

(718) 236-4588 or (718) 234-5001

You should confirm that your facsimile has been received by contacting the subscription agent by telephone at 1-877-248-6417, or outside the United States, (718) 921-8200 and ask for Shareholder Relations. If you deliver your subscription certificate by telecopier, you must send the original subscription certificate to the subscription agent by mail or hand delivery.

DO NOT SEND SUBSCRIPTION CERTIFICATES TO BIOTIME.

A subscription will be deemed accepted by the subscription agent when payment, together with a properly completed and executed subscription certificate, is received by the subscription agent at its Exchanges and Tenders Department.

If you are issued fewer than eight rights, you may subscribe for one full unit. Fractional shares and fractional warrants will not be issued. If after exercising your rights you are left with fewer than eight rights, you will not be able to exercise the remaining rights. If you exercise fewer than 16 rights you will receive the maximum number of full shares issuable but you will not receive a warrant.

If you do not indicate the number of rights you are exercising, or if you do not deliver full payment of the subscription price for the number of units that you indicate you are subscribing for, then you will be deemed to have exercised rights to purchase the maximum number of units determined by dividing the total subscription price you paid by the subscription price per unit.

If you submit payment for more units than may be purchased through the regular exercise of your rights, your excess payment will be deemed to be a subscription payment for additional units through the over-subscription privilege. The number of additional units that you will be deemed to have subscribed for in the over-subscription privilege will be determined by dividing the amount of the excess payment by the subscription price per unit.

All questions concerning the timeliness, validity, form and eligibility of any exercise of rights or subscriptions pursuant to the over-subscription privilege will be determined by BioTime. BioTime's determination will be final and binding. BioTime in its sole discretion may waive any defect or irregularity, or may permit any defect or irregularity to be corrected, within such time as BioTime may determine. BioTime may reject, in whole or in part, the purported exercise of any right or any subscription pursuant to the over-subscription privilege. Neither BioTime nor the subscription agent will be under any duty or obligation to give any notification or to permit the cure of any defect or irregularity in connection with the submission of any subscription certificate, the exercise or attempt to exercise any right or the over-subscription privilege, or the payment of the subscription price. Subscriptions through the exercise of rights or the over-subscription privilege will not be deemed to have been received or accepted by BioTime until all irregularities or defects have been waived by BioTime or cured to the satisfaction of, and within the time allotted by, BioTime in its sole discretion.

OVER-SUBSCRIPTION PRIVILEGE

The over-subscription privilege may allow shareholders to acquire more units than the number issuable upon the exercise of the rights issued to them. By exercising the over-subscription privilege, shareholders who have exercised all exercisable rights issued to them may purchase any units that are left over by shareholders who fail to exercise their rights.

The over-subscription privilege may only be exercised by shareholders who were shareholders on the record date and who exercise all of the rights they received from BioTime. Any person who purchases rights and who was not a shareholder on the record date may not exercise the over-subscription privilege. Shareholders such as broker-dealers, banks, and other professional intermediaries who hold shares on behalf of clients, may participate in the over-subscription privilege for the client if the client fully exercises all rights attributable to him.

If you are eligible to exercise the over-subscription privilege and you wish to do so, you should indicate on the subscription certificate how many units you are willing to acquire through the over-subscription privilege. If sufficient units remain unsold, all over-subscriptions will be honored in full.

If you were a shareholder on the record date and you wish to exercise the over-subscription privilege through The Depository Trust Corporation, you must properly execute and deliver to the subscription agent a DTC Participant Over-Subscription Form, together with payment of the subscription price for the number of units that you wish to purchase through the over-subscription privilege. Copies of the DTC Participant Over-Subscription Form may be obtained from the subscription agent. Your properly executed DTC Participant Over-Subscription Form and payment must be received by the subscription agent at or prior to 5:00 p.m., New York City time on the expiration date.

If subscriptions for units through the over-subscription privilege exceed the initial 1,706,869 units being offered by BioTime through the exercise of the rights, BioTime may issue up to 853,434 additional units to fill all or a portion of the excess over-subscriptions. The issuance of units to fill excess over-subscriptions may dilute the percentage ownership interests of other shareholders.

BioTime will not be obligated to issue any units to fill excess over-subscriptions, but it may do so in its sole and absolute discretion. BioTime reserves the right to limit the number of units issued to fill an excess over-subscription from any single shareholder or from shareholders that are known or believed by BioTime to be under common control or acting as a group for the purpose of acquiring units.

Subject to the right of BioTime to limit the number of units issuable to any shareholder, if the rights offer is over-subscribed so that over-subscriptions cannot be filled in full, the available units will be allocated among those who over-subscribe based on the number of rights originally issued to them, so that the number of units issued to shareholders who subscribe through the over-subscription privilege will generally be in proportion to the number of common shares owned by them on the record date. The percentage of remaining units each over-subscribing shareholder may acquire may be rounded up or down to result in delivery of whole units. The allocation process may involve a series of allocations in order to assure that the total number of units available for over-subscriptions is distributed on a prorata basis. If you are not allocated the full amount of units that you subscribe for pursuant to the over-subscription privilege, you will receive a refund of the subscription price you paid for units that are not allocated to and purchased by you. The refund will be made by a check mailed by the subscription agent.

PAYMENT FOR UNITS

If you wish to exercise your rights or to acquire units pursuant to the over-subscription privilege, you may choose between the following methods of payment:

1. You may send to the subscription agent full payment for all of the units you wish to acquire, including any additional units that you desire to acquire through the over-subscription privilege, if you are entitled to exercise the over-subscription privilege. Make sure that your payment is accompanied by your completed and signed subscription certificate. The payment and properly completed and executed subscription certificate must be received by the subscription agent no later than 5:00 p.m., New York City time, on the expiration date. The subscription agent will deposit all checks received by it for the purchase of units into a segregated interest-bearing account of BioTime pending proration and distribution of units. The interest earned on the account will belong to BioTime.

TO BE ACCEPTED, A PAYMENT PURSUANT TO THIS METHOD MUST BE MADE IN THE FOLLOWING MANNER:

- The payment must be in U.S. dollars;
- The payment must be by money order or check drawn on a bank located in the United States:
- The payment must be payable to BioTime, Inc.; and
- The payment must accompany a properly completed and executed subscription certificate.
- 2. Alternatively, a subscription will be accepted by the subscription agent if, prior to 5:00 p.m., New York City time, on the expiration date, the subscription agent has received a notice of guaranteed delivery by facsimile telecopy or otherwise from a bank, a trust company, or a New York Stock Exchange member guaranteeing delivery of (1) payment of the full subscription price for the units subscribed for, including any additional units subscribed for pursuant to the over-subscription privilege, and (2) a properly completed and executed subscription certificate. The notice of guaranteed delivery must be received by the subscription agent before 5:00 p.m., New York City time, on the expiration date. The subscription agent will not honor a notice of guaranteed delivery unless a properly completed and executed subscription certificate and full payment for the units is received by the subscription agent by the close of business on the third business day after the expiration date.

You will not be allowed to rescind your purchase after the subscription agent has received payment either by means of a notice of guaranteed delivery or a check or money order.

Nominees who hold common shares for the account of others, such as brokers, trustees or depositories for securities, should notify the respective beneficial owners of the common shares as soon as possible to ascertain the beneficial owners' intentions and to obtain instructions with respect to the rights. If the beneficial owner so instructs, the nominee should complete the subscription certificate and submit it to the subscription agent with the

proper payment. In addition, beneficial owners of common shares or rights held through a nominee should contact the nominee and request the nominee to effect transactions in accordance with the beneficial owner's instructions.

SALE OF RIGHTS

The rights are transferable until the last business day prior to the expiration date. BioTime has applied to list the rights for trading on the AMEX. Assuming a market for the rights develops, the rights may be purchased and through usual brokerage channels. Although no assurance can be given that a market for the rights will develop, trading in the rights may be conducted until and including the close of trading on the last business day prior to the expiration date.

You may transfer some or all the rights evidenced by your subscription certificate by following these instructions and the instructions on the back of your subscription certificate. If you wish to transfer all of your rights, you need only sign your subscription certificate and deliver it to the subscription agent. If you wish to transfer some but not all of your rights, you must also deliver to the subscription agent a subscription certificate properly endorsed for transfer with instructions to register the portion of the rights evidenced by the subscription certificate in the name of the transferee and to issue a new subscription certificate to the transferee evidencing the number of rights transferred. In that event, a new subscription certificate evidencing the balance of the rights will be issued to you or, if you so instruct, to an additional transferee.

If you wish to transfer all or a portion of your rights, you should allow sufficient time prior to the expiration date for (1) the transfer instructions to be received and processed by the subscription agent; (2) a new subscription certificate to be issued and transmitted to the transferee or transferees with respect to transferred rights, and to you with respect to retained rights, if any; and (3) the rights evidenced by the new subscription certificate to be exercised or sold by the recipients. BioTime and the subscription agent shall have no liability to a transferee or transferor of rights if subscription certificates are not received in time for exercise or sale prior to the expiration date.

BioTime anticipates that the rights will be eligible for transfer through the facilities of The Depository Trust Company.

Except for the fees charged by the subscription agent, which will be paid by BioTime, all commissions, fees and other expenses, including brokerage commissions and transfer taxes, incurred in connection with the purchase, sale or exercise of rights will be for the account of the transferor of the rights, and none of those commissions, fees or expenses will be paid by BioTime or the subscription agent.

AMENDMENT, EXTENSION OR TERMINATION OF THE RIGHTS OFFER

BioTime reserves the right, in its sole discretion, to: (a) terminate the rights offer prior to delivery of the units for which rights holders have subscribed; (b) extend the expiration date to a later date; (c) change the record date prior to distribution of the rights to shareholders; or (d) amend or modify the terms of the rights offer. If BioTime amends the terms of the rights offer, an amended prospectus will be distributed to you if you are a holder of record of rights or if you previously exercised any of your rights. If you exercised your rights prior to the amendment or within four business days after the mailing of the amended prospectus, you will be given the opportunity to confirm the exercise of your rights by executing and delivering a consent form.

If you exercise rights before or within four days after mailing of an amended prospectus relating to an amendment of the rights offer and you fail to deliver, in a proper and timely manner, a properly executed consent form, you will be deemed to have rejected the amended terms of the rights offer and you will be deemed to have elected to revoke in full the exercise of your rights and the over-subscription privilege. If your exercise of rights is so revoked, the full amount of the subscription price you paid will be returned to you.

If your executed subscription certificate is received by the subscription agent more than four days after the mailing of an amended prospectus, you will be deemed to have accepted the amended terms of the rights offer in connection with the exercise of your rights and the over-subscription privilege.

If BioTime elects to terminate the rights offer before delivering the units for which you subscribed, the subscription price you paid will be returned to you by mail. Except for the obligation to return the subscription price you paid when you attempted to exercise your rights, neither BioTime nor the subscription agent will have any obligation or liability to you in the event of an amendment or termination of the rights offer.

DELIVERY OF SHARE AND WARRANT CERTIFICATES

Certificates representing the common shares and warrants you purchased by exercising your rights will be delivered to you as soon as practicable after your rights have been validly exercised and full payment for the units has been received and cleared. Certificates representing common shares and warrants you purchase pursuant to the over-subscription privilege will be delivered to you as soon as practicable after the expiration date and after all allocations have been affected. It is expected that the certificates will be available for delivery three business days following the expiration date.

SUBSCRIPTION AGENT

The subscription agent is American Stock Transfer & Trust Company, which will receive for its administrative, processing, invoicing and other services as subscription agent, a fee estimated to be \$25,000, and reimbursement for all out-of-pocket expenses related to the rights offer. The subscription agent is also BioTime's transfer agent and registrar. Questions regarding the subscription certificates should be directed to American Stock Transfer & Trust Company, 59 Maiden Lane, New York, New York, 10038; telephone (718) 921-8200. Shareholders may also consult their brokers or nominees.

FEDERAL INCOME TAX CONSEQUENCES

The U.S. Federal income tax consequences to holders of common shares with respect to the rights offer will be as follows:

- 1. The distribution of rights will not result in taxable income nor will the holder realize taxable income as a result of the exercise of rights.
- 2. The basis of a right will be (a) to a holder of common shares to whom it is issued, and who exercises or sells the right (1) zero, if the market value of the right immediately after issuance is less than 15% of the market value of the common share with regard to which it is issued, unless the holder elects, by filing a statement with his timely filed federal income tax return for the year in which the rights are received, to allocate the basis of the common share between the right and the common share based on their respective market values immediately after the right is issued, and (2) a portion of the basis in the common share based upon the respective values of the common share and the right immediately after the right is issued, if the market value of the right immediately after issuance is 15% or more of the market value of the common share with respect to which it is issued; (b) zero, to a holder of common shares to whom it is issued and who allows the right to expire; and (c) the cost to acquire the right, to anyone who purchases a right in the market.
- 3. The holding period of a right received by a holder of a common share includes the holding period of the common share.
- 4. Any gain or loss on the sale of a right will be treated as a capital gain or loss if the right is a capital asset in the hands of the seller. A capital gain or loss will be long-term or short-term, depending on how long the right has been held, in accordance with paragraph 3 above. A right issued with regard to a common share will be a capital asset in the hands of the person to whom it is issued if the common share was a capital asset in the hands of that person. If a right is allowed to expire, there will be no loss realized unless the right had been acquired by purchase, in which case there will be a loss equal to the basis of the right.
- 5. If a right is exercised by the holder of common shares, the basis of the common share and warrant received will include the basis allocated to the right and the amount paid upon exercise of the right.

- 6. If a right is exercised, the holding period of the common share and warrant acquired begins on the date the right is exercised.
- 7. Gain recognized by a non-U.S. shareholder on the sale of a right will be taxed in the same manner as gain recognized on the sale of common shares.

Proceeds from the sale of a right may be subject to withholding of U.S. taxes at the rate of 31% unless the seller's certified U.S. taxpayer identification number or certificate regarding foreign status is on file with the subscription agent and the seller is not otherwise subject to U.S. backup withholding. The 31% withholding tax is not an additional tax. Any amount withhold may be credited against the seller's U.S. federal income tax liability.

The foregoing is only a summary of the applicable federal income tax law and does not include any state or local tax consequences of this transaction. Shareholders and other rights holders should consult their tax advisers concerning the tax consequences of the rights offer.

SPECIAL CONSIDERATIONS

As a result of the terms of the rights offer, shareholders who do not fully exercise their rights should expect that they will, at the completion of the rights offer, own a smaller proportional interest in BioTime than would otherwise be the case.

STANDBY GUARANTY

The Guarantors and the Participating Debenture Holders have entered into a Standby Purchase Agreement under which they have agreed to purchase any units that remain unsold at the termination of the rights offer, excluding units that have been authorized to be sold to fill excess over-subscriptions. The Guarantors' obligations are limited to \$750,000 (535,714 units) in the aggregate and the Participating Debenture Holders' obligations are limited to \$1,500,000 (1,071,428 units) in the aggregate. The obligation to purchase units is pro rata, based on the maximum purchase obligations of each of the Guarantors and the Participating Debenture Holders. The Participating Debenture Holders will purchase their portion of any unsold units by exchanging a principal amount Series 2001-A debentures equal to the purchase price of the units.

We have agreed to pay the Guarantors a cash fee in the amount of \$50,000, to pay up to \$15,000 of the fees and expenses of the Guarantors' counsel, and to issue to the Guarantors a warrant to purchase 250,000 common shares. We have agreed to pay the Participating Debenture Holders \$100,000 and to issue the Participating Debenture Holders warrants to purchase a total of 500,0000 common shares. The warrants issuable to the Guarantors and the Participating Debenture Holders will be on the same terms as the warrants contained in the units offered to shareholders through the rights. The fees and warrants will be allocated among the Guarantors and among the Participating Debenture Holders in the ratio of their respective standby purchase commitments.

We have registered for sale under the Securities Act of 1933, as amended, the warrants and the common shares issuable upon the exercise of the warrants issued to the Guarantors and the Participating Debenture Holders, and we have agreed to register for resale by them any common shares and warrants they may acquire through their standby purchase commitments. We have agreed to indemnify the Guarantors and the Participating Debenture Holders from certain liabilities, including liabilities arising under the Securities Act.

The following table shows the maximum amount of the standby purchase commitments of the Guarantors and the Participating Debenture Holders: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left(\frac{1}{2$

AMOUNT OF GUARANTOR PURCHASE COMMITMENT
Dr. Cynthia
Bayern\$375,000
Alfred D.
Kingsley \$187,500
George
Karfunkel
\$187,500
otal
\$750,000 =====

AMOUNT OF PARTICIPATING DEBENTURE HOLDER
PURCHASE COMMITMENT
Alfred D.
Kingsley\$
789,474 George
Karfunkel\$
263,158 Cameo Tactical Return Partners,
LP \$ 263,158 Goren Brothers, L.P.
\$ 131,579 Milton
Dresner\$
52,632
Total
\$1,500,000 ======

Alfred D. Kingsley beneficially owns more than 5% of the outstanding common shares of BioTime and \$1,500,000 of Series 2001-A debentures. Milton Dresner is a director of BioTime and owns \$100,000 of Series 2001-A debentures.

OFFER OF ADDITIONAL UNITS TO GUARANTORS

We have offered the Guarantors the opportunity to purchase up to an additional 428,571 units until 10 days after the expiration date of the rights offer. These additional units will be offered at the same subscription price as the rights offer. The Guarantors will not be obligated to purchase any of these additional units. The additional units are being offered to the Guarantors on a pro rata basis according to the ratio of the amount of their respective standby purchase commitments. The Guarantors may assign the offer to purchase units to one or more third parties. If any Guarantor or his assignee declines to purchase the number of units offered to him, the other Guarantors may purchase those units.

OFFER TO EXCHANGE ADDITIONAL UNITS FOR DEBENTURES

We are also offering all holders of our Series 2001-A debentures the opportunity to exchange their debentures for units at the rights offer subscription price per unit. The Participating Debenture Holders have agreed to exchange their debentures for units if the rights offer is over-subscribed and BioTime issues all 853,434 units reserved to fill over-subscriptions. The total amount of debentures that may be exchanged for units will be \$1,500,000, less the amount of any debentures that may have been exchanged for units by Participating Debenture Holders to meet their obligations to purchase units that remain unsold at the termination of the rights offering. If the amount of debentures tendered in exchange for units exceeds \$1,500,000, the Company will accept debentures tendered by Participating Debenture Holders, up to the \$1,500,000 limit, before accepting debentures tendered by other debenture holders. Otherwise, the debentures will be accepted for exchange pro rata based upon the ratio of the principal amount of debentures owned to the total principal amount tendered. If all of the debenture holders accept the exchange offer, we would issue an additional 1,071,428 units.

USE OF PROCEEDS

The net cash proceeds received by BioTime from the sale of the 1,706,869 units in the rights offer are estimated to be \$, after deducting the expenses of the offer of approximately \$, without taking into account any common shares that may be sold through the exercise of warrants. An additional \$1,794,807 of cash proceeds may be received through the sale of up to 853,434 units to fill excess over-subscriptions and through the sale of up to 428,571 units to the Guarantors. BioTime intends to use the net proceeds of the rights offer as shown in the following table. The minimum amount of proceeds reflects the proceeds from the sale of 1,706,869 units in the rights offer only, and the maximum amount also includes proceeds from the sale of 853,434 units to fill excess over-subscriptions and through the sale of 428,571 units to the Guarantors. In addition, up to \$1,500,000 of debenture indebtedness may be retired through the exchange of Series 2001-A Debentures for units.

