
SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended June 30, 1997

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TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 1-12830

 $\label{eq:bioTime} {\tt BioTime,\ Inc.}$ (Exact name of registrant as specified in its charter)

California (State or other jurisdiction of incorporation or organization) 94-3127919 (I.R.S. Employer Identification No.)

935 Pardee Street, Berkeley, California (Address of principal executive offices)

94710 (Zip Code)

Registrant's telephone number, including area code (510) 845-9535

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

Common Shares, no par value (Title of Class)

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [$\rm X$]

The approximate aggregate market value of voting stock held by nonaffiliates of the registrant was \$105,070,000 as of September 22, 1997.

3,266,193

(Number of Common Shares outstanding as of September 22, 1997)

Documents Incorporated by Reference

None

PART I

Item 1. Description of Business

Overview

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

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

perfluorocarbons.

Phase III clinical trials of Hextend began during late October 1996, and were conducted at Duke University Medical Center, Durham, NC and The Mount Sinai Medical Center, New York, NY. The trials were designed to test whether Hextend can be used to replace substantial amounts of blood volume lost during major elective surgeries such as gastrointestinal, orthopedic, urological, and gynecological procedures, without hypovolemia resulting and without the use of albumin. The trials were designed as double blind, two center studies containing 128 patients. Surgical procedures have been completed on all but two patients, and a 28 day follow up period has been completed for most. After surgical procedures on all patients in the trial have been completed and the 28 day follow up period has expired, the Company will compile and analyze clinical data for the purpose of preparing a new drug application (NDA).

A clinical study of the pharmacokinetics of Hextend has been conducted at the Middlesex Hospital in London, England. That study involved twenty-one patients and was conducted to test the rate at which Hextend is metabolized by the patient and to examine some of their physiological, biochemical and hematological functions. All surgical procedures have been

successfully completed and the data is presently undergoing analysis. Additional clinical studies of Hextend are being designed for the European market.

The Company has licensed to Abbott Laboratories the right to manufacture and market Hextend in the United States and Canada. Abbott Laboratories may also acquire a license to manufacture and market other BioTime products in those countries. See "Licensing."

To reduce the capital costs and delays inherent in acquiring or establishing a pharmaceutical manufacturing facility and establishing a marketing organization, the Company intends to license to pharmaceutical companies the right to manufacture and market the Company's products in other countries. Alternatively, the products could be produced for the Company by a pharmaceutical company and supplied to independent overseas distributors. Such arrangements are being discussed with a number of pharmaceutical manufacturers and distributors, but if contracts cannot be made on acceptable terms, the Company would be required to obtain additional capital to construct or acquire its own manufacturing facilities and establish its own marketing organization for overseas markets. There is no assurance that the Company would be able to raise sufficient capital for those purposes.

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

Hextend(R) and PentaLyte(R) are registered trademarks, and HetaCoolTM and HetaFreezeTM are trademarks, of BioTime, Inc.

Glossarv

Albumin

Certain terms used in this report are defined below.

osmotic pressure of blood. Prepared by fractionating plasma, it can be used to treat the loss of blood volume due to

A principal protein in plasma involved in regulating the

blood loss or shock Blood Plasma

Any fluid, crystalloid or colloid, which can be used to treat the loss of blood volume and treat or prevent Volume Expander

hypovolemia due to hemorrhage

Colloid Suspensions of finely divided particles in water or a

crystalloid solution which, because the particles do not readily disappear from the bloodstream, can be used as a

plasma volume expander with effects lasting from hours to

davs

Crystalloid

Solutions containing electrolytes such as sodium, potassium, calcium, chloride and in some cases small molecules such as glucose or lactic acid, in water that can

be used as a plasma volume expander, but the volume

expansion is transient since such solutions rapidly disappear from the bloodstream $\,$