ESTIMATED AMOUNT APPLICATION
MINIMUM MAXIMUM PERCENT OF TOTAL
Research and
Development \$ \$ 50%
Working
Capital 50
otal
\$ \$ 100% ===== ===

Research and Development. Up to \$1,000,000 of the proceeds allocated to research and development will be used to finance clinical testing of PentaLyte. We have completed a Phase I clinical trial of PentaLyte and we are planning the next phase of clinical trials in which PentaLyte will be used to treat hypovolemia in surgery. We have spent approximately \$2,000,000 in direct costs through June 30, 2003 developing PentaLyte. If Abbott obtains a license to manufacture and market PentaLyte under our License Agreement with them, they would reimburse us for our direct costs incurred in developing PentaLyte. Abbott's decision whether to license PentaLyte would follow the completion of our Phase II trial, or if we proceed directly into a Phase II/II trial, the first successful human use in that trial.

The balance of the proceeds allocated to research and development may be used to finance additional clinical trials of Hextend, initial clinical trials of HetaCool, and laboratory testing of other products we are developing. When laboratory testing of a product has been completed, a portion of the proceeds allocated to research and development may also be used to commence clinical trials of that product. We may also use a portion of the proceeds to fund the cost of seeking regulatory approval of our products.

Working Capital. We intend to apply the balance of the proceeds of the rights offer to working capital and general corporate purposes. We will have broad discretion with respect to the use of proceeds retained as working capital. The proceeds may be used to defray overhead expenses and for future opportunities and contingencies that may arise. We expect that our general and administrative expenses will increase as we achieve progress in developing products and bringing them to market. For example, a portion of the proceeds allocated to working capital may be used to pay the salaries, benefits and fees to employees and consultants who assist in the preparation of applications to the FDA and foreign regulatory agencies and patent applications. Proceeds allocated to working capital also may be reallocated to research and development and may be used to pay the costs of clinical trials of our products.

Repayment of Debentures. The Participating Debenture Holders have agreed to exchange \$1,500,000 principal amount of their debentures for units at the subscription price if all 1,706,869 units are issued to rights holders and an additional 853,434 units are sold to fill excess over-subscriptions, and all 428,571 units are sold to the Guarantors. If that occurs, our total net proceeds, after deducting expenses of the offering, would be approximately \$ and we will use approximately \$1,850,000 of the proceeds to prepay the remaining outstanding debentures.

The foregoing represents only an estimate of the allocation of the net proceeds of the rights offer based upon the current state of our product development program. The development of new medical products and technologies often involves complications, delays and costs that cannot be predicted, and may cause us to make a reallocation of proceeds among the categories shown above or to other uses. We may need to raise additional capital after the rights offer to pay operating expenses until such time as we are able to generate sufficient revenues from product sales, royalties, and license fees.

Until used, the net proceeds of the rights offer will be invested in certificates of deposit, United States government securities or other high quality, short-term interest-bearing investments.

DESCRIPTION OF SECURITIES

COMMON SHARES

BioTime's Articles of Incorporation currently authorize the issuance of up to 40,000,000 common shares, no par value, of which 13,654,949 shares were outstanding at August 14, 2003 and held by 7,421 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 that purpose. BioTime has not paid any cash dividends on our common shares, and it is unlikely that any cash dividends will be declared or paid on any common shares in the foreseeable future. Instead, BioTime plans to retain our cash for use in financing our future operations and growth.

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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 prorata basis all remaining assets of BioTime available for distribution to the holders of common shares in the event of the liquidation, dissolution, or winding up of BioTime. Holders of common shares do not have any preemptive rights to become subscribers or purchasers of additional shares of any class of BioTime's capital stock.

PREFERRED SHARES

BioTime's Articles of Incorporation currently authorize the issuance of up to 1,000,000 preferred shares, no par value. We may issue preferred shares 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 our shareholders. 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 common shares. There are no preferred shares presently outstanding and we have no present plan, arrangement or commitment to issue any preferred shares.

WARRANTS

Each full warrant entitles the holder to purchase one common share at a price of \$2.00 per share. The number of common shares and exercise price will be proportionally adjusted in the event of a stock split, stock dividend, combination or similar recapitalization of the common shares. The warrants will expire on ______, 2006 and may not be exercised after that date.

BioTime may redeem the warrants by paying \$.05 per warrant if the closing price of the common shares on the AMEX or any other national securities exchange or the Nasdaq Stock Market exceeds 200% of the exercise price of the warrants for any 20 consecutive trading days ending not more than 20 days before the Company sends a notice of redemption to the warrant holders (the "Trigger Period"). We will give the warrant holders at least 20 days written notice of the redemption, setting the redemption date, and the warrant holders may exercise the warrants prior to the redemption date. The warrants may not be exercised after the last business day prior to the redemption date.

The redemption date will abate, and the notice of redemption will be of no effect, if the closing price or average bid price of BioTime common share does not equal or exceed 120% of the exercise price of the warrants on the redemption date and each of the five trading days immediately preceding the redemption date. However, BioTime will have the right to redeem the warrants at a future date if the market price of the common shares again exceeds 200% of the exercise price for 20 consecutive trading days, as described above. In addition, BioTime may not redeem the warrants unless a registration statement with respect to the warrants and underlying common shares is effective under the Securities Act during the Trigger Period and during the 20 day period ending on the redemption date.

TRANSFER AGENT, WARRANT AGENT, AND REGISTRAR

The transfer agent, warrant agent, and registrar for the common shares and warrants is American Stock Transfer and Trust Company, 59 Maiden Lane, New York, New York 10038.

RESALE OF SHARES AND WARRANTS

The Guarantors and Participating Debenture Holders have advised us that they may hold for investment purposes any common shares and warrants they acquire, or they may sell common shares and warrants from time to time on the AMEX at prevailing market prices, or at prices related to the prevailing market price, or in privately negotiated transactions. They also may sell common shares in connection with the exercise of their warrants or they may hold those shares for investment purposes and sell them at later date.

The Guarantors and Participating Debenture Holders will bear all broker-dealer commissions payable in connection with the sale of their common shares and warrants. Broker-dealers who acquire common shares or warrants from the Guarantors and Participating Debenture Holders as principals may resell the shares and warrants from time to time in transactions on the AMEX, or may resell the shares and warrants in negotiated

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transactions at prevailing market prices or at negotiated prices, and may receive usual and customary commissions from the purchasers of the shares and warrants.

The Guarantors and Participating Debenture Holders have advised us that during the time that they may be engaged in a distribution of their common shares and warrants they will (a) not engage in any stabilization activity in connection with BioTime securities, (b) cause to be furnished to each broker through whom their shares or warrants may be offered the number of copies of this prospectus required by the broker, and (c) not bid for or purchase any BioTime securities or rights to acquire BioTime securities, or attempt to induce any person do so, other than as permitted under the Securities Exchange Act of 1934, as amended. The Guarantors and Participating Debenture Holders and any broker-dealers who participate in the sale of their common shares and warrants may be deemed to be "underwriters" as defined in the Securities Act. Any commissions paid or any discounts or concessions allowed to any broker-dealers in connection with the sale of the common shares and warrants, and any profits received on the resale of any shares and warrants purchased by broker-dealers as principals, may be deemed to be underwriting discounts and commissions under the Securities Act.

LEGAL MATTERS

The validity of the rights, common shares, and warrants will be passed upon for BioTime by Lippenberger, Thompson, Welch, Soroko & Gilbert LLP, San Francisco and Corte Madera, California.

EXPERTS

The financial statements incorporated by reference in this prospectus have been audited by BDO Seidman, LLP, independent certified public accountants, to the extent and for the periods set forth in their report (which contains an explanatory paragraph related to the development stage of BioTime's operations) incorporated herein by reference, and are incorporated herein in reliance upon such report given upon the authority of said firm as experts in accounting and auditing.

The financial statements incorporated in this prospectus by reference from the BioTime Annual Report on Form 10-K/A-1 as of December 31, 2001 and for the years ended December 31, 2001 and 2000 and the period from November 30, 1990 (inception) to December 31, 2001 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, incorporated herein by reference (which report expresses an unqualified opinion and includes an explanatory paragraph related to the development stage of BioTime's operations), and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

ADDITIONAL INFORMATION ABOUT BIOTIME

This prospectus is accompanied by a copy of our Annual Report on Form 10-K/A-1 for the year ended December 31, 2002 and our Quarterly Report on Form 10-Q for the three months ended June 30, 2003, which contain important information about us.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

BioTime's Annual Report on Form 10-K/A-1, as amended, for the fiscal year ended December 31, 2002 and Quarterly Reports on Form 10-Q for the periods ended March 31, 2003 and June 30, 2003, and all other reports filed by BioTime pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, since the end of the fiscal year covered by such Form 10-K and prior to the termination of the offering covered by this prospectus are hereby incorporated into this prospectus by reference. Description of the common shares and warrants contained in Registrations Statements on Form 8-A filed under the Securities Exchange Act of 1934, as amended, are also incorporated into this prospectus by reference. BioTime will provide without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request of such person, a copy of any and all of the information that has been incorporated by reference but not

delivered with this prospectus. Such requests may be addressed to the Secretary of BioTime at 935 Pardee Street, Berkeley, California 94710; Telephone: (510) 845-9535.

BioTime is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith files quarterly, annual, and current reports and proxy statements and other information with the Securities and Exchange Commission. The public may read and copy any materials BioTime files with Securities and Exchange Commission at the Commission's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330.

The Commission maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission. The address of such site is http://www.sec.gov.

ADDITIONAL INFORMATION

BioTime has filed with the Securities and Exchange Commission, 450 Fifth Street, N.W., Washington, D.C. a registration statement on Form S-2 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 BioTime 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. In each instance reference is made to the copy of the contract or other document filed as an exhibit to the registration statement, and each such statement is qualified in all respects by reference to the exhibit.

CONTROL NUMBER

Expiration Date

, 2003

BIOTIME, INC.

SUBSCRIPTION CERTIFICATE FOR

SUBSCRIPTION CERTIFICATE FOR UNITS VOID IF NOT EXERCISED AT OR BEFORE 5:00 P.M. (NEW YORK TIME) ON , 2003, THE EXPIRATION DATE. THIS SUBSCRIPTION CERTIFICATE IS TRANSFERRABLE AND MAY BE COMBINED OR DIVIDED (BUT ONLY INTO SUBSCRIPTION CERTIFICATES EVIDENCING A WHOLE NUMBER OF RIGHTS) AT THE OFFICE OF THE SUBSCRIPTION AGENT

Rights

SUBSCRIPTION PRICE U.S. \$1.40 PER UNIT

CUSIP

A-1

THIS SUBSCRIPTION CERTIFICATE MAY BE USED TO SUBSCRIBE FOR UNITS OR MAY BE ASSIGNED OR SOLD. FULL INSTRUCTIONS APPEAR ON THE BACK OF THIS SUBSCRIPTION CERTIFICATE. REGISTERED OWNER:

The registered owner of this Subscription Certificate, named above, or assignee, is entitled to the number of Rights to subscribe for Units consisting of one common share, no par value, and one-half of a warrant to purchase one common share of BioTime, Inc. shown above, in the ratio of one Unit for each 8 Rights held, and upon the terms and conditions and at the price for each Unit specified in the Prospectus , 2003. dated

, 2003 DATE:

BIOTIME, INC.

SECRETARY Countersigned: American Stock Transfer & Trust Company (New

York, N.Y.) Subscription Agent

By:

Authorized Signature

If you exercise fewer than all the Rights represented by this Subscription Certificate, the subscription agent will issue a new Subscription Certificate representing the balance of the unexercised Rights, provided that the subscription agent has received your properly completed and executed Subscription Certificate and payment prior to 5:00 p.m., New York time, on , 2003. No new Subscription Certificate will be issued after that date.

IMPORTANT: Complete appropriate form on reverse

BIOTIME, INC.

VICE PRESIDENT; MEMBER, OFFICE
OF THE PRESIDENT

, 2003

PLEASE COMPLETE ALL APPLICABLE INFORMATION

By Mail: By Hand: By Overnight Courier: To: American Stock To: American Stock To: American Stock Transfer & Trust Company Transfer & Trust Company Transfer & Trust Company Exchanges and Tenders Exchanges and Tender Exchanges and Tenders 59 Maiden Lane 59 Maiden Lane, Plaza Level New York, New York 10038 SECTION 1: TO SUBSCRIBE: I hereby irrevocably subscribe for the dollar amount of Units indicated as the total of A and B below upon the terms and conditions specified in the Prospectus related hereto, receipt of which is acknowledged. TO SELL: If I have checked either the box on line C or the box on line D, I authorize the sale of Rights by the subscription agent according to the procedures described in the Prospectus. The check for the proceeds of sale will be mailed to the address of record. Please check below: /8 Subscription .000 x \$1.40 = [] A. \$ (Subscription Price) (Rights Exercised) (Units Requested) (Amount Required) (Amount Required)

\$1.40 = \$ (*)

(Subscription Price) (Amount Required) Г1 В. Over-Subscription Privilege .000 x (Units Requested) Amount of Check Enclosed or Amount in Notice of Guaranteed Delivery (Total of A + B) = Make check payable to the order of "BioTime, Inc." (*) The Over-Subscription Privilege can be exercised by certain shareholders only, as described in the Prospectus. Sell any remaining unexercised Rights С. Sell all of my Rights. D. Please provide your telephone number Day (___)____ Signature of Subscriber(s)/Seller(s) Evening (____)____ Social Security Number or Tax ID Number: SECTION II: TO TRANSFER RIGHTS: (except pursuant to C and D above) __ of the Rights represented by this Subscription For value received, Certificate are assigned to Social Security Number or Tax ID Number of (Print Full Name of Assignee) Assianee Signature(s) of Assignor(s) (Print Full Address including postal Zip Code) The signature(s) must correspond with the name(s) as written upon the face of this Subscription Certificate, in every particular, without alteration. IMPORTANT: For transfer, a signature guarantee must be provided by an eligible financial institution which is a participant in a recognized signature guarantee program. SIGNATURE GUARANTEED BY: PROCEEDS FROM THE SALE OF RIGHTS MAY BE SUBJECT TO WITHHOLDING OF U.S. TAXES UNLESS THE SELLER'S CERTIFIED U.S. TAXPAYER IDENTIFICATION NUMBER (OR CERTIFICATION REGARDING FOREIGN STATUS) IS ON FILE WITH THE SUBSCRIPTION AGENT AND THE SELLER IS NOT OTHERWISE SUBJECT TO U.S. BACKUP WITHHOLDING.

[] CHECK HERE IF RIGHTS ARE BEING EXERCISED PURSUANT TO A NOTICE OF GUARANTEED DELIVERY DELIVERED TO THE SUBSCRIPTION AGENT PRIOR TO THE DATE HEREOF AND COMPLETE THE FOLLOWING:

NAME(S) OF REGISTERED OWNER(S):
WINDOW TICKET NUMBER (IF ANY):
DATE OF EXECUTION OF NOTICE OF GUARANTEED DELIVERY:
NAME OF INSTITUTION WHICH GUARANTEED DELIVERY:

APPENDIX B

[Form of Notice of Guaranteed Delivery]

NOTICE OF GUARANTEED DELIVERY OF SUBSCRIPTION RIGHTS AND THE SUBSCRIPTION PRICE FOR UNITS OF BIOTIME, INC. SUBSCRIBED FOR IN THE RIGHTS OFFER

As set forth in the Prospectus under "The Rights Offer -- Payment for Units," this form or one substantially equivalent may be used as a means of effecting subscription and payment for all Units of BioTime, Inc. subscribed for in the Rights Offer. Such form may be delivered by hand or sent by facsimile transmission, overnight courier or mail to the Subscription Agent.

The Subscription Agent is: American Stock Transfer & Trust Company

By Mail: American Stock Transfer & Trust Company 59 Maiden Lane New York, New York 10038 By Facsimile: (718) 234-5001 Confirm by Telephone 1-877-248-6417

By Hand: American Stock Transfer & Trust Company Exchanges and Tenders 59 Maiden Lane, Plaza Level New York, New York 10038 By Overnight Courier:
American Stock Transfer & Trust Company
Exchanges and Tenders
59 Maiden Lane, Plaza Level
New York, New York 10038

DELIVERY OF THIS INSTRUMENT TO AN ADDRESS, OR TRANSMISSION OF INSTRUCTIONS VIA A TELECOPY OR FACSIMILE NUMBER, OTHER THAN AS SET FORTH ABOVE, DOES NOT CONSTITUTE A VALID DELIVERY

The New York Stock Exchange member firm or bank or trust company which completes this form must communicate the guarantee and the number of Units subscribed for to the Subscription Agent and must deliver this Notice of Guaranteed Delivery guaranteeing delivery of (i) payment in full for all subscribed Units (including any Units subscribed for through the over-subscription privilege) and (ii) a properly completed and executed Subscription Certificate (which certificate and full payment must then be delivered by the close of business on the third business day after the expiration date, as defined in the Prospectus) to the Subscription Agent prior to 5:00 p.m., New York time, on the expiration date (, 2003, unless extended). Failure to do so will result in a forfeiture of the Rights.

GUARANTEE

The undersigned, a member firm of the New York Stock Exchange or a bank or trust company, guarantees delivery to the Subscription Agent by the close of business (5:00 p.m., New York time) on the third business day after the expiration date (, 2003, unless extended) of (A) a properly completed and executed Subscription Certificate and (B) payment of the full subscription price of Units subscribed for in the Rights offer (including the over-subscription privilege, if applicable) as subscription for such Units as indicated herein or in the Subscription Certificate.

Number of Units subscribed for (excluding the over-subscription privilege) for which you are guaranteeing delivery of Rights and payment	Number of Units subscribed for pursuant to the over-subscription privilege for which you are guaranteeing delivery of Rights and payment
Number of Rights to be delivered:	
Total subscription price payment to bedelivered:	\$
Method of delivery [circle one]	A. Through DTC B. Direct to Corporation

Please note that if you are guaranteeing for over-subscription Units, and are a DTC participant, you must also execute and forward to American Stock Transfer & Trust Company a Nominee Holder Over-Subscription Exercise Form.

Name of Firm	Authorized Signature
Address	Title
Zip Code	(Type or Print)
Name of Registered Holder (If Applicable)	
Telephone Number	Date

* IF THE RIGHTS ARE TO BE DELIVERED THROUGH DTC, A REPRESENTATIVE OF THE SUBSCRIPTION AGENT WILL PHONE YOU WITH A PROTECT IDENTIFICATION NUMBER, WHICH NEEDS TO BE COMMUNICATED BY YOU TO DTC.

PLEASE NOTE THAT IF YOU ARE GUARANTEEING FOR OVER-SUBSCRIPTION UNITS AND ARE A DTC PARTICIPANT, YOU MUST ALSO EXECUTE AND FORWARD TO THE SUBSCRIPTION AGENT A NOMINEE HOLDER OVER-SUBSCRIPTION EXERCISE FORM.

APPENDIX C

[FORM OF NOMINEE HOLDER OVER-SUBSCRIPTION EXERCISE FORM]

BIOTIME, INC.
RIGHTS OFFER
NOMINEE HOLDER OVER-SUBSCRIPTION EXERCISE FORM
PLEASE COMPLETE ALL APPLICABLE INFORMATION

By Mail: To: American Stock Transfer & Trust Company Exchanges and Tenders 59 Maiden Lane New York, New York 10038 By Hand: To: American Stock Transfer & Trust Company Exchanges and Tenders 59 Maiden Lane, Plaza Level

New York, New York 10038

By Overnight Courier:
To: American Stock
Transfer & Trust Company
Exchanges and Tenders
59 Maiden Lane, Plaza
Level
New York, New York 10038

THIS FORM IS TO BE USED ONLY BY NOMINEE HOLDERS TO EXERCISE THE OVER-SUBSCRIPTION PRIVILEGE IN RESPECT OF RIGHTS THAT WERE EXERCISED AND DELIVERED THROUGH THE FACILITIES OF A COMMON DEPOSITORY. ALL OTHER EXERCISES OF OVER-SUBSCRIPTION PRIVILEGES MUST BE EFFECTED BY THE DELIVERY OF THE SUBSCRIPTION CERTIFICATES.

THE TERMS AND CONDITIONS OF THE RIGHTS OFFER ARE SET FORTH IN BIOTIME'S PROSPECTUS DATED , 2003 (THE "PROSPECTUS") AND ARE INCORPORATED HEREIN BY REFERENCE. COPIES OF THE PROSPECTUS ARE AVAILABLE UPON REQUEST FROM BIOTIME.

VOID UNLESS RECEIVED BY THE SUBSCRIPTION AGENT WITH PAYMENT IN FULL BY 5:00 P.M., NEW YORK TIME, ON , 2003, UNLESS EXTENDED BY BIOTIME (THE "EXPIRATION DATE").

- 1. The undersigned hereby certifies to the Subscription Agent that it is a participant in [Name of Depository] (the "Depository") and that it has either (i) exercised all of the Rights and delivered such exercised Rights to the Subscription Agent by means of transfer to the Depository Account of BioTime, Inc., or (ii) delivered to the Subscription Agent a Notice of Guaranteed Delivery in respect of the exercise of the Rights and will deliver the Rights called for in such Notice of Guaranteed Delivery to the Subscription Agent by means of transfer to such Depository Account of BioTime, Inc.
- 2. The undersigned hereby exercises the over-subscription privilege to purchase, to the extent available, Units and certifies to the Subscription Agent that such over-subscription privilege is being exercised for the account or accounts of persons (which may include the undersigned) on whose behalf all Rights have been exercised.(*)
- 3. The undersigned understands that payment of the subscription price of \$1.40 per Unit for each Unit subscribed for pursuant to the over-subscription privilege must be received by the Subscription Agent at or before 5:00 p.m., New York time, on the Expiration Date, and represents that such payment, in the aggregate amount of \$ either (check appropriate box):
 - [] has been or is being delivered to the Subscription Agent pursuant to the Notice of Guaranteed Delivery referred to above or;
 - [] is being delivered to the Subscription Agent herewith or;

of was	funds not delivered in	d separately to the Subscription Agent; and, in the case wered pursuant to a Notice of Guaranteed Delivery, is or the manner set forth below (check appropriate box and ion relating thereto):
[] (uncertified che	ck
[]	certified check	
[] 1	bank draft	
[] r	money order	
	y Subscription (Confirmation Number
	y Participant N	umber
Contact Na	ame	
Phone Numb	ber	
Dated:	, :	2003
Name of No	ominee Holder	
 Address		
 City	State	
Ву:		
Name:		
Title:		

^{*} PLEASE COMPLETE THE BENEFICIAL OWNER CERTIFICATION ON THE BACK HEREOF CONTAINING THE RECORD DATE POSITION OF RIGHTS OWNED, THE NUMBER OF UNITS SUBSCRIBED FOR (OTHER THAN OVER-SUBSCRIPTIONS) AND THE NUMBER OF OVERSUBSCRIPTION UNITS, IF APPLICABLE, REQUESTED BY EACH SUCH OWNER.

BIOTIME, INC. BENEFICIAL OWNER CERTIFICATION

The undersigned, a bank, broker or other nominee holder of Rights ("Rights") to purchase Units of BioTime, Inc. ("BioTime") pursuant to the Rights Offer described and provided for in BioTime's Prospectus dated , 2003 (the "Prospectus") hereby certifies to BioTime and to American Stock Transfer & Trust Company, as Subscription Agent for such Rights Offer, that for each numbered line filled in below the undersigned has exercised, on behalf of the beneficial owner thereof (which may be the undersigned), the number of Rights specified on such line, and such beneficial owner wishes to subscribe for the purchase of additional Units pursuant to the over-subscription privilege (as defined in the Prospectus), in the amount set forth in the third column of such line:

NUMBER OF UNITS REQUESTED PURSUANT RECORD DATE SHARES NUMBER OF RIGHTS EXERCISED TO THE OVER-SUBSCRIPTION PRIVILEGE -------------------- 1) ------ --------------- 2) ----------- 3) -----4) ------ 5) ------- 6) -----

---- 7) ---

----- 8) -

9)	
40)	
10)	
	Name of Nominee Holder
	Name of Nomittee Hotuer
Name:	
Title:	
TICIC.	
Dated:	, 2003
Dacoa.	, 2000
	Depository Participant Number
	, , , , , , , , , , , , , , , , , , ,
	Depository Primary Subscription Confirmation Number(s)
	C-3

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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 BIOTIME OR THE FACTS HEREIN SET FORTH SINCE THE DATE HEREOF.

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BIOTIME, INC.

1,706,869 UNITS ISSUABLE UPON THE EXERCISE OF SUBSCRIPTION RIGHTS

853,434 UNITS ISSUABLE TO FILL EXCESS OVER-SUBSCRIPTIONS

428,571 UNITS OFFERED TO THE GUARANTORS

1,071,428 UNITS ISSUABLE IN EXCHANGE FOR SERIES 2001-A DEBENTURES

2,780,150 COMMON SHARES ISSUABLE UPON EXERCISE OF WARRANTS

EACH UNIT CONSISTS OF ONE COMMON SHARE AND ONE-HALF OF A WARRANT

PROSPECTUS

, 2003

- -----

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The estimated expenses of the Registrant in connection with the issuance and distribution of the securities being registered hereby are as follows: $\frac{1}{2} \left(\frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} \right) \left$

Registration Fee-Securities and Exchange Commission \$909.70 AMEX Listing
Fee\$
Printing and Engraving
Expenses * Accounting
Fees * Legal
Fees*
Subscription
Agent\$25,000 Miscellaneous
Expenses *
Total
\$ * ======

ITEM 15. 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 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 -
    --- 3.1
  Articles of
Incorporation,
as Amended (1)
3.2 By-Laws, As
Amended.(3) 4.1
  Specimen of
 Common Share
Certificate.(2)
  4.2 Form of
 Subscription
Certificate(16)
  4.3 Form of
Warrant(16) 4.4
Form of Warrant
   Agreement
  between the
Registrant and
American Stock
  Transfer &
     Trust
Company(16) 5.
  Opinion of
  Counsel(17)
  10.1 Lease
Agreement dated
 July 1, 1994
  between the
Registrant and
  Robert and
 Norah Brower,
  relating to
   principal
   executive
offices of the
Registrant.(4)
     10.2
 Intellectual
   Property
   Agreement
  between the
Registrant and
Hal Sternberg.
 (2) 10.3
Intellectual
```

Property Agreement between the

^{*} To be filed by amendment

Registrant and Harold Waitz. (2) 10.4 Intellectual Property Agreement between the Registrant and Judith Segall. (2) 10.5 Intellectual Property Agreement between the Registrant and Steven Seinberg.(13) 10.6 Agreement between CMSI and BioTime Officers Releasing Employment Agreements, Selling Shares, and Transferring Non-Exclusive License.(2)

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EXHIBIT
  NUMBERS
DESCRIPTION
- ------ --
   10.7
 Agreement
 for Trans
Time, Inc.
to Exchange
CMSI Common
 Stock for
BioTime,
Inc. Common
Shares.(2)
10.8 2002
Stock Option
Plan, as amended.(6)
10.9 Addenda
  to Lease
 Agreement
between the
Registrant
  and Donn
 Logan. (10)
   10.10
 Exclusive
  License
 Agreement
  between
   Abbott
Laboratories
and BioTime,
    Inc.
(Portions of
this exhibit
 have been
  omitted
pursuant to
 a request
    for
confidential
treatment).
(8) 10.11
Modification
of Exclusive
  License
 Agreement
  between
   Abbott
Laboratories
and BioTime,
    Inc.
(Portions of
this exhibit
 have been
  omitted
pursuant to
 a request
    for
confidential
treatment).
 (9) 10.12
  Warrant
Agreement,
dated March
 27, 2001,
  between
  BioTime,
  Inc. and
 Alfred D.
 Kingsley.
 (11) 10.13
  Form of
Series 2001-
   A 10%
 Debenture
due August
1, 2004.(12)
   10.14
  Warrant
 Agreement
  between
  BioTime,
  Inc. and
 Purchasers
 of Series
   2001-A
Debentures.
(12) 10.15
Warrant
 Agreement,
dated March
 27, 2002,
```

between BioTime, Inc. and Alfred D. Kingsley. (13) 10.16 Warrant for the Purchase of Common Shares, dated August 12, 2002, issued to Ladenburg Thalmann & Co. Inc.(14) 10.17 Exclusive License Agreement between BioTime, Inc. and CJ Corp.(15) 10.18 Warrant Agreement dated April 9, 2003, between BioTime, Inc. and certain holders of Series 2001-Α Debentures. (15) 10.19 Standby Purchase Agreement between BioTime and the persons named therein as Guarantors and Participating Debenture Holders(16) 23.1 Consent of Deloitte & Touche, LLP(16) 23.2 Consent of BDO Seidman, LLP(16) 23.3 Consent of Counsel (included in Exhibit 5)

(17)

(1) Incorporated by reference to the Registrant's Form 10-K for the fiscal year ended June 30, 1998.

- (2) 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.
- (3) Incorporated by reference to Registration Statement on Form S-1, File Number 33-48717 and Post-Effective Amendment No. 1 thereto filed with the Securities and Exchange Commission on June 22, 1992, and August 27, 1992, respectively.
- (4) Incorporated by reference to the Registrant's Form 10-K for the fiscal year ended June 30, 1994.
- (5) Incorporated by reference to the Registrant's Form 10-Q for the quarter ended March 31, 1997.
- (6) Incorporated by reference to Registration Statement on Form S-8, File Number 333-101651 filed with the Securities and Exchange Commission on December 4, 2002.
- (7) Incorporated by reference to the Registrant's Form 10-Q for the quarter ended March 31, 1999.
- (8) Incorporated by reference to the Registrant's Form 8-K, filed April 24, 1997.
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- (15) Incorporated by reference to the Registrant's Form 10-K/A-1 for the year ended December 31, 2002.
- (16) Filed herewith.
- (17) To be filed by amendment

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.

The undersigned undertakes that:

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

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-2 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Berkeley, State of California on October 2, 2003.

BIOTIME, INC.

By JUDITH SEGALL

Vice President -- Operations
Member, Office of the President*

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

SIGNATURE TITLE DATE -----HAROLD WAITZ Vice President, Member Office of the October 2, 2003 ---------President* and Director (Co-Principal HAROLD WAITZ Executive Officer) HAL STERNBERG Vice President, Member Office of the October 2, 2003 ----President* and Director (Co-Principal HAL STERNBERG Executive Officer) JUDITH SEGALL Vice President-Operations, Secretary, October 2, 2003 ---------Member Office of the President* and JUDITH SEGALL Director (Co-Principal Executive Officer) STEVEN **SEINBERG** Chief

Financial Officer (Principal

October 2, 2003 ---------Financial and Accounting Officer) STEVEN SEINBERG JEFFREY B. NICKEL Director October 2, 2003 ---------JEFFREY B. NICKEL Director 2003 ---------MILTON H. DRESNER Director ------------KATHERINE GORDON Director 2003 ---------MICHAEL D. WEST - -----

* The Office of the President is composed of three executive officers of the registrant who collectively exercise the powers of the Chief Executive Officer.