The United States Food and Drug Administration FDA

Hematocrit The percentage of total blood volume occupied by the red

blood cells

HetaCool

BioTime's proprietary hetastarch-based synthetic solution specially formulated to allow the complete replacement of blood volume during low temperature surgery,

and to serve as a multi-organ preservation solution

HetaFreeze

BioTime's proprietary hetastarch-based freeze-protective solution, designed for storage of organs and tissues in a frozen or partially frozen state

Hextend

BioTime's proprietary hetastarch-based synthetic blood plasma volume expander, designed especially to treat hypovolemia in surgery and trauma care where patients experience a large amount of blood loss

Hypovolemia Loss of blood volume

IND

An Investigational New Drug application submitted to the FDA for review prior to the commencement of clinical trials to test the safety and efficacy of a new drug

A New Drug Application submitted to the FDA to evaluate the safety and efficacy of the product and to request approval to market the new drug after conclusion of clinical trials NDA

PentaLyte

BioTime's proprietary pentastarch-based synthetic blood plasma volume expander, designed especially for use when a faster elimination of the starch component is desired and

acceptable

Transfusion Trigger The hematocrit at which a physician treating a

a patient suffering blood loss would transfuse red cells or whole blood, rather than fluids lacking the ability to

transport large amounts of oxygen to the body's tissues

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

The transfusion of human blood or blood products is presently the traditional and only commercially available means for treating patients suffering from severe blood loss requiring the

replacement of more than half of their blood volume. The transfusion market in the United States consists of two principal segments. The acute blood loss segment, which comprises approximately two-thirds of the transfusion market, includes transfusions required in connection with trauma, surgery and unexpected blood loss. The chronic blood loss segment represents approximately one-third of the transfusion market and includes transfusions in connection with general medical applications and chronic anemias. Approximately 14 million units of blood were transfused in the United States in 1992, of which approximately 8.5 million units were administered to patients suffering the effects of acute blood loss. Patient charges for the units of blood used in the United States in 1992 for the treatment of acute blood loss were approximately \$2.5 billion.

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

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

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

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

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

The Products

Products for Surgery, Plasma Replacement and Emergency Care

The Company is developing Hextend, PentaLyte, HetaCool and other synthetic plasma expander solutions to treat acute blood loss that occurs during many kinds of surgery, particularly cardiac, orthopedic and gastro-intestinal operations. The solutions could also be used by emergency room physicians or by paramedics while the patient is being transported to the hospital to treat acute blood loss in trauma victims.

Severe blood loss during surgery or from trauma injuries caused by blunt or penetrating force can cause fatal shock. Whole blood or packed red cells generally cannot be administered to a patient until the patient's blood serum has been typed and sufficient units of compatible blood or red cells can be located. The use of human blood products also poses the risk of exposing the patient to blood borne diseases such as AIDS and hepatitis. Because the Company's solutions are synthetic, they could be used without matching the patient's blood type and would not pose the risk of transmitting blood borne infectious diseases.

While some fluid needs can be temporarily met by various colloid and crystalloid products, the use of those solutions can contribute to patient morbidity, including conditions such as hypovolemia, acidosis and other biochemical imbalances. The solutions being developed by the Company are intended to be more complete synthetic plasma volume expanders that can replace one-half or more of a patient's blood

volume and can provide more of the components necessary to prevent physiological shock during emergency care and surgical procedures.

Hextend, Pentalyte, and HetaCool contain constituents that may prevent or reduce the physiological imbalances that can impair or inhibit blood clotting and cardiac function in acute blood loss patients. BioTime has a cooperative research program with physicians and scientists in the Department of Surgery at the Metropolitan Hospital Center and the Department of Anesthesiology at Mt. Sinai Medical Center, both in New York City, to test the potential usefulness of Hextend and Pentalyte as surgical and trauma care products. In a series of laboratory animal experiments, researchers at both centers have shown the ability of Hextend and Pentalyte to replace blood lost due to severe bleeding. Results from certain of these tests indicate that Hextend and Pentalyte may prove more effective at maintaining blood calcium levels than the leading domestically available plasma extender when used to replace large volumes of blood. Calcium can be a significant factor in regulating blood clotting and cardiac function. Results from other in vitro tests of Hextend indicate that Hextend does not alter the activity of a number of specific blood clotting factors, other than by simple hemodilution. Preliminary observations during the currently blinded clinical trials, and previous results of animal experiments, have led the Company to believe that it is likely that Hextend will prove to be safe for use in clinical medicine.