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Incorporation,
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   Agreement
between BioTime
and the persons
 named therein
 as Guarantors
      and
 Participating
   Debenture
  Holders(16)
23.1 Consent of
```

Deloitte &
Touche, LLP(16)
23.2 Consent of
BDO Seidman,
LLP(16) 23.3
Consent of
Counsel
(included in
Exhibit 5)(17)

- -----

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- (15) Incorporated by reference to the Registrant's Form 10-K/A-1 for the year ended December 31, 2002.
- (16) Filed herewith.
- (17) To be filed by amendment

CONTROL NUMBER BIOTIME, INC. SUBSCRIPTION CERTIFICATE FOR SUBSCRIPTION CERTIFICATE FOR UNITS VOID IF NOT EXERCISED AT BEFORE 5:00 P.M. (NEW YORK TIME) ON ______, 2003, THE EXPIRATION DATE.
THIS SUBSCRIPTION CERTIFICATE IS TRANSFERRABLE
AND MAY BE COMBINED OR DIVIDED (BUT ONLY INTO SUBSCRIPTION Rights SUBSCRIPTION PRICE U.S. \$1.40 PER UNIT Expiration Date ____, 2003 CERTIFICATES EVIDENCING A WHOLE NUMBER OF RIGHTS) AT THE OFFICE OF THE SUBSCRIPTION AGENT CUSIP THIS SUBSCRIPTION CERTIFICATE MAY BE USED TO SUBSCRIBE FOR UNITS OR MAY BE ASSIGNED OR SOLD. FULL INSTRUCTIONS APPEAR ON THE BACK OF THIS SUBSCRIPTION CERTIFICATE. REGISTERED OWNER: The registered owner of this Subscription If you exercise fewer than all the Rights represented by this Certificate, named above, or assignee, is entitled to the number of Rights to subscribe for Units consisting of one common subscription Certificate, the subscription agent will issue a new subscription Certificate representing the balance of the unexercised Rights, provided that the subscription agent has share, no par value, and one-half of a warrant to purchase one common share of received your properly completed and executed Subscription $% \left(1\right) =\left(1\right) \left(1\right) \left$ certificate and payment prior to 5:00 p.m., New York time, on $\ensuremath{\text{BioTime}}$, Inc. shown above, in the ratio of one Unit for each 8 Rights held, and ______, 2003. No new Subscription Certificate will be issued after that date. upon the terms and conditions and at IMPORTANT: Complete appropriate from on reverse the price for each Unit specified in the _, 2003. Prospectus dated ___ DATE: ___ _____, 2003 BIOTIME, INC. BIOTIME, INC. SECRETARY VICE PRESIDENT; MEMBER, OFFICE OF THE PRESIDENT

American Stock Transfer & Trust Company (New York, N.Y.)

Authorized Signature

Countersigned:

Subscription Agent

Expiration	Date:	2	2003
EXPTIGLION	Date.		2003

By Overnight Courier: To: American Stock

PLEASE COMPLETE ALL APPLICABLE INFORMATION

By Hand:

Bv Mail:

Transfer & Trust Company Transfer & Trust Company Transfer & Trust Company Exchanges and Tenders 59 Maiden Lane Exchanges and Tenders Exchanges and Tender 59 Maiden Lane, Plaza Level 59 Maiden Lane, Plaza Level New York, New York 10038 New York, New York 10038 New York, New York 10038 SECTION 1: TO SUBSCRIBE: I hereby irrevocably subscribe for the dollar amount of Units indicated as the total of A and B below upon the terms and conditions specified in the Prospectus related hereto, receipt of which is acknowledged. TO SELL: If I have checked either the box on line C or the box on line D, I authorize the sale of Rights by the subscription agent according to the procedures described in the Prospectus. The check for the proceeds of sale will be mailed to the address of record. Please check [] below: (Rights Exercised) (Units Requested) (Subscription Price) (Amount Required) [] A. Subscription =\$ (*) \$1.40 .000 × [] B. Over-Subscription Privilege .000 x \$1.40 =\$ (*)

(Units Requested) (Subscription Price) (Amount Required) Amount of Check Enclosed or Amount in Notice of Guaranteed Delivery (total of A + B) = \$ Make check payable to the order of "BioTime, Inc." (*) The Over-Subscription Privilege can be exercised by certain shareholders only, as described in the Prospectus. [] C. Sell any remaining unexercised Rights [] D. Sell all of my Rights. __ Please provide your telephone number Dav (Day ()_ Evening() Signature of Subscriber(s)/Seller(s) Social Security Number or Tax ID Number: ___ SECTION II: TO TRANSFER RIGHTS: (except pursuant to C and D above) ___ of the Rights represented by this Subscription Certificate For value received, _ are assigned to Social Security Number or Tax ID Number of Assignee (Print Full Name of Assignee) Signature(s) of Assignor(s) (Print Full Address including postal Zip Code)

The signature(s) must correspond with the name(s) as written upon the face of this Subscription Certificate, in every particular, without alteration.

IMPORTANT: For transfer, a signature guarantee must be provided by an eligible financial institution which is a participant in a recognized signature guarantee program.

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PROCEEDS FROM THE SALE OF RIGHTS MAY BE SUBJECT TO WITHHOLDING OF U.S. TAXES UNLESS THE SELLER'S CERTIFIED U.S. TAXPAYER IDENTIFICATION NUMBER (OR CERTIFICATION REGARDING FOREIGN STATUS) IS ON FILE WITH THE SUBSCRIPTION AGENT AND THE SELLER IS NOT OTHERWISE SUBJECT TO U.S. BACKUP WITHHOLDING.

CHECK HERE IF RIGHTS ARE BEING EXERCISED PURSUANT TO A NOTICE OF GUARANTEED DELIVERY DELIVERED TO THE SUBSCRIPTION AGENT PRIOR TO THE DATE HEREOF AND COMPLETE THE FOLLOWING:

NAME(S) OF REGISTERED OWNER(S): WINDOW TICKET NUMBER (IF ANY): DATE OF EXECUTION OF NOTICE OF GUARANTEED DELIVERY: NAME OF INSTITUTION WHICH GUARANTEED DELIVERY: VOID AFTER 5:00 P.M. NEW YORK TIME, _____, 2006

Certificate No.

Warrant to Purchase [Insert number of Shares] Shares of Common Stock

BIOTIME, INC. COMMON STOCK PURCHASE WARRANTS

This certifies that, for value received, [Insert name of Holder] or registered assigns (the "Holder"), is entitled to purchase from BioTime, Inc. a California corporation (the "Company"), at a purchase price per share [Insert Warrant Price determined pursuant to Sections 4 and 10 of the Warrant Agreement] (the "Warrant Price"), the number of its Common Shares, no par value per share (the "Common Stock"), shown above. The number of shares purchasable upon exercise of the Common Stock Purchase Warrants (the "Warrants") and the Warrant Price are subject to adjustment from time to time as set forth in the Warrant Agreement referred to below. Outstanding Warrants not exercised prior to 5:00 p.m., New York time, on _______, 2006 shall thereafter be void.

Subject to restriction specified in the Warrant Agreement, Warrants may be exercised in whole or in part by presentation of this Warrant Certificate with the Purchase Form on the reverse side hereof duly executed, which signature shall be guaranteed by a financial institution that is a participant in a recognized signature guarantee program., and simultaneous payment of the Warrant Price (or as otherwise set forth in Section 10.5 of the Warrant Agreement) at the principal office of the Warrant Agent. Payment of the Warrant Price shall be made in cash or by certified or bank cashier's check in such amount as provided in Section 3 of the Warrant Agreement. As provided in the Warrant Agreement, the Warrant Price and the number or kind of shares which may be purchased upon the exercise of the Warrant evidenced by this Warrant Certificate are, upon the happening of certain events, subject to modification and adjustment.

The Warrants evidenced by this Warrant Certificate may be redeemed by the Company, at its election, at any time if the closing price of the Common Stock on a national securities exchange (including the Nasdaq Stock Market National Market System), or the average bid price as quoted in Nasdaq Stock Market if the Common Stock is not listed on a national securities exchange, equals or exceeds 200% of the Warrant Price for any twenty (20) consecutive trading days ending not more than twenty (20) days prior to the date of the notice given pursuant to Section 6.2 of the Warrant Agreement. From and after the date specified by the Company for redemption of the Warrants (the "Redemption Date"), the Warrants evidenced by this Warrant Certificate shall no longer be deemed outstanding and all rights of the Holder of this Warrant Certificate shall cease and terminate, except for the right of the registered Holder to receive payment of the redemption price of five cents (\$0.05) per Warrant Share upon presentation and surrender of this Warrant Certificate. The Redemption Date shall abate, and the notice of redemption shall be of no effect, if the closing price or average bid price of the Common Stock, as applicable under Section 6.1 of the Warrant Agreement, does not equal or

exceed 120% of the Warrant Price on the Redemption Date and the five trading days immediately preceding the Redemption Date, but the right Company shall have the right to redeem the Warrants at a future date if the conditions set forth in Section 6.1 of the Warrant Agreement are subsequently met and a new notice setting a new Redemption Date is sent to Warrant holders.

This Warrant Certificate is issued under and in accordance with a Warrant Agreement dated as of ______, 2003 between the Company and the Warrant Agent named therein, and is subject to the terms and provisions contained in the Warrant Agreement, to all of which the Holder of this Warrant Certificate by acceptance of this Warrant Certificate consents. A copy of the Warrant Agreement may be obtained by the Holder hereof upon written request to the Company.

Upon any partial exercise of the Warrants evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate in respect of the shares of Common Stock as to which the Warrants evidenced by this Warrant Certificate shall not have been exercised. This Warrant Certificate may be exchanged at the office of the Warrant Agent by surrender of this Warrant Certificate properly endorsed either separately or in combination with one or more other Warrant Certificates for one or more new Warrant Certificates evidencing the right of the Holder thereof to purchase the aggregate number of shares as were purchasable on exercise of the Warrants evidenced by the Warrant Certificate or Certificates exchanged. No fractional shares will be issued upon the exercise of any Warrant, but the Company will pay the cash value thereof determined as provided in the Warrant Agreement. This Warrant Certificate is transferable at the office of the Warrant Agreement.

The Holder hereof may be treated by the Company, the Warrant Agent and all other persons dealing with this Warrant Certificate as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, or to the transfer hereof on the books of the Company, any notice to the contrary notwithstanding, and until such transfer on such books, the Company and the Warrant Agent may treat the Holder hereof as the owner for all purposes.

Neither the Warrants nor this Warrant Certificate entitles any Holder to any of the rights of a stockholder of the Company.

DATED:	BIOTIME, INC.
(Seal)	Ву:
	Title:
Attest:	
[COUNTERSIGNED:	
WARRANT AGENT	
By:]	
Authorized Signature	

This Warrant Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Warrant Agent.

PURCHASE FORM

(To be executed upon exercise of Warrant)

To BioTime, Inc.:

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, _____ shares of Common Stock, as provided for therein, and tenders herewith payment of the Warrant Price in full in the form of cash or a certified or bank cashier's check.

(Please Print Name)
(Please Print Address)
(Social Security Number or Other Taxpayer Identification Number)
- (Signature)

NOTE: The above signature should correspond exactly with the name on the face of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

And, if said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the share purchasable thereunder less any fraction of a share paid in cash.

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

	For value received,	nereby sells	, assigns and transfers
unto	the withi	n Warrant Certificate, to	ogether with all right,
title and	interest therein, and	does hereby irrevocably	constitute and appoint
	attorney, to	transfer said Warrant Ce	rtificate on the books of
the withi	n-named Company, with	full power of substitution	on in the premises.
Dated:			
			(Signature)

NOTE: The above signature should correspond exactly with the name on the face of this Warrant Certificate.

2003

WARRANT AGREEMENT, dated as of _______, 2003, between BioTime, Inc., a California corporation (the "Company"), and American Stock Transfer & Trust Company ("Warrant Agent") for the benefit of each registered holder of a Warrant described herein ("Holder"). The Company proposes to issue common share purchase warrants, as hereinafter described (the "Warrants"), to purchase up to an aggregate of 2,780,150 of its common shares, no par value (the "Common Stock") as follows: (a) up to 853,434 upon the exercise of subscription rights (the "Rights"); (b) up to an additional 426,717 Warrants through the sale of up to 853,434 Units to fill excess over-subscriptions of Rights, (c) 750,000 Warrants to certain persons named as Guarantors and Participating Debenture Holders pursuant to a Standby Purchase Agreement between such persons and the Company (the "Standby Guaranty Warrants"), (d) up to 214,285 Warrants through the sale of up to an additional 428,571 Units otherwise than through the exercise of Rights to the Guarantors under the Standby Purchase Agreement and (e) up to 535,714 Warrants through the exchange of 1,071,428 Units for Series 2001-A Debentures issued by the Company. Each Unit will be comprised of one share of Common Stock and one-half of Warrant. Each Right will entitle the holder thereof to purchase one "Unit" for every eight (8) Rights held.

In consideration of the foregoing and for the purpose of defining the terms and provisions of the Warrants and the respective rights and obligations thereunder of the Company and each Holder, the Company agrees as follows:

Section 1. Issuance of Warrants; Term of Warrants.

- ${\tt 1.1}$ The Company is issuing and delivering to each person who purchases Units a Warrant to purchase a number of Warrant Shares equal to one-half of the number of Units purchased by such purchaser.
- 1.2 The Company is issuing and delivering to the Guarantors and Participating Debenture Holders under the Standby Guaranty Agreement an aggregate of 750,000 Standby Guaranty Warrants. The Standby Guaranty Warrants and the other Warrants covered by this Agreement are identical in all respects.
- 1.3 As used in this Agreement, the term "Warrants" refers to all Warrants, including the Standby Guaranty Warrants, covered by this Agreement. The shares of Common Stock issuable upon exercise of the Warrants are referred to herein as the "Warrant Shares."
- 1.4 Subject to the terms of this Agreement, a Holder of any Warrant (including any Warrants into which a Warrant may be divided) shall have the right, which may be exercised at any time prior to 5:00 p.m., New York Time on ______, 2006 (the "Expiration Date"), to purchase from the Company the number of fully paid and nonassessable Warrant Shares which the Holder may at the time be entitled to purchase upon exercise of any of such Warrant.
- Section 2. Form of Warrant. The Warrants shall be represented by a certificate in substantially the form of Exhibit A hereto. The price per

Warrant Share and the number of Warrant Shares issuable upon exercise of each Warrant are subject to adjustment upon the occurrence of certain events, all as hereinafter provided. The Warrants shall be executed on behalf of the Company by its Chairman of the Board, President or one of its Vice Presidents, under its corporate seal reproduced thereon attested by its Secretary or any Assistant Secretary. The signature of any such officers on the Warrants may be manual or facsimile.

- 2.1 Signatures; Date of Warrants. Warrants bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any one of them shall have ceased to hold such offices prior to the delivery of such Warrants or did not hold such offices on the date of this Agreement. So long as the Warrant Agent (or a successor designated by the Company) is serving in such capacity, Warrants shall be dated as of the date of countersignature by the Warrant Agent upon division, exchange, substitution or transfer. If there is no Warrant Agent, Warrants shall be dated as of the date of execution thereof by the Company either upon initial issuance or upon division, exchange, substitution or transfer.
- 2.2 Countersignature of Warrants. So long as the Warrant Agent or a successor shall be serving as Warrant Agent, the Warrants shall be countersigned by the Warrant Agent (or any successor serving in such capacity) and shall not be valid for any purpose unless so countersigned. Warrants may be countersigned, however, by the Warrant Agent (or by its successor) and may be delivered by the Warrant Agent, notwithstanding that the persons whose manual or facsimile signatures appear thereon as proper officers of the Company shall have ceased to be such officers at the time of such countersignature, issuance or delivery. The Warrant Agent shall, upon written instructions of the Chairman of the Board, the President, an Executive or Senior Vice President, the Treasurer or the Controller of the Company, countersign, issue and deliver the Warrants and shall countersign and deliver Warrants as otherwise provided in this Agreement.

Section 3. Exercise of Warrants; Payment.

- 3.1 Exercise of Warrants. A Warrant may be exercised upon surrender of the certificate or certificates evidencing the Warrants to be exercised, together with the form of election to purchase on the reverse thereof duly filled in and signed, which signature shall be guaranteed by a financial institution that is a participant in a recognized signature guarantee program , to the principal office of the Warrant Agent and upon payment of the Warrant Price (as defined in and determined in accordance with the provisions of Section 4 and Section 10) to the Warrant Agent for the account of the Company, for the number of Warrant Shares in respect of which such Warrants are then exercised. Payment of the aggregate Warrant Price (defined in Section 4 herein) shall be made in cash or by certified or bank cashier's check in such amount.
- 3.2 Issuance of Warrant Shares. Subject to Section 5, upon the surrender of the Warrant and payment of the Warrant Price as aforesaid, the Warrant Agent shall promptly cause to be issued and delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate or certificates for the number of full Warrant Shares so purchased upon the exercise of such Warrant, together with cash, as provided in Section 12, in respect of any fractional Warrant Shares otherwise issuable upon such surrender. Such certificate or certificates shall be deemed

to have been issued and any person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares as of the date of the surrender of such Warrants and payment of the Warrant Price, as aforesaid. The rights of purchase represented by the Warrant shall be exercisable, at the election of the Holder thereof, either in full or from time to time in part and, in the event that a certificate evidencing the Warrant is exercised in respect of less than all of the Warrant Shares purchasable on such exercise at any time prior to the date of expiration of the Warrant, a new certificate evidencing the unexercised portion of the Warrant will be issued, and the Warrant Agent is hereby irrevocably authorized to countersign and to deliver the required new Warrant certificate or certificates pursuant to the provisions of this Section 3 and Section 2.2, and the Company, whenever required by the Warrant Agent, will supply the Warrant Agent with Warrant certificates duly executed on behalf of the Company for such purpose.

- 3.3 Payment of Funds to Company. Checks representing payment of the Warrant Price shall be delivered to the Company by the Warrant Agent. If so requested by the Company, the Warrant Agent shall delay issuance of Warrant Shares until the Company confirms collection of any check or checks received by the Company.
- 3.4 Records; Accounts. The Warrant Agent shall maintain a record of the date, amount of each payment of the Warrant Price received upon the exercise of Warrants, and the name and address of the Holder by whom or on whose behalf such payment was made.
- Section 4. Warrant Price. Subject to any adjustments required by Section 10, the price per share at which Warrant Shares shall be purchasable upon exercise of a Warrant (as to any particular Warrant, the "Warrant Price") shall be Two Dollars (\$2.00) per share.
- Section 5. Payment of Taxes. The Company will pay all documentary stamp taxes, if any, attributable to the initial issuance of Warrant Shares upon the exercise of Warrants; provided, however, that the Company shall not be required to pay any tax or taxes which may be payable in respect of any transfer involved in the issue or delivery of any Warrant or certificates for Warrant Shares in a name other than that of the registered Holder of such Warrants.

Section 6. Redemption of Warrants.

- 6.1 Right to Redeem. The Warrants may be redeemed by the Company, at its election, at any time if the closing price of the Common Stock on a national securities exchange (including the Nasdaq Stock Market National Market System), or the average bid price as quoted in Nasdaq Stock Market if the Common Stock is not listed on a national securities exchange, equals or exceeds 200% of the Warrant Price for any twenty (20) consecutive trading days ending not more than twenty (20) days prior to the date of the notice given pursuant to Section 6.2 (the "Trigger Period"); provided, however, that the Company may not redeem the Warrants unless a registration statement with respect to the Warrants and Warrant Shares is effective under the Securities Act of 1933, as amended (the "Act"), during the Trigger Period and during the twenty (20) day period ending on the Redemption Date (as defined below)
- $\,$ 6.2 Notice of Redemption. Notice of proposed redemption of the Warrants shall be sent by or on behalf of the Company, by first class mail, postage

prepaid, to the Holders of record of the Warrants subject to redemption at the addresses of such Holders appearing in the records of the Company or the Warrant Agent. Such notice shall be sent not less than twenty (20) days prior to the date fixed by the Company for redemption (the "Redemption Date"). Such notice shall notify the Holder of the Warrants that the Company will redeem the Warrants, and shall state (i) the date of redemption, (ii) the redemption price, (iii) the place or places at which the redemption price shall be paid upon presentation and surrender of the Warrants, and (iv) the name and address of the Warrant Agent.

- 6.3 Effect of Redemption. From and after the Redemption Date, the Warrants redeemed shall no longer be deemed outstanding and all rights of the Holder of such Warrants shall cease and terminate, except for the right of the registered Holder to receive payment of the redemption price of five cents (\$0.05) per Warrant Share upon presentation and surrender of the Warrants.
- 6.4 Abatement of Redemption. The Redemption Date shall abate, and the notice of redemption shall be of no effect, if the closing price or average bid price of the Common Stock, as applicable under Section 6.1, does not equal or exceed 120% of the Warrant Price on the Redemption Date and each of the five trading days immediately preceding the Redemption Date, but the Company shall have the right to redeem the Warrants at a future date if the conditions set forth in Section 6.1 are subsequently met and a new notice setting a new Redemption Date is sent to Warrant holders as provided in Section 6.2.

Section 7. Transferability of Warrants.

- 7.1 Registration. Each Warrant shall be numbered and shall be registered on the books of the Company (the "Warrant Register") as issued. The Company and the Warrant Agent shall be entitled to treat the Holder of any Warrant as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim or interest in such Warrant on the part of any other person, and shall not be liable for any registration of transfer of any Warrant which is registered or to be registered in the name of a fiduciary or the nominee of a fiduciary upon the instruction of such fiduciary, unless made with the actual knowledge that a fiduciary or nominee is committing a breach of trust in requesting such registration or transfer, or with such knowledge of such facts that its participation therein amounts to bad faith. Each Warrant shall initially be registered in the name of the person or entity to whom it is originally issued.
- 7.2 Restrictions on Exercise and Transfer. The Warrants may not be exercised, sold, pledged, hypothecated, transferred or assigned, in whole or in part, unless a registration statement under the Act, and under any applicable state securities laws is effective therefor, or an exemption from such registration is then available.
- 7.3 Transfer. Subject to Section 7.2, the Warrants shall be transferable only on the Warrant Register upon delivery thereof duly endorsed by the Holder or by his duly authorized attorney or representative, or accompanied by proper evidence of succession, assignment or authority to transfer, which endorsement shall be guaranteed by a financial institution that is a participant in a recognized signature guarantee program. In all cases of transfer by an attorney, the original power of attorney, duly

approved, or a copy thereof, duly certified, shall be deposited and remain with the Warrant Agent. In case of transfer by executors, administrators, guardians or other legal representatives, duly authenticated evidence of their authority shall be produced, and may be required to be deposited and remain with the Warrant Agent in its discretion. Upon any registration of transfer, the Warrant Agent shall countersign and deliver a new Warrant or Warrants to the persons entitled thereto.

- Section 8. Exchange of Warrant Certificates. Each Warrant certificate may be exchanged, at the option of the Holder thereof, for another Warrant certificate or Warrant certificates in different denominations entitling the Holder or Holders thereof to purchase a like aggregate number of Warrant Shares as the certificate or certificates surrendered then entitle each Holder to purchase. Any Holder desiring to exchange a Warrant certificate or certificates shall make such request in writing delivered to the Warrant Agent at its principal office and shall surrender, properly endorsed, the certificate or certificates to be so exchanged. Thereupon, the Warrant Agent shall execute and deliver to the person entitled thereto a new Warrant certificate or certificates, as the case may be, as so requested, in such name or names as such Holder shall designate.
- Section 9. Mutilated or Missing Warrants. In case any of the certificates evidencing the Warrants shall be mutilated, lost, stolen or destroyed, the Company may in its discretion issue and deliver and the Warrant Agent shall countersign and deliver in exchange and substitution for and upon cancellation of the mutilated Warrant certificate, or in lieu of and substitution for the Warrant certificate lost, stolen or destroyed, a new Warrant certificate of like tenor, but only upon receipt of evidence of such loss, theft or destruction of such Warrant reasonably satisfactory to the Company and the Warrant Agent and an indemnity or bond, if requested, also reasonably satisfactory to them. An applicant for such a substitute Warrant certificate shall also comply with such other reasonable regulations and pay such other reasonable charges as the Company or the Warrant Agent may prescribe.
- Section 10. Adjustment of Warrant Price and Number of Warrant Shares. The number and kind of securities purchasable upon the exercise of each Warrant and the Warrant Price shall be subject to adjustment from time to time upon the happening of certain events, as hereinafter defined.
- 10.1 Adjustments. The number of Warrant Shares purchasable upon the exercise of each Warrant and the Warrant Price shall be subject to adjustment as follows:
- (a) In the event that the Company shall (i) pay a dividend in shares of Common Stock or make a distribution in shares of Common Stock, (ii) subdivide its outstanding shares of Common Stock, (iii) combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) reclassify or change (including a change to the right to receive, or a change into, as the case may be (other than with respect to a merger or consolidation pursuant to the exercise of appraisal rights), shares of stock, other securities, property, cash or any combination thereof) its Common Stock (including any such reclassification or change in connection with a consolidation or merger in which the Company is the surviving corporation), the number of Warrant Shares purchasable upon exercise of each Warrant immediately prior thereto shall be adjusted so that the Holder of each Warrant shall be entitled to receive the kind and number of Warrant Shares or other securities of the Company or other property which he would have owned or have been entitled to receive after the happening of any of the events

described above, had such Warrant been exercised immediately prior to the happening of such event or any record date with respect thereto. An adjustment made pursuant to this paragraph (a) shall become effective immediately after the effective date of such event retroactive to the record date, if any, for such event

- (b) In case the Company shall issue rights, options or warrants to all holders of its outstanding Common Stock, without any charge to such holders, entitling them to subscribe for or purchase shares of Common Stock at a price per share which is lower at the record date mentioned below than the then current market price per share of Common Stock (as defined in paragraph (d) below), the number of Warrant Shares thereafter purchasable upon the exercise of each Warrant shall be determined by multiplying the number of Warrant Shares theretofore purchasable upon exercise of each Warrant by a fraction, of which the numerator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of additional shares of Common Stock offered for subscription or purchase in connection with such rights, options or warrants, and of which the denominator shall be the number of shares of Common Stock outstanding on the date of issuance of such rights, options or warrants plus the number of shares which the aggregate offering price of the total number of shares of Common Stock so offered would purchase at the current market price per share of Common Stock at such record date. Such adjustment shall be made whenever such rights, options or warrants are issued, and shall become effective immediately after the record date for the determination of stockholders entitled to receive such rights, options or warrants.
- (c) In case the Company shall distribute to all holders of its shares of Common Stock, (including any distribution made in connection with a merger in which the Company is the surviving corporation), evidences of its indebtedness or assets (excluding cash, dividends or distributions payable out of consolidated earnings or earned surplus and dividends or distributions referred to in paragraph (a) above) or rights, options or warrants, or convertible or exchangeable securities containing the right to subscribe for or purchase shares of Common Stock (excluding those referred to in paragraph (b) above), then in each case the number of Warrant Shares thereafter purchasable upon the exercise of each Warrant shall be determined by multiplying the number of Warrant Shares theretofore purchasable upon the exercise of each Warrant by a fraction, of which the numerator shall be the then current market price per share of Common Stock (as defined in paragraph (d) below) on the date of such distribution, and of which the denominator shall be the then current market price per share of Common Stock, less the then fair value (as determined by the Board of Directors of the Company) of the portion of the assets or evidences of indebtedness so distributed or of such subscription rights, options or warrants, or of such convertible or exchangeable securities applicable to one share of Common Stock. Such adjustment shall be made whenever any such distribution is made, and shall become effective on the date of distribution retroactive to the record date for the determination of shareholders entitled to receive such distribution.
- (d) For the purpose of any computation under paragraphs (b) and (c) of this Section 10.1, the current market price per share of Common Stock at any date shall be the average of the daily last sale prices for the 20 consecutive trading days ending one trading day prior to the date of such computation. The closing price for each day shall be the last reported sales price regular way or, in case no such reported sale takes place on such day, the average of the closing bid and asked prices regular way for such day, in each case on the principal national securities exchange on which the shares of Common

Stock are listed or admitted to trading or, if not so listed or admitted to trading, the last sale price of the Common Stock on the Nasdaq Stock Market or any comparable system. If the current market price of the Common Stock cannot be so determined, the Board of Directors of the Company shall reasonably determine the current market price on the basis of such quotations as are available.

- (e) No adjustment in the number of Warrant Shares purchasable hereunder shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the number of Warrant Shares purchasable upon the exercise of each Warrant; provided, however, that any adjustments which by reason of this paragraph (e) are not required to be made shall be carried forward and taken into account in the determination of any subsequent adjustment. All calculations shall be made with respect to the number of Warrant Shares purchasable hereunder, to the nearest tenth of a share and with respect to the Warrant Price payable hereunder, to the nearest whole cent.
- (f) Whenever the number of Warrant Shares purchasable upon the exercise of each Warrant is adjusted, as herein provided, the Warrant Price payable upon exercise of each Warrant shall be adjusted by multiplying such Warrant Price immediately prior to such adjustment by a fraction, of which the numerator shall be the number of Warrant Shares purchasable upon the exercise of each Warrant immediately prior to such adjustment, and of which the denominator shall be the number of Warrant Shares purchasable immediately thereafter.
- (g) No adjustment in the number of Warrant Shares purchasable upon the exercise of each Warrant need be made under paragraphs (b) and (c) if the Company issues or distributes to each Holder of Warrants the rights options, warrants, or convertible or exchangeable securities, or evidences of indebtedness or assets referred to in those paragraphs which each Holder of Warrants would have been entitled to receive had the Warrants been exercised prior to the happening of such event or the record date with respect thereto. No adjustment need be made for a change in the par value of the Warrant Shares.
- (h) For the purpose of this Section 10.1, the term "shares of Common Stock" shall mean (i) the class of stock designated as the Common Stock of the Company at the date of this Agreement, or (ii) any other class of stock resulting from successive changes or reclassifications of such shares consisting solely of changes in par value, or from par value to no par value, or from no par value to par value. In the event that at any time, as a result of an adjustment made pursuant to paragraph (a) above, the Holders shall become entitled to purchase any securities of the Company other than shares of Common Stock, thereafter the number of such other shares so purchasable upon exercise of each Warrant and the Warrant Price of such shares shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Warrant Shares contained in paragraphs (a) through (i), inclusive, and the provisions of Section 3 and Section 10.2 through Section 10.5, inclusive, with respect to the Warrant Shares, shall apply on like terms to any such other securities.
- (i) Upon the expiration of any rights, options, warrants or conversion or exchange privileges, if any thereof shall not have been exercised, the Warrant Price and the number of Warrant Shares purchasable upon the exercise of each Warrant shall, upon such expiration, be readjusted

and shall thereafter be such as it would have been had it been originally adjusted (or had the original adjustment not been required, as the case may be) as if (A) the only shares of Common Stock so issued were the shares of Common Stock, if any, actually issued or sold upon the exercise of such rights, options, warrants or conversion or exchange rights and (B) such shares of Common Stock, if any, were issued or sold for the consideration actually received by the Company upon such exercise plus the aggregate consideration, if any, actually received by the Company for the issuance, sale or grant of all such rights, options, warrants or conversion or exchange rights whether or not exercised.

10.2 Voluntary Adjustment by the Company. The Company may at its option, at any time during the term of the Warrants, reduce the then current Warrant Price to any amount deemed appropriate by the Board of Directors of the Company.

10.3 Notice of Adjustment. Whenever the number of Warrant Shares purchasable upon the exercise of each Warrant or the Warrant Price of such Warrant Shares is adjusted, as herein provided, the Company or the Warrant Agent, on request on request of the Company, shall promptly mail by first class, postage prepaid, to each Holder notice of such adjustment or adjustments. Such notice shall set forth the number of Warrant Shares purchasable upon the exercise of each Warrant and the Warrant Price of such Warrant Shares after such adjustment, setting forth a brief statement of the facts requiring such adjustment and setting forth the computation by which such adjustment was made.

10.4 No Adjustment for Dividends. Except as provided in Section 10.1, no adjustment in respect of any dividends shall be made during the term of a Warrant or upon the exercise of a Warrant.

10.5 Preservation of Purchase Rights Upon Merger, Consolidation, etc. In case of any consolidation of the Company with or merger of the Company into another corporation or in case of any sale, transfer or lease to another corporation of all or substantially all the property of the Company, the Company or such successor or purchasing corporation, as the case may be, shall execute an agreement that each Holder shall have the right thereafter, upon such Holder's election, either (i) upon payment of the Warrant Price in effect immediately prior to such action, to purchase upon exercise of each Warrant the kind and amount of shares and other securities and property (including cash) which he would have owned or have been entitled to receive after the happening of such consolidation, merger, sale, transfer or lease had such warrant been exercised immediately prior to such action (such shares and other securities and property (including cash) being referred to as the "Sale Consideration") or (ii) to receive, in cancellation of such Warrant (and in lieu of paying the Warrant price and exercising such Warrant), the Sale Consideration less a portion thereof having a fair market value (as reasonably determined by the Company) equal to the Warrant Price (it being understood that, if the Sale Consideration consists of more than one type of shares, other securities or property, the amount of each type of shares, other securities or property to be received shall be reduced proportionately); provided, however, that no adjustment in respect of dividends, interest or other income on or from such shares or other securities and property shall be made during the term of a Warrant or upon the exercise of a Warrant. The Company shall mail by first class mail, postage prepaid, to each Holder, notice of the execution of any such agreement. Such agreement shall provide for adjustments, which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Section 10. The provisions of this paragraph shall similarly apply to successive consolidations, mergers, sales, transfers or leases. The Warrant Agent shall be under no duty

or responsibility to determine the correctness of any provisions contained in any such agreement relating to the kind or amount of shares of stock or other securities or property receivable upon exercise of Warrants or with respect to the method employed and provided therein for any adjustments and shall be entitled to rely upon the provisions contained in any such agreement.

10.6 Statement on Warrants. Irrespective of any adjustments in the Warrant Price or the number or kind of shares purchasable upon the exercise of the Warrants, Warrants issued before or after such adjustment may continue to express the same price and number and kind of shares as are stated in the Warrants initially issuable pursuant to this Agreement.

Section 11. Reservation of Warrant Shares; Purchase and Cancellation of Warrants.

11.1 Reservation of Warrant Shares. There have been reserved, and the Company shall at all times keep reserved, out of its authorized Common Stock, a number of shares of Common Stock sufficient to provide for the exercise of the rights of purchase represented by the outstanding Warrants and any additional Warrants issuable hereunder. The Transfer Agent for the Common Stock and every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of any of the rights of purchase aforesaid will be irrevocably authorized and directed at all times to reserve such number of authorized shares as shall be required for such purpose. The Company will keep a copy of this Agreement on file with the Transfer Agent for the Common Stock and with every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of the rights of purchase represented by the Warrants. The Warrant Agent will be irrevocably authorized to requisition from time to time from such Transfer Agent the stock certificates required to honor outstanding Warrants upon exercise thereof in accordance with the terms of this Agreement. The Company will supply such Transfer Agent with duly executed stock certificates for such purposes and will provide or otherwise make available any cash which may be payable as provided in Section 12. The Company will furnish such Transfer Agent a copy of all notices of adjustments and certificates related thereto, transmitted to each Holder pursuant to Section 10.3.

11.2 Purchase of Warrants by the Company. The Company shall have the right, except as limited by law, other agreements or herein, with the consent of the Holder, to purchase or otherwise acquire Warrants at such times, in such manner and for such consideration as it may deem appropriate.

11.3 Cancellation of Warrants. In the event the Company shall purchase or otherwise acquire Warrants, the same shall thereupon be cancelled and retired. The Warrant Agent shall cancel any Warrant surrendered for exchange, substitution, transfer or exercise in whole or in part.

Section 12. Fractional Interests. The Company shall not be required to issue fractional Warrants or fractional Warrant Shares on the exercise of Warrants. If the exercise of any Rights would result in the issuance of a fractional Warrant, the fractional interest in a Warrant shall be disregarded and no compensation shall be payable with regard to the disregarded fractional Warrant. If more than one Warrant shall be presented for exercise in full at the same time by the same Holder, the number of full Warrant Shares which shall be issuable upon the exercise thereof shall be computed on the basis of the aggregate number of Warrant Shares purchasable on exercise of the Warrants so presented. If any

fraction of a Warrant Share would, except for the provisions of this Section 12, be issuable on the exercise of any Warrant (or specified portion thereof), the Company shall pay an amount in cash equal to the average of the daily closing sale prices (determined in accordance with paragraph (d) of Section 10.1) per share of Common Stock for the 20 consecutive trading days ending one trading day prior to the date the Warrant is presented for exercise, multiplied by such fraction.

- Section 13. No Rights as Shareholders; Notices to Holders. Nothing contained in this Agreement or in any of the Warrants shall be construed as conferring upon the Holders or their transferees the right to vote or to receive dividends or to consent or to receive notice as shareholders in respect of any meeting of shareholders for the election of directors of the Company or any other matter, or any rights whatsoever as shareholders of the Company. If, however, at any time prior to the expiration of the Warrants and prior to their exercise, any of the following events shall occur:
- (a) the Company shall declare any dividend payable in any securities upon its shares of Common Stock or make any distribution (other than a regular cash dividend, as such dividend may be increased from time to time, or a dividend payable in shares of Common Stock) to the holders of its shares of Common Stock; or
- (b) the Company shall offer to the holders of its shares of Common Stock on a pro rata basis any cash, additional shares of Common Stock or other securities of the Company or any right to subscribe for or purchase any thereof; or
- (c) a dissolution, liquidation or winding up of the Company (other than in connection with a consolidation, merger, sale, transfer or lease of all or substantially all of its property, assets, and business as an entirety) shall be proposed,

then in any one or more of said events the Company shall give notice in writing of such event as provided in Section 18, such giving of notice to be completed at least 10 days prior to the date fixed as a record date or the date of closing the transfer books for the determination of the stockholders entitled to such dividend, distribution, or subscription rights or for the determination of stockholders entitled to vote on such proposed dissolution, liquidation or winding up or the date of expiration of such offer. Such notice shall specify such record date or the date of closing the transfer books or the date of expiration, as the case may be. Failure to publish, mail or receive such notice or any defect therein or in the publication or mailing thereof shall not affect the validity of any action in connection with such dividend, distribution or subscription rights, or such proposed dissolution, liquidation or winding up, or such offer.

Section 14. Appointment of Successor Warrant Agent. The Company may remove the Warrant Agent at any time and appoint a successor Warrant Agent. In the event that the Warrant Agent shall resign or the Company shall elect to remove the Warrant Agent and replace it with a successor Warrant Agent, the Company may designate a successor Warrant Agent. At such time as the Company appoints a successor Warrant Agent, the successor Warrant Agent shall agree in writing to be bound by this Warrant Agreement, subject to such amendments as the Company may approve In the event that a successor Warrant Agent is appointed or this Warrant Agreement is amended or modified in any material respect, the Company shall promptly notify the Holders of such amendment or appointment and the place

designated for transfer, exchange and exercise of the Warrants. If no successor Warrant Agent is appointed, all powers and duties of the Warrant Agent shall be performed by the Company, and any documents or funds otherwise deliverable to the Warrant Agent shall instead by delivered to the Company at its principal office.

Section 15. Liability of Warrant Agent.

15.1 Limitation on Liability. The Warrant Agent shall not, by issuing and delivering warrant certificates evidencing Warrants, or receiving or holding funds for the benefit of the Company, or by any other act under this Agreement, be deemed to make any representations as to the validity or value or authorization of the Warrants represented thereby or the Common Stock issued upon the exercise of Warrants, or whether the Common Stock issued upon the exercise of Warrants is fully paid and nonassessable. The Warrant Agent shall not be (i) liable for any statement of fact made or contained in this Agreement or in any Prospectus or in any documents prepared by the Company in connection with the offer of Units through the Rights or the offer of Common Stock through the exercise of Warrants, (ii) liable for any action taken, suffered, or omitted by it in reliance upon any Warrant certificate or other document or instrument believed by it in good faith to be genuine and to have been signed or presented by the proper party or parties, (iii) responsible for any failure on the part of the Company to comply with any of its covenants and obligations contained in this Agreement, or (iv) liable for any act or omission in connection with the performance of its duties, obligations, covenants and agreements under this Agreement, except for the Warrant Agent's own negligence, willful breach or misconduct.

15.2 Consultation With Counsel. The Warrant Agent may consult with legal counsel (who may be legal counsel for the Company), and the opinion of such counsel shall be full an complete authorization and protection to the Warrant Agent as to any action taken or omitted by it in good faith and in accordance with such opinion. The Warrant Agent may execute any of the powers, and may perform the duties required of it, under this Agreement by or thorough attorneys, agents, receivers, or employees, and shall be entitled to advice of counsel concerning all matters of agency and its duty under this Agreement.

15.3 Reliance Upon Statements of Company Officers. Whenever in the performance of its duties under this Agreement, the Warrant Agent shall deem it necessary or desirable that any fact or matter be proven or established by the Company prior to taking or suffering any action under this Agreement, such fact or matter (unless other evidence in respect of such fact or matter is otherwise specifically prescribed by this Agreement) may be deemed to be conclusively proved and established by a statement signed by the Chief Executive Officer, the President, any Vice President, the Chief Financial Officer, or the Secretary of the Company and delivered to the Warrant Agent, and such statement shall be warrant to the Warrant Agent for any action taken or suffered in good faith by the Warrant Agent under the provisions of this Agreement in reliance upon such statement, provided, t hat in its discretion , the Warrant Agent may, in lieu of such statement, accept other evidence of such fact or matter. or may require such further or additional evidence as may seem reasonable to the Warrant Agent.

Section 16. Indemnification. The Company agrees to indemnify and hold harmless the Warrant Agent from and against any and all losses, expenses, and liabilities, including judgments, costs and reasonable attorneys fees, arising out of any act or omission of the Warrant Agent in the execution or

performance of its duties, obligations, covenants and agreements under this Agreement, except for the Warrant Agent's own negligence, willful breach or misconduct.

- Section 17. Compensation for Services. The Company agrees to pay the Warrant Agent a fee of for all services rendered by the Warrant Agent under this Agreement in accordance with the Warrant Agent's fee schedule, and to reimburse the Warrant Agent for all reasonable out-of-pocket expenses incurred in performing its duties under this Agreement.