Hextend, PentaLyte and HetaCool are similar formulations, except that Hextend and HetaCool use a high molecular weight hydroxyethyl starch (hetastarch) whereas PentaLyte uses a low molecular weight hydroxyethyl starch (pentastarch). The hetastarch is retained in the blood longer than the pentastarch, which may make Hextend and HetaCool the products of choice when a larger volume of plasma expander or blood substitute for low temperature surgery is needed or where the patient's ability to restore his own blood proteins after surgery is compromised. PentaLyte, with pentastarch, would be eliminated from the blood faster than Hextend and HetaCool and might be used when less plasma expander is needed or where the patient is more capable of quickly restoring lost blood proteins. By testing and bringing both Hextend and PentaLyte to the market, BioTime can increase its market share by providing the medical community with solutions to match patients' needs.

BioTime has not attempted to synthesize potentially toxic and costly oxygen carrying molecules such as hemoglobin because the loss of fluid volume and physiological balance may contribute as much to shock as the loss of the oxygen carrying component of the blood. Surgical and trauma patients are routinely given supplemental oxygen and retain a substantial portion of their own red blood cells. Whole blood or packed red blood cells are generally not transfused during surgery or in trauma care until several liters of plasma or plasma volume expanders have been administered and the patient's hematocrit has fallen to the transfusion trigger. Therefore, the lack of oxygen carrying molecules in the Company's solutions should not pose a significant contraindication to use.

Experiments by $\ensuremath{\mathsf{BioTime}}$ scientists have demonstrated that laboratory animals are able to

survive at normal temperatures and without supplemental oxygen when more than two-thirds of their circulating blood volume is replaced by Hextend and or PentaLyte. When animals are placed in an oxygen rich environment, they are able to survive at normal temperatures when even more of their circulating blood volume is replaced by Hextend.

Hextend is BioTime's proprietary hetastarch-based synthetic blood plasma volume expander, designed especially to treat hypovolemia in surgery and trauma care where patients experience a large amount of blood loss.

Hextend has been designed and formulated to replace large volumes of blood loss, to maintain normal blood electrolytes and blood sugar and to prevent acidosis. The colloid and crystalloid plasma expanders presently on the market do not contain all the physiologically balanced components used in Hextend. Albumin produced from human plasma is also currently used as a plasma expander, but it is scarce and expensive. In contrast, Hextend is synthetic and can be manufactured in large volumes.

A recent analysis of surgeries performed each year in the United States indicates that approximately 2.5 million patients lose sufficient blood to require transfusion of at least one unit of blood. Until blood loss becomes so severe that a transfusion is required, blood volume loss is treated with plasma expanders. BioTime's goal in developing Hextend is to produce a product that may be used to replace larger volumes of blood loss than other starch-based plasma volume expanders, thereby reducing the use of less effective crystalloids and the number of units of blood or blood products that must be used during surgery.

BioTime also plans to test the use of Hextend as cardio-pulmonary bypass circuit priming solution. In order to perform heart surgery, the patient's heart must be stopped and mechanical apparatus is used to oxygenate and circulate the blood. The cardio-pulmonary bypass apparatus requires a blood compatible fluid such as Hextend to commence and maintain the process of diverting the patient's blood from the heart and lungs to the mechanical oxygenator and pump.