- Section 18. Notices; Principal Office. Any notice pursuant to this Agreement by the Company or by any Holder to the Warrant Agent, or by the Warrant Agent or by any Holder to the Company, shall be in writing and shall be delivered in person, or mailed first class, postage prepaid (a) to the Company, at its office, Attention: Secretary or (b) to the Warrant Agent, at its offices as designated at the time the Warrant Agent is appointed. The address of the principal office of the Company is 935 Pardee Street, Berkeley, California 94710. Any notice mailed pursuant to this Agreement by the Company or the Warrant Agent to the Holders shall be in writing and shall be mailed first class, postage prepaid, or otherwise delivered, to such Holders at their respective addresses on the books of the Company or the Warrant Agent, as the case may be. Each party hereto and any Holder may from time to time change the address to which notices to it are to be delivered or mailed hereunder by notice to the other party.
- Section 19. Successors. Except as expressly provided herein to the contrary, all the covenants and provisions of this Agreement by or for the benefit of the Company, the Warrant Agent and the Holders shall bind and inure to the benefit of their respective successors and permitted assigns hereunder.
- Section 20. Merger or Consolidation of the Company. The Company will not merge or consolidate with or into any other corporation unless the successor or purchasing corporation, as the case may be (if not the Company), shall expressly assume, by supplemental agreement, the due and punctual performance and observance of each and every covenant and condition of this Agreement to be performed and observed by the Company.
- Section 21. Applicable Law. This Agreement and each Warrant issued hereunder shall be governed by and construed in accordance with the laws of the State of California, without giving effect to principles of conflict of laws.
- Section 22. Benefits of this Agreement. Nothing in this Agreement shall be construed to give to any person or corporation other than the Company, the Warrant Agent and the Holders any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Warrant Agent and the Holders of the Warrants.
- Section 23. Counterparts. This Agreement may be executed in any number of counterparts (including by separate counterpart signature pages) and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 24. Captions. The captions of the Sections and subsections of this Agreement have been inserted for convenience only and shall have no substantive effect.

Attest: By:

	BIOTIME, INC.
	Ву:
	Name:
	Title:
test:	
:	
Name: Judith Segall Title: Secretary	
	AMERICAN STOCK TRANSFER & TRUST COMPANY
	By:
	Title:

VOID AFTER 5:00 P.M. NEW YORK TIME, _____, 2006

Certificate No.

Warrant to Purchase [Insert number of Shares] Shares of Common Stock

BIOTIME, INC. COMMON STOCK PURCHASE WARRANTS

This certifies that, for value received, [Insert name of Holder] or registered assigns (the "Holder"), is entitled to purchase from BioTime, Inc. a California corporation (the "Company"), at a purchase price per share [Insert Warrant Price determined pursuant to Sections 4 and 10 of the Warrant Agreement] (the "Warrant Price"), the number of its Common Shares, no par value per share (the "Common Stock"), shown above. The number of shares purchasable upon exercise of the Common Stock Purchase Warrants (the "Warrants") and the Warrant Price are subject to adjustment from time to time as set forth in the Warrant Agreement referred to below. Outstanding Warrants not exercised prior to 5:00 p.m., New York time, on ______, 2006 shall thereafter be void.

Subject to restriction specified in the Warrant Agreement, Warrants may be exercised in whole or in part by presentation of this Warrant Certificate with the Purchase Form on the reverse side hereof duly executed, which signature shall be guaranteed by a financial institution that is a participant in a recognized signature guarantee program., and simultaneous payment of the Warrant Price (or as otherwise set forth in Section 10.5 of the Warrant Agreement) at the principal office of the Warrant Agent. Payment of the Warrant Price shall be made in cash or by certified or bank cashier's check in such amount as provided in Section 3 of the Warrant Agreement. As provided in the Warrant Agreement, the Warrant Price and the number or kind of shares which may be purchased upon the exercise of the Warrant evidenced by this Warrant Certificate are, upon the happening of certain events, subject to modification and adjustment.

The Warrants evidenced by this Warrant Certificate may be redeemed by the Company, at its election, at any time if the closing price of the Common Stock on a national securities exchange (including the Nasdaq Stock Market National Market System), or the average bid price as quoted in Nasdaq Stock Market if the Common Stock is not listed on a national securities exchange, equals or exceeds 200% of the Warrant Price for any twenty (20) consecutive trading days ending not more than twenty (20) days prior to the date of the notice given pursuant to Section 6.2 of the Warrant Agreement. From and after the date specified by the Company for redemption of the Warrants (the "Redemption Date"), the Warrants evidenced by this Warrant Certificate shall no longer be deemed outstanding and all rights of the Holder of this Warrant Certificate shall cease and terminate, except for the right of the registered Holder to receive payment of the redemption price of five cents (\$0.05) per Warrant Share

upon presentation and surrender of this Warrant Certificate. The Redemption Date shall abate, and the notice of redemption shall be of no effect, if the closing price or average bid price of the Common Stock, as applicable under Section 6.1 of the Warrant Agreement, does not equal or exceed 120% of the Warrant Price on the Redemption Date and the five trading days immediately preceding the Redemption Date, but the right Company shall have the right to redeem the Warrants at a future date if the conditions set forth in Section 6.1 of the Warrant Agreement are subsequently met and a new notice setting a new Redemption Date is sent to Warrant holders.

This Warrant Certificate is issued under and in accordance with a Warrant Agreement dated as of ______, 2003 between the Company and the Warrant Agent named therein, and is subject to the terms and provisions contained in the Warrant Agreement, to all of which the Holder of this Warrant Certificate by acceptance of this Warrant Certificate consents. A copy of the Warrant Agreement may be obtained by the Holder hereof upon written request to the Company.

Upon any partial exercise of the Warrants evidenced by this Warrant Certificate, there shall be issued to the Holder hereof a new Warrant Certificate in respect of the shares of Common Stock as to which the Warrants evidenced by this Warrant Certificate shall not have been exercised. This Warrant Certificate may be exchanged at the office of the Warrant Agent by surrender of this Warrant Certificate properly endorsed either separately or in combination with one or more other Warrant Certificates for one or more new Warrant Certificates evidencing the right of the Holder thereof to purchase the aggregate number of shares as were purchasable on exercise of the Warrants evidenced by the Warrant Certificate or Certificates exchanged. No fractional shares will be issued upon the exercise of any Warrant, but the Company will pay the cash value thereof determined as provided in the Warrant Agreement. This Warrant Certificate is transferable at the office of the Warrant Agreement.

The Holder hereof may be treated by the Company, the Warrant Agent and all other persons dealing with this Warrant Certificate as the absolute owner hereof for any purpose and as the person entitled to exercise the rights represented hereby, or to the transfer hereof on the books of the Company, any notice to the contrary notwithstanding, and until such transfer on such books, the Company and the Warrant Agent may treat the Holder hereof as the owner for all purposes.

This Warrant Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Warrant Agent.*

DATED:

	BIOTIME, INC.
(Seal)	By:
	Title:
Attest:	
[COUNTERSIGNED:	
WARRANT AGENT	
By:]	
Authorized Signature	

PURCHASE FORM

(To be executed upon exercise of Warrant)

To BioTime, Inc.:

The undersigned hereby irrevocably elects to exercise the right of purchase represented by the within Warrant Certificate for, and to purchase thereunder, _____ shares of Common Stock, as provided for therein, and tenders herewith payment of the Warrant Price in full in the form of cash or a certified or bank cashier's check.

(Please Print Name)
Please Print Address)
(Social Security Number or Other Taxpayer Identification Number)
(Signature)

NOTE:

The above signature should correspond exactly with the name on the face of this Warrant Certificate or with the name of the assignee appearing in the assignment form below.

And, if said number of shares shall not be all the shares purchasable under the within Warrant Certificate, a new Warrant Certificate is to be issued in the name of said undersigned for the balance remaining of the share purchasable thereunder less any fraction of a share paid in cash.

ASSIGNMENT

(To be executed only upon assignment of Warrant Certificate)

For value received, hereb the within Warrant Certifica	y sells, assigns and transfers unto te, together with all right, title
and interest therein, and does hereby irrevo	
attorney, to transfer said	Warrant Certificate on the books of
the within-named Company, with full power of	substitution in the premises.
Dated:	
	/-! · · · ·
	(Signature)

NOTE: The above signature should correspond exactly with the name on the face of this Warrant Certificate.

STAND-BY PURCHASE AGREEMENT

October 2, 2003

BioTime, Inc. 935 Pardee Street Berkeley, California 94710

BioTime, Inc., a California corporation (the "Company"), each of the holders of Series 2001-A debentures named on Schedule I (the "Participating Debenture Holders"), and each of the persons named on Schedule II (the "Guarantors") hereby agree as follows:

1. Rights Offer.

- 1.1 Subscription Rights. The Company will distribute to the holders of its common shares, no par value subscription rights ("Rights") entitling each holder to subscribe for and purchase one "Unit" for every eight Rights held (provided, that the Company may set a ratio of eight Rights per Unit if the Subscription Price (as defined below) is less than \$1.40) (the "Rights Offer"). Each "Unit" will consist of one new common share (the "Shares") and one-half of a warrant to purchase an additional common share (the "Warrants"). The subscription price per Unit payable upon the exercise of the Rights shall be \$1.40 (the "Subscription Price").
- (a) Each person who is a holder of record of common shares on the record date fixed by the Company will receive one Right for each common share owned on the record date. Beneficial owners of common shares held in the name of Cede & Co. as nominee for The Depository Trust Company, or in the name of any other depository or nominee, on the record date, will also receive Rights. The Rights will expire at 5:00 p.m. New York City time twenty-one days after the commencement of the Rights Offer or on such later date as the Company may determine (the "Expiration Date").
- 1.2 Over-Subscription Privilege. Shareholders who fully exercise the Rights initially issued to them will be entitled to the additional privilege of subscribing for and purchasing any Units not acquired by other holders of Rights (the "Over-Subscription Privilege"). The terms and conditions of the Over-Subscription Privilege are more fully set forth in the Prospectus included as a part of the Registration Statement (as defined below). The Company may also issue and sell additional Units to fill excess over-subscriptions after all of the Rights are exercised through the primary subscription or through the over-subscription privilege ("Excess Over-Subscription Units").
- 1.3 Warrants. Each full Warrant will entitle the holder to purchase one common share at a price of \$2.00 per share. The Warrants will expire on the day immediately preceding the third anniversary of the Expiration Date, and may not be exercised after that date. The Company may redeem the Warrants in accordance with the provisions of the Warrant Agreement by paying \$.05 per Warrant if the closing price of the common shares on the AMEX or any other

national securities exchange or the Nasdaq Stock Market exceeds 200% of the exercise price of the Warrants for any 20 consecutive trading days. The Warrants may not be exercised after the last business day prior to the redemption date.

- 1.4 Purchase of Units. Each Participating Debenture Holder and each Guarantor agrees to purchase from the Company in accordance with the terms and conditions of this Agreement, an amount of Units that remain unsold through the exercise of the Rights and the over-subscription privilege determined by dividing the amount of such Participating Debenture Holder's or Guarantor's Purchase Commitment shown on Schedule I or Schedule II, as applicable, by the Subscription Price. Payment of the Subscription Price for the Units purchased by Participating Debenture Holders shall be made by tendering to the Company for cancellation Series 2001-A Debentures issued by the Company ("Debentures") in the principal amount of the aggregate Subscription Price to be paid, with all signatures and endorsements required by the Company. If the principal amount of a Participating Debenture Holder's Debenture so tendered exceeds the total Subscription Price payable by the Participating Debenture Holder, the Company will deliver to that Participating Debenture Holder a new Debenture of like tenor in the principal amount of such excess. Payment of the Subscription Price for the Units purchased by Guarantors shall be made by tendering to the Company cash in the principal amount of the aggregate Subscription Price to be paid.
- (a) If the aggregate Subscription Price of all Units that the Participating Debenture Holders and the Guarantors are required to purchase is less than \$2,250,000, the Participating Debenture Holders as a group and the Guarantors as a group shall purchase their respective pro rata share of the Units to be purchased. The pro rata share of the Participating Debenture Holders as a group shall be 66.667% (\$1,500,000) and the pro rata share of the Guarantors as a group shall be 33.333% (\$750,000). The Participating Debenture Holders and the Guarantors shall not be required to purchase a fractional Unit and no fractional Units shall be issued.
- (b) If the aggregate Subscription Price of all Units that the Participating Debenture Holders are required to purchase is less than \$1,500,000, the Participating Debenture Holders shall purchase their respective pro rata share of the Units to be purchased. A Participating Debenture Holder's pro rata share shall be the Participating Debenture Holder's Purchase Commitment divided by \$1,500,000. The Participating Debenture Holders will have no right or obligation to purchase Excess Over-Subscription Units.
- (c) If the aggregate Subscription Price of all Units that the Guarantors are required to purchase is less than \$750,000, the Guarantors shall purchase their respective pro rata share of the Units to be purchased. A Guarantor's pro rata share shall be the Guarantor's Purchase Commitment divided by \$750,000. The Guarantors will have no right or obligation to purchase Excess Over-Subscription Units.
- 1.5 Offer of Additional Units to Guarantors. For a period of ten (10) days following the Expiration Date, the Company will offer the Guarantors the opportunity to purchase, at the Subscription Price per Unit, a number of Units equal to \$600,000 divided by the Subscription Price.. Each Guarantor shall have the right to purchase a number of Units determined by multiplying the aggregate number of Units offered to all Guarantors by a fraction, the numerator of which is the Guarantor's Purchase Commitment and the denominator of which

is \$750,000. If any Guarantor does not purchase his entire pro rata share of such Units within such 10 day period, the other Guarantors shall have the opportunity to do so for a period of five (5) days after the expiration of the initial 10 day period; provided, that the available shares not purchased by a Guarantor shall be allotted to the Guarantors pro rata based upon the ratio of their respective Purchase Commitments. The Company will not have the obligation to offer, and the Guarantors will not have the right to purchase, any Units under this Section 1.5 if the Guarantors fail to fulfill their obligation to purchase Units that remain unsold in the Rights Offer,

- (a) Each Guarantor who elects to purchase Units will be required to complete and execute an original copy of a subscription agreement in the form provided by the Company (the "Subscription Agreement). Payment shall be due upon subscription by wire transfer of, or certified check payable to the order of the Company for, good funds in the full amount of the Subscription Price for the number of Units desired to be purchased.
- (b) A Guarantor may assign some or all of their rights to purchase Units under this Section to one or more Guarantors, Participating Debenture Holders, or persons who are not parties to this Agreement, provided that (a) the Registration Statement (as defined below) is effective under the Securities Act (as defined below), (b) the assignor delivers to the assignee a current Prospectus (as defined below) at the time of the assignment, and (c) the assignee is not a member of the NASD or registered as a broker or dealer under the Securities Exchange Act of 1934, as amended.
- 1.6 Escrow of Funds By Guarantors. To secure their respective obligations under this Agreement, the Guarantors shall enter into an escrow agreement with the Company and American Stock Transfer & Trust Company or an other financial institution approved by the Company and the Guarantors, as escrow agent, and shall deposit with the escrow agent an amount of good funds equal to the total amount of the Guarantor's Purchase Commitment. On the Closing Date (as defined below) the escrow agent shall pay to the Company from funds held in escrow an amount equal to the total Subscription Price required to be paid by the Guarantors to purchase Units under this Agreement, net of the Guarantors' respective share of the Guarantors' Fee (as defined below).
- 1.7 Registration Statement. The Company will prepare and file with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Securities Act"), a registration statement including a prospectus, relating to the Rights, Units, Shares, Warrants, and Warrant Shares. Such registration statement, as amended at the time it becomes effective, is referred to herein as the "Registration Statement." The term "Prospectus" means the prospectus in the form first delivered to holders of record who receive Rights in the Rights Offer. Any reference in this Agreement to the Registration Statement or the Prospectus shall be deemed to refer to and include the documents incorporated by reference therein pursuant to Item 12 of Form S-2 under the Securities Act, as of the effective date of the Registration Statement or the date of the Prospectus, as the case may be, and any reference to "amend", "amendment" or "supplement" with respect to the Registration Statement, or the Prospectus shall be deemed to refer to and include any documents filed after such date under the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Exchange Act") that are deemed to be incorporated by reference therein.

Unless the context otherwise requires, the term "Warrants" means the Warrants issued as part of the Units and the Standby Guaranty Warrants issuable to the Guarantors and Participating Debenture Holders under this Agreement. The term "Warrant Shares" means the common shares issuable upon the exercise of the Warrants. Capitalized terms used but not defined herein shall have the meanings given to such terms in the Registration Statement and the Prospectus.

- 1.8 No Stabilization. The Participating Debenture Holders and the Guarantors will not (a) take, directly or indirectly, any action to, or that could reasonably be expected to, cause or result in any stabilization or manipulation of the price of the Units or Company common shares, or (b) bid for or purchase any BioTime securities or rights to acquire BioTime securities, or attempt to induce any person do so, other than as permitted under the Securities Exchange Act of 1934, as amended. The Participating Debenture Holders and the Guarantors will cause to be furnished to each broker through whom their Shares, Warrants or Warrant Shares may be offered the number of copies of this prospectus required by the broker.
- 1.9 Exchange of Debentures. In addition to their obligation under Section 1.4, if (a) all of the Rights issued by the Company are exercised, directly by the holders of the Rights or through over-subscriptions, and (b) all of the Excess Over-Subscription Units are sold, and (c) all of the additional Units being offered to the Guarantors under Section 1.4 of this Agreement are sold, the Participating Debenture Holders shall exchange all of their Debentures for Units, subject to a maximum of \$1,500,000 from all Participating Debenture Holders as a group. The balance of the outstanding Debentures not so exchanged will be prepaid in cash, with accrued interest. The number of Units the Participating Debenture Holders will receive in exchange for their Debentures will be the principal amount of their Debentures divided by the Subscription Price. The Company will pay cash in lieu of any fractional Unit. The exchange of Debentures will take place on the Closing Date (as defined below). On the Closing Date, the Participating Debenture Holders will deliver to the Company their Debentures duly endorsed for transfer to the Company against delivery of certificates evidencing the Shares and Warrants comprising the Units. Accrued interest on the Debentures as of the Closing Date will be paid in cash. If any Participating Debenture Holder fails to deliver their Debenture certificate on the Closing Date, their Debentures will nonetheless be deemed exchanged for Units, the Company will make a book entry of the cancellation of such Debentures in its Debenture registry, but the Company may withhold delivery of the certificate evidencing the Shares and Warrants comprising the Units issuable in exchange for the cancelled Debentures until such Participating Debenture Holder delivers their Debenture certificates to the Company.
- (a) If the Participating Debenture Holders are not obligated to exchange Debentures for Units under Section 1.4 or under this Section 1.9, the Company may nevertheless offer the Participating Debenture Holders the opportunity to voluntarily exchange up to \$1,500,000 of Debentures for Units at the Subscription Price. The Company may extend the same offer to other holders of Debentures, but if the total amount of Debentures tendered for exchange exceeds \$1,500,000, the Company will accept Debentures tendered by the Participating Debenture Holders, up to the \$1,500,000 limit, before accepting Debentures tendered by other Debenture holders.
- 2. Representations and Warranties. The Company hereby represents and warrants to the Participating Debenture Holders that:
- 2.1 Corporate Organization. The Company is a corporation duly organized, validly existing and in good standing under the laws of its state of incorporation, and has the requisite corporate power and authority to own or lease its properties and to carry on its business as now being conducted. The Company is duly qualified as a foreign corporation to do business and is in good standing in every jurisdiction in which the property owned or leased by it or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or in good standing would not have, individually or in the aggregate, a Material Adverse Effect. For purposes of this Agreement, "Material Adverse Effect" shall mean any material adverse effect on the business, operations, conditions (financial

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2.2 Capitalization; Organizational Documents.

(a) The authorized capital stock of the Company will consist immediately prior to the Closing of 40,000,000 common shares, no par value, of which 13,654,949 shares are issued and outstanding as of the date of this Agreement, and 1,000,000 preferred shares, of which no shares are issued and outstanding. All of the outstanding common shares have been duly and validly issued and are fully paid and nonassessable. Except as contemplated by the Registration Statement or as disclosed in the Company's Form 10-K for the fiscal year ended December 31, 2002, or its Form 10-Q for the fiscal quarter ended June 30, 2003, as of the date of this Agreement, there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company, or contracts, commitments, understandings or arrangements by which the Company is or may become bound to issue additional shares of capital stock other than options that may be granted from time to time by the Company under its 2002 Stock Option Plan. Except for the Rights, when and as distributed by the Company, there are no preemptive rights or rights of first refusal or similar rights which are binding on the Company permitting any person to subscribe for or purchase from the Company shares of its capital stock pursuant to any provision of law, the Articles of Incorporation or the Company's Bylaws or by agreement or otherwise.

(b) Upon issuance of the Units and payment of the Subscription Price in accordance with the terms of this Agreement, the Shares so issued will be duly authorized, validly issued, fully paid and nonassessable, and free and clear of any restrictions on transfer preemptive rights other than any transfer restrictions under the Securities Act and applicable state securities or Blue Sky laws, and the Warrants will constitute the binding obligations of the Company, enforceable in accordance with their terms. When issued as provided in this Agreement, the Standby Guaranty Warrants will constitute the binding obligations of the Company, enforceable in accordance with their terms. When issued upon the exercise of the Warrants, the Warrant Shares shall be duly authorized, validly issued, fully paid and nonassessable, and free and clear of any restrictions on transfer preemptive rights other than any transfer restrictions under the Securities Act and applicable state securities or Blue Sky laws

2.3 Authorization; Enforcement. (a) The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement and to issue, sell and perform its obligations with respect to the Rights, Units, Shares, Warrants, and Warrant Shares (b) the execution and delivery of this Agreement by the Company and the consummation of the transactions contemplated hereby have been duly authorized by the Company's Board of Directors or a committee thereof and no further consent or authorization is required by the Company, its Board of Directors or its stockholders, and (c) this Agreement has been duly executed and delivered by the Company. No other corporate proceedings on the part of the Company are necessary to approve and authorize the execution and delivery of this Agreement and the issuance of the Rights, and the Shares and Warrants comprising the Units, the Standby Guaranty Warrants, and the Warrant Shares. This Agreement constitutes the valid and binding agreement of the Company enforceable against the Company in accordance with its terms,

except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies, and except as enforcement of indemnification provisions may be limited under the Securities Act and applicable state securities or Blue Sky laws.

2.4 No Conflicts. The execution, delivery and performance of this Agreement by the Company, and the consummation of the transactions contemplated hereby will not (a) result in a violation of the Articles of Incorporation or Bylaws of the Company, or (b) violate or conflict with, or result in a breach of, any provision of, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any note, bond, mortgage, agreement, license indenture or instrument to which the Company is a party, or result in the creation of any lien on or against any of the properties of the Company, or result in a violation of any statute, law, rule, regulation, writ, injunction, order, judgment or decree applicable to the Company or by which any property or asset of the Company is bound or affected, except where such violation, conflict, breach or other consequence would not have a Material Adverse Effect. Except as disclosed in the Registration Statement, including any reports ("Exchange Act Reports") filed under the Exchange Act incorporated by reference in the Registration Statement, the Company is not in violation of any term of or in default under its Articles of Incorporation or Bylaws or in violation of any material term of, or in default under, any material contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree or order or any statute, rule or regulation applicable to the Company. Except as specifically contemplated by this Agreement, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental or regulatory or self-regulatory agency in order for it to execute, deliver or perform any of its obligations under or contemplated by this Agreement in accordance with the terms hereof, other than (i) the Registration Statement and filings pursuant to state securities laws in connection with the distribution of the Rights, sale of the Units, exercise of the Warrants and resale of any Units and Warrant Shares acquired by the Guarantors and Participating Debenture Holders, (ii) the filing and approval of an application to list the Rights, t Shares and Warrants comprising the Units, and the Warrant Shares on the AMEX, and (iii) filings, if any, required by the NASD. All consents, authorizations, orders, filings and registrations that the Company is required to obtain pursuant to the preceding sentence will have been obtained or effected on or prior to the date hereof.

2.5 Exchange Act Reports; Financial Statements. (a) The Company has filed on a timely basis all Exchange Act Reports required to be filed under the Exchange Act. None of the Exchange Act Reports incorporated by reference in the Registration Statement, at the time they were filed (except those Exchange Act Reports that were subsequently amended), contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. As of their respective dates, the financial statements of the Company included in the Exchange Act Reports incorporated by reference in the Registration Statement complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the Commission or other applicable rules and regulations with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis during the periods

involved (except (a) as may be otherwise indicated in such financial statements or the notes thereto, or (b) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

- (b) Except as set forth in the Exchange Act Reports or in the Registration Statement, the Company has incurred no material liabilities of any kind, whether accrued, absolute, contingent or otherwise or entered into any material transactions except in the ordinary course of business. The other historical financial and statistical information with respect to the Company included in the Registration Statement present fairly in all material respects the information shown therein on a basis consistent with the audited and unaudited financial statements of the Company included in the Exchange Act Reports incorporated by reference in the Registration Statement. The Company does not know of any facts, circumstances or conditions materially adversely affecting its operations, earnings or prospects which have not been fully disclosed in the Registration Statement, including the Exchange Act Reports incorporated by reference in the Registration Statement.
- (c) BDO Seidman, LLP and Deloitte & Touche LLP who have expressed their opinions with respect to the audited financial statements which form a part of the Company's Annual Report on Form 10-K, as amended, incorporated in the Registration Statement, are independent accountants as required by the Securities Act and the rules and regulations thereunder.
- 2.6 Litigation. All lawsuits and arbitrations proceedings known by the Company to be pending or threatened against the Company that would have a Material Adverse Effect on the Company are disclosed in the Exchange Act Reports. There is no action, suit, proceeding or investigation known to the Company that questions the validity of this Agreement or the right of the Company to execute, deliver and perform its obligations under this Agreement.
- 2.7 Intellectual Property. The Company owns, or has the contractual right to use, sell or license all intellectual property necessary or required for the conduct of its business as presently conducted and as proposed to be conducted, including, without limitation, all trade secrets, processes, source code, licenses, trademarks, service marks, trade names, logos, brands, copyrights, patents, franchises, domain names and permits. The Company has not received any communications alleging that the Company has violated or, by conducting its business presently conducted or as proposed to be conducted, violates or will violate any intellectual property rights of any other person or entity.
- 2.8 Title to Property and Assets. The Company has good and marketable title to, or, in the case of leases and licenses, has valid and subsisting leasehold interests or licenses in, all of its properties and assets (whether real or personal, tangible or intangible) free and clear of any liens or other encumbrances, except for liens or other encumbrances that do not, individually or in the aggregate, have a Material Adverse Effect. With respect to property leased by the Company, the Company has a valid leasehold interest in such property pursuant to leases which

are in full force and effect, and the Company is in compliance in all material respects with the provisions of such leases.

- 2.9 Compliance with Laws. To the best of the Company's knowledge, the Company is and has been in compliance in all material respects with all laws, regulations, orders, judgments or decrees that are applicable to the Company, the conduct of its business as presently conducted, and the ownership of its property and assets (including, without limitation, all Environmental Laws (as defined below) and laws related to occupational safety, health, wage and hour, and employment discrimination), except where such violation or violations do not have a Material Adverse Effect. "Environmental Laws" means all federal, state, local and foreign laws, ordinances, treaties, rules, regulations, guidelines and permit conditions relating to contamination or pollution of the environment (including ambient air, surface water, ground water, land surface or subsurface strata) or the protection of human health and worker safety, including, without limitation, laws and regulations relating to transportation, storage, use, manufacture, disposal or release of, or exposure of employees or others to, Hazardous Materials (as defined below) or emissions, discharges, releases or threatened releases of Hazardous Materials. "Hazardous Materials" means any substance that has been designated by any governmental entity or by applicable Environmental Laws to be radioactive, toxic, hazardous or otherwise a danger to health or the environment, including, without limitation, PCBs, asbestos, petroleum, urea formaldehyde and all substances listed as hazardous substances pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, or defined as a hazardous waste pursuant to the Resource Conservation and Recovery Act of 1976, as amended, and the regulations promulgated pursuant to Environmental Laws, but excluding office and janitorial supplies maintained in accordance with Environmental Laws.
- 2.10 Licenses and Permits. The Company has obtained and maintains all federal, state, local and foreign licenses, permits, consents, approvals, registrations, authorizations and qualifications required to be maintained in connection with the operations of the Company as presently conducted, the lack of which could have a Material Adverse Effect, provided, that in the ordinary course of business, the Company will have to obtain applicable regulatory approvals required to market its products or new clinical uses of Company products. The Company is not in default in any material respect under any of such licenses, permits, consents, approvals, registrations, authorizations and qualifications.
- 2.11 Related Entities. The Company does not presently own or control, directly or indirectly, any interest in any other subsidiary, corporation, association or other business entity. The Company is not a party to any joint venture, partnership or similar arrangement.
- 2.12 Changes. Since June 30, 2003, the Company has operated its business in the ordinary course of business and, to the knowledge of the Company, there has not been, or the Company has not (as the case may be):
 - (a) any Material Adverse Effect;
- (b) any damage, destruction or casualty loss, whether or not covered by insurance, which would have a Material Adverse Effect;

- (c) any waiver or compromise by the Company of a valuable right or of a material debt owed it;
- (d) sold, encumbered, assigned or transferred any material assets or properties of the Company, other than in the ordinary course of business:
- (e) incurred any liability, whether accrued, absolute, contingent or otherwise, and whether due or to become due, other than (i) in the ordinary course of business or (ii) liabilities that are not, individually or in the aggregate, material to the business, operations, condition (financial or otherwise), assets, results of operations or prospects of the Company;
- (f) created, incurred, assumed or guaranteed any indebtedness or subjected any of its assets to any lien or encumbrance, except for indebtedness, liens or encumbrances that are not, individually or in the aggregate, material to the business, operations, condition (financial or otherwise), assets, results of operations or prospects of the Company;
- (g) declared, set aside or paid any dividends or made any other distributions in cash or property on the Company's capital stock, except for the distribution of the Rights;
- $\hbox{(h) directly or indirectly redeemed, purchased or otherwise acquired any shares of capital stock of the Company;}$
- (i) suffered any resignation or termination of employment of any key officers or employees;
- (j) except in the ordinary course of business of the Company, materially increased the compensation payable or to become payable by the Company to any of its officers, employees or directors or materially increased any bonus, insurance, pension or other employee benefit plan, payment or arrangement made by the Company for or with any such officers, employees or directors;
- (k) made any direct or indirect loan to any stockholder, employee, officer or director of the Company, other than advances made in the ordinary course of business;
- $\hbox{(1) changed any agreement to which the Company is a party which would have a Material Adverse Effect; or }$
- $\,$ (m) entered into any agreement or commitment to do any of the things described in this Section 2.12.
- 2.13 Employee Benefit Plans. All "employee benefit plans," as such term is defined in the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), to which the Company has any liability or obligation, contingent or otherwise, comply in all material respects and have been maintained and administered in material compliance with ERISA, the Internal Revenue Code of 1986, as amended (the "Code"), and all other statutes, orders and governmental rules and regulations applicable to such employee benefit plans. The Company has not incurred any liability pursuant to ERISA or the penalty or excise tax provisions

of the Code relating to employee benefit plans (as defined in ERISA), and no event, transaction or condition has occurred or exists that could reasonably be expected to result in the incurrence of any such liability by the Company, or in the imposition of any lien on any of the rights, properties or assets of the Company pursuant to ERISA or to such penalty or excise tax provisions of the Code. The Company does not maintain or contribute to, and has not maintained or contributed to, any "multiemployer plan," as such term is defined in ERISA.

- 2.14 Taxes. The Company has timely filed all tax returns and reports (federal, state and local) required to be filed and these returns and reports are true and correct in all material respects. The Company has paid all taxes and other assessments shown to be due on such returns or reports. Neither the Internal Revenue Service nor any state or local taxing authority has, during the past three (3) years, examined or informed the Company that it is in the process of examining any such tax returns and reports. The provision for taxes of the Company, as shown on the financial statements included in the most recent Exchange Act Report, is adequate for taxes due or accrued as of the date thereof and since that date the Company has provided adequate accruals in accordance with generally accepted accounting principals in its financial statements for any taxes incurred that have not been paid, whether or not shown as being due on any tax returns.
- 2.15 Insurance. The Company has in full force and effect fire, casualty and liability insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow the Company to replace any of its properties that might be damaged or destroyed to the extent and in the manner customary for companies in similar business similarly situated.
- 2.16 Employees. (a) The Company does not have any collective bargaining agreements with any of its employees. There is no labor union organizing activity pending or, to the Company's knowledge, threatened with respect to the Company. To the Company's knowledge, no officer or key employee intends to terminate their employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. All material employment arrangements existing or proposed to exist with the Company's officers have been fully disclosed in the Registration Statement.
- (b) To the knowledge of the Company, if any existing full-time employee identified in the Registration Statement has entered into any non-competition, non-disclosure, confidentiality or other similar agreement with any party other than the Company, such employee is neither in violation thereof nor is expected to be in violation thereof as a result of the business conducted or expected to be conducted by the Company as described in the Registration Statement or such person's performance of his obligations to the Company; and the Company has not received notice that any consultant or scientific advisor of the Company is in violation of any non-competition, non-disclosure, confidentiality or similar agreement.
- 2.17 Material Contracts. All contracts, agreements, instruments, leases, licenses, arrangements and understandings to which the Company therein is a party or by which it may be bound required to be filed as exhibits to the Exchange Act Reports included in the Registration Statement or incorporated by reference therein have been so filed (the "Material Contracts"). The Material Contracts that have been filed as exhibits are complete and correct copies of the

contracts, agreements, instruments, leases, licenses, arrangement, understanding or other documents of which they purport to be copies, except for portions of certain documents that were redacted under the Commission's regulations pertaining to confidential treatment. The Material Contracts are valid and in full force and effect as to the Company, and, to the Company's knowledge, to the other parties thereto. Except as otherwise disclosed herein or in the Exchange Act Reports, the Company is not in violation of, or default under (and there does not exist any event or condition which, after notice or lapse of time or both, would constitute such a default under), the Material Contracts, except to the extent that such violations or defaults, individually or in the aggregate, could not reasonably be expected to (a) affect the validity of this Agreement, (b) have a Material Adverse Effect, or (c) impair the ability of the Company to perform fully on a timely basis any material obligation which the Company has or will have under this Agreement. To the Company's knowledge, except as set forth in the Exchange Act Reports, none of the other parties to any Material Contract are in violation of or default under any Material Contract in any material respect. The Company has not received any notice of cancellation or any written communication threatening cancellation of any Material Contract by any other party thereto.

- 2.18 Customers and Suppliers. Except as set forth in the Exchange Act Reports, no customer or supplier that was material to the Company during the previous twenty-four (24) months has terminated, materially reduced or threatened to terminate or material reduce its purchases from or provision of products or services to the Company.
- 2.19 Registration Statement and Prospectus. No order suspending the effectiveness of the Registration Statement has been issued by the Commission and no proceeding for that purpose has been initiated or threatened by the Commission. As of the applicable effective date of the Registration Statement and any amendment thereto, the Registration Statement complied, and will comply in all material respects, with the Securities Act, and did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading; and as of the applicable filling date of the Prospectus and any amendment or supplement thereto and as of the Closing Date, the Prospectus will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to the Underwriter or the Participating Debenture Holders' Information (as defined below).
- 2.20 Transfer Taxes. On the Closing Date, all stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Units to be sold to the Guarantors and Participating Debenture Holders hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been complied with.
- 2.21 Contributions. The Company has not directly or indirectly, (i) made any unlawful contribution to any candidate for public office, or failed to disclose fully where required by law any contribution in violation of law, or (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public

duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof.

- 2.22 Investment Company. The Company is not an "investment company" or an "affiliated person" of, or "promoter" or "principal Participating Debenture Holders" for an investment company, within the meaning of the Investment Company Act of 1940, as amended.
- 2.23 Related Party Transactions. No transaction has occurred between or among the Company and its affiliates, officers or directors or any affiliate or affiliates of any such officer or director that is required to be described in the Company's Exchange Act Reports that is not so described.
- 2.24 Books, Records; and Financial Controls. The books, records and accounts of the Company accurately and fairly reflect, in reasonable detail, the transactions in, and dispositions of, the assets of, liabilities of, and the results of operations of, the Company, all to the extent required by generally accepted accounting principles. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.
- 3. Cooperation with and Compensation of the Guarantors and Participating Debenture Holders $\,$
- 3.1 Cooperation. The Company will cooperate with the Guarantors and Participating Debenture Holders by making available to them such information as may be requested in making a reasonable investigation of the Company and its affairs and shall provide access to such employees as shall be reasonably requested. All non-public information provided by the Company to the Guarantors and Participating Debenture Holders will be considered as confidential information and shall be maintained as such by the Guarantors and Participating Debenture Holders, except as required by law, until the same becomes known to the public through no fault of the Guarantors and Participating Debenture Holders.
- 3.2 Fee. For the agreement of the Guarantors and the Participating Debenture Holders to purchase Units, if any, that remain unsold in the Rights Offer, on the Closing Date the Company shall pay to the Guarantors a fee in the amount of Fifty Thousand Dollars (\$50,000) in cash (the "Guarantors' Fee") and shall pay to the Participating Debenture Holders a fee in the amount of One Hundred Thousand Dollars (\$100,000) in cash (the "Participating Debenture Holders' Fee"), and shall issue to the Guarantors and the Participating Debenture Holders warrants, in the form attached as Exhibit A (the "Standby Guaranty Warrants"). The Guarantors shall receive Standby Guaranty Warrants to Purchase 250,000 common shares, and the Participating Debenture Holders shall receive Standby Guaranty Warrants to purchase 500,000 common shares, at an exercise price per share of \$2.00.

- (a) The Guarantors' Fee, the Participating Debenture Holders' Fee and the Standby Guaranty Warrants shall be allocated as follows: (i) among the Guarantors pro rata according to the ratio that each Guarantor's Purchase Commitment bears to the total Purchase Commitments of all of the Guarantors as a group; and (ii) among the Participating Debenture Holder's pro rata according to the ratio that each Participating Debenture Holder's Purchase Commitment bears to the total Purchase Commitments of all of the Participating Debenture Holders as a group.
- (b) Payment of the Guarantor's Fee and the Participating Debenture Holders' Fee will be made by wire transfer of good funds to such accounts as the respective payees may designate by written notice to the Company. The Guarantors' Fee and the Participating Debenture Holders' Fee shall be paid, and the Standby Guaranty Warrants shall be issued, on the Closing Date even if the Rights Offer is fully subscribed such that the Guarantors and the Participating Debenture Holders purchase no Units under this Agreement.
- 3.3 No Stabilization. The Company will not take, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of its common shares.
- $\,$ 3.4 AMEX Listing. The Company will use its best efforts to list the Rights, the Shares and Warrants comprising the Units, and the Warrant Shares on the AMEX.