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

Another potential indication for Hextend that BioTime plans to evaluate in clinical trials is its use as a replacement for plasma volume in therapeutic plasma exchange (TPE). In TPE, plasma is removed from the circulation, to be replaced typically by normal plasma or inert solutions of electrolytes or albumin. Theoretically, the patient's blood contains a pathogenic substance that can be reduced by the TPE procedure to levels that will favorably affect the course of the illness. These TPE procedures involve the use of large volumes of plasma or plasma volume substitutes. Diseases commonly treated using this procedure include Myasthenia Gravis and Guillain-Barre syndrome.

PentaLyte is BioTime's proprietary pentastarch-based synthetic plasma expander, designed especially for use when a faster elimination of the starch component is desired and acceptable. Of the approximately 10,000,000 surgeries that occur within U.S. hospitals each year, about 25% require blood transfusions. A substantial portion of the remaining surgeries, while not requiring transfusions, do cause blood loss. In addition, many patients are treated for injuries that result in significant bleeding. Although Hextend can be used in these cases, some physicians appear to prefer a solution which could be metabolized faster and excreted earlier when the longer term protection provided by Hextend is not required. PentaLyte combines the physiologically balanced Hextend formulation with pentastarch, a medical starch currently available in the U.S., that has a lower molecular weight and degree of substitution than the hetastarch used in Hextend.

Products for Hypothermic Surgery

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

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

HetaCool is a modified formulation of Hextend. HetaCool is specifically designed for use at low temperatures. Surgeons are already using a variety of other solutions to carry out certain limited procedures involving shorter term (up to nearly one hour) arrest of brain and heart function at temperatures between 15 and 200 C. However, BioTime is not aware of any fluid currently used in medical practice or any medically-approved protocol allowing operations which can completely replace all of a patient's blood at temperatures close to the ice point. The Company believes that very low temperature bloodless surgical techniques could be developed for open heart and minimally invasive closed chest cardiovascular surgeries, and removal of tumors from the brain, head, neck,

heart, and other areas.

The Company is in the process of preparing an IND application to conduct clinical trials using HetaCool as a solution to replace all of a patient's circulating blood volume during profound hypothermic (carried out at near-freezing temperatures) surgical procedures, such as repair of the aortic arch, during which heart and brain activity could be arrested for longer periods and with greater safety than is now possible. HetaCool would be introduced into the patient's body during the cooling process. Once the patient's body temperature is nearly ice cold, and heart and brain function are temporarily arrested, the surgeon would perform the operation. During the surgery, HetaCool may be circulated throughout the body in place of blood, or the circulation may be arrested for a period of time if an interruption of fluid circulation is required. Upon completion of the surgery, the patient would be slowly warmed and blood would be transfused.

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

HetaCool has been used to completely replace the blood volume of hamsters, dogs and baboons at temperatures approaching freezing. Many of these animal subjects survived long term after hypothermic blood substitution with HetaCool. In these laboratory tests, the animals' blood was replaced by HetaCool and they were chilled for one to more than four hours with deep body temperatures between 10C and 10oC.

Organ Transplant Products

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

A significant problem that arises frequently in the field of organ transplant surgery is the inability to recover more than a few viable organs from a donor. Currently, surgeons use different preservation solutions for different organs or different groups of organs. As a result, a separate procedure using a different preservation solution is required to preserve and remove each organ, or

system of related organs. The removal of one organ can impair the viability of other organs. Available technology does not permit surgeons to keep the remaining organs viable within the donor's body for a significant time after the first organ is removed.

Another problem in the field of organ transplant surgery is the timely matching and delivery of compatible organs from donors to recipients. Currently, an organ available for transplant is flushed with an ice cold solution during the removal process to deactivate the organ and preserve its tissues, and then the organ is transported on ice to the donee. The ice cold solutions currently used, together with transportation on ice, keep the organ healthy for only a short period of time. For example, the storage time for hearts is limited to approximately six hours. Because of the short time span available for removal and transplant of an organ, potential organ donees may not receive the needed organs.