- 4. Closing Procedures. Payment for the Units that remain unsold in the Rights Offer shall be made by delivering to the Company by 10:00 A.M. New York City time on the fifth business day after the Expiration Date, or at such other time on the same or such other date thereafter as the Participating Debenture Holders and the Company may agree upon in writing (the "Closing Date") cash, in the amount of the Subscription price to be paid by Guarantors, or Debentures, duly endorsed for transfer to the Company, in the principal amount of the Subscription Price to be paid by Participating Debenture Holders. The time and date of such payment for the Units is referred to herein as the "Closing Date." Certificates evidencing the Shares and Warrants purchased shall be delivered or shall be available for delivery to the Guarantors and Participating Debenture Holders at the offices of American Stock Transfer &Trust Company (the "Transfer Agent") on the Closing Date, and, except for the Standby Guaranty Warrants, shall be so delivered upon confirmation of the payment of the Subscription Price. Such Shares and Warrants shall be registered in such names and in such denominations as the purchasers shall request in writing, or if so requested by the purchasers Shares and Warrants other than the Standby Guaranty Warrants may be registered by book-entry delivery through the facilities of The Depository Trust Company ("DTC"). All requests concerning the registration and denomination of certificates evidencing Shares and Warrants shall be delivered to the Company and the Transfer Agent not later than two full business days prior to the Closing Date, with any transfer taxes payable in connection with the sale of the Shares and Warrants duly paid by the purchasers. The certificates for the Shares and Warrants, unless delivered by book-entry through the facilities of DTC, will be made available for inspection by the Guarantors and Participating Debenture Holders at the office of the Transfer Agent on the business day prior to the Closing Date. Accrued interest on the Debentures as of the Closing Date will be paid in cash. Any transfer taxes payable in connection with the issuance of Shares and Warrants in the name

of a designee or assignee of a Guarantor or Participating Debenture Holder shall be paid by such designee, assignee, Guarantor or Participating Debenture Holder.

- 5. Further Covenants. The Company hereby covenants and agrees that:
- 5.1 Effectiveness of the Registration Statement. If not already effective, the Company will use its reasonable best efforts to cause the Registration Statement to become effective at the earliest possible time and, if required, will file the final Prospectus with the Commission within the time periods specified by Rule 424(b) and Rule 430A under the Securities Act and to file promptly all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of the Prospectus and for so long as the delivery of a prospectus is required in connection with the Rights Offer or the offer or sale of the Units, Standby Guaranty Warrants, and Warrant Shares by the Guarantors and Participating Debenture Holders; and the Company will furnish copies of the Prospectus to the Guarantors and Participating Debenture Holders in New York City concurrent with the distribution of the Prospectus to Company shareholders who receive Rights.
- 5.2 Delivery of Copies of Prospectus. The Company will deliver, at the expense of the Company, to the Guarantors and Participating Debenture Holders during the applicable prospectus delivery period under the Securities Act, as many copies of the Prospectus (including all amendments and supplements thereto and documents incorporated by reference therein) as the Guarantors and Participating Debenture Holders may reasonably request. The term "prospectus delivery period" means the period of time after the first date of the public offering of the Rights as a prospectus relating to the Rights and Units is required by law to be delivered in connection with sales of the Units (or the Shares and Warrants) by the Company or by the Guarantors and Participating Debenture Holders.
- 5.3 Amendments or Supplements. Before filing any amendment or supplement to the Registration Statement or the Prospectus, whether before or after the time that the Registration Statement becomes effective, the Company will furnish to the Guarantors and Participating Debenture Holders a copy of the proposed amendment or supplement for review and will not file any such proposed amendment or supplement to which they reasonably object.
- 5.4 Notice to the Participating Debenture Holders. The Company will advise the Guarantors and Participating Debenture Holders promptly (i) if not already effective, when the Registration Statement has become effective; (ii) when any amendment to the Registration Statement has been filed or becomes effective; (iii) when any supplement to the Prospectus or any amendment to the Prospectus has been filed; (iv) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or the receipt of any comments from the Commission relating to the Registration Statement or any other request by the Commission for any additional information; (v) of the issuance by the Commission of any order suspending the effectiveness of the Registration Statement or preventing or suspending the use of the Prospectus or the initiation or threatening of any proceeding for that purpose; (vi) of the occurrence of any event within the prospectus delivery period as a result of which the Prospectus as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact necessary in order to make the

statements therein, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, not misleading; and (vii) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Rights and Units for offer and sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and the Company will use its best efforts to prevent the issuance of any such order suspending the effectiveness of the Registration Statement, preventing or suspending the use of the Prospectus or suspending any such qualification of the Rights, Units, Shares or Warrants, and, if any such order is issued, will use its best efforts to obtain as soon as possible the withdrawal thereof.

- 5.5 Ongoing Compliance of the Prospectus. If during the prospectus delivery period (i) any event shall occur or condition shall exist as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Prospectus to comply with law, the Company will immediately notify the Guarantors and Participating Debenture Holders thereof and forthwith prepare and file with the Commission and furnish to the Guarantors and Participating Debenture Holders such amendments or supplements to the Prospectus as may be necessary so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances existing when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law.
- 5.6 Blue Sky Compliance. The Company will use its best efforts to qualify the Rights, Units, Standby Guaranty Warrants, and Warrant Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as the Guarantors and Participating Debenture Holders shall reasonably request and will continue such qualifications in effect so long as required for the Guarantors and Participating Debenture Holders to (a) sell the Shares, Warrants, and Standby Guaranty Warrants acquired under this Agreement, or (b) to exercise such Warrants and Standby Guaranty Warrants and sell the Warrant Shares; provided that the Company shall not be required to file any general consent to service of process other than a form U-2.
- 5.7 Expenses. The Company shall pay all expenses incurred in connection with the preparation and printing of all necessary offering documents and instruments related to the Rights Offer and the issuance of the Units and Warrant Shares and will also pay the Company's own expenses for accounting fees, legal fees and other costs involved with the Rights Offer. The Company will provide at its own expense such quantities of the Prospectus and other documents and instruments relating to the Rights Offer as the Guarantors and Participating Debenture Holders may request. In addition, the Company will pay all reasonable filing fees, costs and legal fees for Blue Sky services and related filings and expenses of counsel with respect to Blue Sky qualifications.
- 5.8 Registration of Shares and Warrants. The Company will include the Standby Guaranty Warrants and Warrant Shares issuable upon the exercise of the Standby Guaranty Warrants in the Registration Statement. The Company will file such post-effective amendments to the Registration Statement as may be required to keep the Registration Statement in effect so as to permit the Guarantors and Participating Debenture Holders to (a) exercise the Standby Guaranty Warrants and sell any Warrant Shares issued upon such exercise, (b) exercise any

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Warrants purchased under this Agreement and sell any Warrant Shares issued upon such exercise, and (c) sell any Units purchased pursuant to this Agreement. The Company will provide the Guarantors and Participating Debenture Holders with copies of a current Prospectus required to fulfill the Guarantors' and Participating Debenture Holders' prospectus delivery requirement in connection with the sale of the common shares issued upon the exercise of the Standby Guaranty Warrants and Shares and Warrants comprising any Units purchased pursuant to this Agreement.

- 6. Conditions of Obligations of the Guarantors and Participating Debenture Holders. The obligations of the Guarantors and Participating Debenture Holders to purchase the Units are subject to the fulfillment, on or before the Closing Date, of the following additional conditions.
- 6.1 Registration Compliance; No Stop Order. The Registration Statement (or a post-effective amendment if required to be filed under the Securities Act) shall have become effective, no order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose shall be pending before or threatened by the Commission; the Prospectus shall have been timely filed with the Commission under the Securities Act and all requests by the Commission for additional information shall have been complied with.
- 6.2 Representations and Warranties Correct. The representations and warranties of the Company shall be true and correct in all material respects when made and on the Closing Date as though made on and as of the Closing Date.
- 6.3 Performance of Covenants. The Company shall have performed and complied in all material respects with all agreements, covenants and conditions required to be performed and complied with by it under this Agreement on or before the Closing Date.
- 6.4 Capitalization. Immediately prior to the Closing Date, the Company will have an authorized capitalization and issued and outstanding securities consistent with the description in the Registration Statement.
- 6.5 Officer's Certificate. The Guarantors and Participating Debenture Holders shall have received a certificate of an executive officer and of the Company, dated as of the Closing Date, certifying the fulfillment of the conditions set forth in this Section 6.
- 6.6 Good Standing; Resolutions. The Company shall have delivered to the Guarantors and Participating Debenture Holders (i) a good standing certificate from the Secretary of State of its jurisdiction of incorporation, and (ii) certified resolutions of the Company's Board of Directors approving this Agreement and the transactions contemplated by this Agreement.
- 6.7 Fees and Warrants. The Company shall have (i) paid the Guarantors' Fee and Participating Debenture Holders' Fee, and (ii) delivered to the Guarantors and Participating Debenture Holders the Standby Guaranty Warrants.
- $\,$ 6.8 Corporate Proceedings. All proceedings taken at or prior to the Closing Date in connection with the authorization, issuance and sale of the Units will be reasonably satisfactory in form and substance to the Guarantors and Participating Debenture Holders.

6.9 Opinion of Counsel. The Guarantors and Participating Debenture Holders shall have received an opinion of the Company's counsel substantially in the form attached as Exhibit B.

6.10 Delivery of Shares and Warrants. The Guarantors and Participating Debenture Holders shall have received the certificates (or confirmation of book entry) evidencing any Shares and Warrants purchased by them, against payment of the Subscription Price.

7. Indemnification.

7.1 Indemnification by the Company. The Company agrees to indemnify and hold harmless the Guarantors and Participating Debenture Holders, and each of their respective affiliates, directors and officers and each person, if any, who controls a Guarantor or Participating Debenture Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act from and against any and all losses, claims, damages and liabilities (including, without limitation, legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), joint or several, that arise out of, or are based upon, any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus (or any amendment or supplement thereto), or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to the Guarantors or Participating Debenture Holders furnished to the Company or approved by any Guarantor or Participating Debenture Holder; provided, that the foregoing indemnity with respect to any Prospectus shall not inure to the benefit of the a Guarantor or Participating Debenture Holder (or any affiliate of a Guarantor or Participating Debenture Holder that assists a Guarantor or Participating Debenture Holder in the sale of Shares and Warrants), or any person controlling any Guarantor or Participating Debenture Holder, if a copy of the Prospectus (as then amended or supplemented) was not sent or given by or on behalf of the Guarantor or Participating Debenture Holders to each purchaser of Shares or Warrants asserting such losses, claims, damages or liabilities, at or prior to the written confirmation of the sale of the Shares and Warrants to such person, unless such failure to send or give a copy of the Prospectus is the result of noncompliance by the Company with Section 5.1 or 5.2 of this Agreement.

7.2 Indemnification of the Company. Each Guarantor and each Participating Debenture Holder agrees to indemnify and hold harmless the Company, the Company's directors, Company officers who signed the Registration Statement, each other Guarantor and Participating Debenture Holder, and each person, if any, who controls the Company or another Guarantor or Participating Debenture Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the indemnity set forth in Section 7.1 above, but only with respect to any losses, claims, damages or liabilities that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any written information relating to the Guarantor or

Participating Debenture Holder furnished to the Company or approved by the Guarantor or Participating Debenture Holder for use in the Registration Statement and the Prospectus (or any amendment or supplement thereto).

7.3 Notice and Procedures. If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnification may be sought pursuant to the preceding paragraphs of this Section 7, such person (the "Indemnified Person") shall promptly notify the person against whom such indemnification may be sought (the "Indemnifying Person") in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under this Section 7 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person to represent the Indemnified Person and any others entitled to indemnification pursuant to this Section 7 that the Indemnifying Person may designate in such proceeding and shall pay the fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person who is also a named party in such proceeding, or for other reasons representation of both parties by the same counsel would be inappropriate due to actual or potential conflicts of interest between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the fees and expenses of more than one separate firm for all Indemnified Persons, and that all such fees and expenses shall be paid or reimbursed as they are incurred. An Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement or judgment. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification could have been sought hereunder by such Indemnified Person, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person.

7.4 Contribution. If the indemnification provided for in this Agreement is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under, in lieu of indemnifying each Indemnified Person under this Agreement, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion

as is appropriate to reflect the relative benefits received by the Company on the one hand and the Guarantors and Participating Debenture Holders on the other from the offering of the Units or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company on the one hand and the Guarantors and Participating Debenture Holders on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Guarantors and Participating Debenture Holders on the other shall be deemed to be in the same respective proportions as the net proceeds (before deducting expenses) received by the Company from the sale of the Units to the Guarantors and Participating Debenture Holders and the Guarantors' Fee, Participating Debenture Holders' Fee, and Guarantor's and Participating Debenture Holders' discount, bear to the aggregate Subscription Price of the Units purchased by the Guarantors and Participating Debenture Holders under this Agreement. For the purpose of this Agreement the Guarantors' and Participating Debenture Holders' discount shall be the excess, if any, of the market value of the Shares and Warrants purchased by the Guarantors and Participating Debenture Holders on the Closing Date over the Subscription Price. The relative fault of the Company on the one hand and the Guarantors and Participating Debenture Holders on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Guarantors and Participating Debenture Holders and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission..

7.5 Limitation on Liability. The Company and the Guarantors and Participating Debenture Holders agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in Section 7.4 above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in Section 7.4 above shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of this Section 7, in no event shall any Guarantor or Participating Debenture Holder be required to contribute any amount in excess of the amount by which the total Guarantors' Fee or Participating Debenture Holder's Fee and Guarantor's or Participating Debenture Holder's discounts received by the Guarantor or Participating Debenture Holder with respect to the purchase Units exceeds the amount of any damages that the Guarantor or Participating Debenture Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

7.6 Non-Exclusive Remedies. The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

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8. Termination

8.1 In addition to the other circumstances permitting termination set forth elsewhere in this Agreement (if any), this Agreement may be terminated by the Guarantors and Participating Debenture Holders at any time prior to the Closing Date in the event that (i) any of the representations or warranties of the Company contained herein shall prove to have been false or misleading in any material respect when made, (ii) the Company shall have failed to perform any of its material obligations hereunder, (iii) the Company shall have terminated the Rights Offer prior to the Expiration Date, or (iv) there shall occur any event not occasioned by or arising out of or in connection with any breach or failure hereunder on the part of the Guarantors and Participating Debenture Holders which would cause the offer or sale of the Units to the Guarantors and Participating Debenture Holders as contemplated by this Agreement to violate the Securities Act or any applicable state securities or Blue Sky law. In the event of any such termination the Guarantors and Participating Debenture Holders shall not be entitled to receive the Guarantors' Fee, the Participating Debenture Holders' Fee, and the Standby Guaranty Warrants or any other compensation; provided, that if the Guarantors and Participating Debenture Holders terminate this Agreement under clause (i) or (ii) of this paragraph, the Guarantors and Participating Debenture Holders shall be entitled to receive, as their exclusive remedy, an amount equal to the documented out-of-pocket expenses incurred by the Guarantors and Participating Debenture Holders in connection with this Agreement, not to exceed the Guarantors' Fee and Participating Debenture Holders' Fee, and up to \$15,000 of attorneys fees.

8.2 The Rights Offer and this Agreement may be terminated by the Company at any time prior to the Expiration Date for any reason. In the event of any such termination the Guarantors and Participating Debenture Holders shall not be entitled to receive the Guarantors' Fee, the Participating Debenture Holders' Fee, and Standby Guaranty Warrants or any other compensation; provided, that if the Company terminates the Rights Offer prior to the Expiration Date, or if at the time the Company terminates this Agreement (i) any of the representations or warranties of the Company contained herein shall prove to have been false or misleading in any material respect when made, or (ii) the Company shall have failed to perform any of its material obligations hereunder, the Guarantors and Participating Debenture Holders shall be entitled to receive, as their exclusive remedy, an amount equal to the documented out-of-pocket expenses incurred by the Guarantors and Participating Debenture Holders in connection with this Agreement, not to exceed the Guarantors' Fee and Participating Debenture Holders' Fee and up to \$15,000 of attorneys fees.

9. Survival

9.1 The obligations of the parties to pay any costs and expenses under this Agreement and to provide indemnification and contribution as provided herein shall survive any termination of this Agreement.

9.2 The respective indemnities, agreements, representations, warranties and other statements of the Company set forth in or made pursuant to this Agreement will remain in full force and effect, regardless of any investigation made by or on behalf of, and regardless of any

access to information by, the Company or the Guarantors and Participating Debenture Holders, or any of their officers or directors or any controlling person thereof, and will survive the sale of the Shares.

- 10. Notices. All communications hereunder will be in writing and, except as otherwise expressly provided herein or after notice by one party to the other of a change of address, if sent to the Guarantors and Participating Debenture Holders, will be mailed, delivered or telefaxed and confirmed to them at the addresses shown on Schedule I or Schedule II, and if sent to the Company, will be mailed, delivered or telefaxed and confirmed to BioTime, Inc., 935 Pardee Street, Berkeley, CA 94710-2623: Attn Judith Segall, Vice President and Secretary, Facsimile No. (510) 845-7914, with a copy to Lippenberger, Thompson, Welch, Soroko & Gilbert LLP: 201 Tamal Vista Boulevard, Corte Madera, CA 94925, Attn: Richard Soroko, Esq., Facsimile No. (415) 927-5210.
- 11. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California.
- 12. Counterparts. This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.
- 13. Amendments or Waivers. No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.
- 14. Headings. The headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.
- 15. Several Obligations. The obligations of the Guarantors and Participating Debenture Holders under this Agreement are their respective several obligations, and are not joint and several obligations. No Guarantor or Participating Debenture Holder shall be liable for the breach or default of any provision of this Agreement by another Guarantor or Participating Debenture Holder.

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

BIOTIME, INC. /s/ Judith Segall By: Title: Vice President GUARANTORS: /s/ Cynthia Bayern Dr. Cynthia Bayern /s/ Alfred D. Kingsley Alfred D. Kingsley /s/ George Karfunkel George Karfunkel PARTICIPATING DEBENTURE HOLDERS: /s/ Alfred D. Kingsley Alfred D. Kingsley /s/ George Karfunkel George Karfunkel Goren Brothers, LP By /s/ Alex Goren Alex Goren, General Partner /s/ Milton Dresner Milton Dresner, Trustee Camco Tactical Return Partners, LP By Broadwood Capital, Inc., General Partner By /s/ Neal C. Bradsher Neal C. Bradsher, President

PARTICIPATING DEBENTURE HOLDERS PURCHASE COMMITMENTS

ADDRESS PURCHASE COMMITMENT - ----------------Alfred D. Alfred D. Kingsley \$ 789,474 110 E. 59th Street Suite 3203 New York, NY 10022 FAX: (212) 207-3901 George George Karfunkel \$ 263,158 59 Maiden Lane New York, New York 10038 FAX: (718) 921-8323 Camco Tactical Return Partners, L.P. \$ 263,158 c/o Broadwood Capital, Inc. 767 Fifth Avenue, 50th Fl New York, NY 10153 Goren Brothers, L.P. \$ 131,579 150 East 52nd St. New York, NY 10022 Milton Dresner, Trustee \$ 52,632 28777 Northwestern Hwy., #100 Southfield,

MI 48034 Total: \$1,500,000

NAME AND

SCHEDULE II

GUARANTOR PURCHASE COMMITMENTS

NAME AND ADDRESS PURCHASE COMMITMENT - ---------------Dr. Cynthia Cynthia Bayern \$375,000 5 Cedarwood Court Laurel Hollow, NY 11791 FAX: (516) 367-4791 Alfred D. Kingsley \$187,500 110 E. 59th Street Suite 3203 New York, NY 10022 FAX: (212) 207-3901 George Karfunkel \$187,500 59 Maiden Lane New York, New York 10038 FAX: (718) 921-8323

Total: \$750,000

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of BioTime, Inc. on Form S-2 of our report dated February 16, 2002 relating to the financial statements of BioTime, Inc. as of December 31, 2001 and for the years ended December 31, 2001 and 2000, and for the period from November 30, 1990 (inception) to December 31, 2001, which report expresses an unqualified opinion and includes an explanatory paragraph related to the development stage of the Company's operations, appearing in the Annual Report on Form 10-K/A-1 of BioTime, Inc. for the year ended December 31, 2002 and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

DELOITTE & TOUCHE LLP

San Francisco, California October 1, 2003

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated March 28, 2003, except for Note 1d, which is as of April 4, 2003, relating to the financial statements of BioTime, Inc. appearing in BioTime's Annual Report on Form 10-K/A-1 for the year ended December 31, 2002. Our report contains an explanatory paragraph related to the development stage of BioTime's operations.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

BDO Seidman, LLP

San Francisco, California October 1, 2003