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

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

Long-term Tissue and Organ Banking

The development of marketable products and technologies for the preservation of tissues and vital organs for weeks and months is a long-range goal of the Company's research and development plan. To permit such long-term organ banking the Company is attempting to develop products and technologies that can protect tissues and organs from the damage that occurs when human tissues are subjected to subfreezing temperatures.

 $\label{thm:bound} \mbox{HetaFreeze is one of a family of BioTime's } \mbox{ freeze-protective solutions } \\ \mbox{which may ultimately}$

allow the extension of time during which organs and tissues can be stored for future transplant or surgical grafting. In laboratory experiments, BioTime's proprietary freeze-protective compounds have already been used to preserve skin when used as a whole animal perfusate. Silver dollar size full thickness shaved skin samples have been removed after saturation with HetaFreeze solution, frozen at liquid nitrogen temperatures and stored for periods ranging from days to weeks. The grafts were then warmed and sewn onto the backs of host animals. Many of these grafts survived.

In other laboratory experiments, BioTime scientists have shown that animals can be revived to consciousness after partial freezing with their blood replaced by HetaFreeze. While this technology has not developed to an extent that allows long term survival of the laboratory subjects, and their organs, a better understanding of the effects of partial freezing could allow for extended preservation times for vital organs, skin and blood vessels.

Other Potential Uses of BioTime Solutions

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

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

Research and Development Strategy

From inception through June 30, 1997, the Company has spent \$6,909,353 on research and development. The greatest portion of BioTime's research and development efforts have been devoted to the development of Hextend, PentaLyte and HetaCool for conventional surgery, emergency care, low temperature surgery, and multi-organ preservation. A lesser portion of the Company's research and development efforts have been devoted to developing solutions and protocols for storing organs and tissues at subfreezing temperatures. In the future the Company may explore other applications of its products and technologies, including cancer chemotherapy. As the first products achieve market entry, more effort will be expended to bring the next tier of products to maturity.

One major focus of the Company's research and development effort has been on products and technology to extend the time animals can be kept cold and blood-substituted, and then revived without physical impairment. An integral part of that effort has been the development of techniques

and procedures or "protocols" for use of the Company's products. A substantial amount of data has been accumulated through animal tests, including the proper surgical techniques, drugs and anesthetics, the temperatures and pressures at which blood and blood substitutes should be removed, restored and circulated, solution volume, the temperature range, and times, for maintaining circulatory arrest, and the rate at which the subject should be rewarmed.

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

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

Licensing

On April 23, 1997, the Company and Abbott Laboratories ("Abbott") entered into an Exclusive License Agreement (the "License Agreement") under which the Company has granted to Abbott an exclusive license to manufacture and sell Hextend in the United States and Canada for all therapeutic uses other than those involving hypothermic surgery where the patient's body temperature is lower than 12(degree)C ("Hypothermic Use"), or replacement of substantially all of a patient's circulating blood volume ("Total Body Washout"). The Company has retained all rights to manufacture, sell or license Hextend and other products in all other countries.

Under the License Agreement, Abbott has agreed to pay the Company up to \$40,000,000 in license fees and to provide assistance to the Company in connection with the Company's Phase III clinical trials of Hextend. \$1,400,000 of the license fees has been paid to date, and an additional \$1,100,000 will become payable in installments upon the achievement of specific milestones pertaining to the filing and approval of a new drug application for Hextend, and the commencement of sales of the product. Up to \$37,500,000 of additional license fees will be payable based upon annual net sales of Hextend, at the rate of 10% of annual net sales if annual net sales exceed \$30,000,000 or 5% if annual net sales are between \$15,000,0000 and \$30,000,000. Abbott's

obligation to pay licensing fees on sales of Hextend will expire on the earlier of January 1, 2007 or, on a country by country basis, when all patents protecting Hextend in the applicable country expire or any third party obtains certain regulatory approvals to market a generic equivalent product in that country.

In addition to the license fees, Abbott will pay the Company a royalty on annual net sales of Hextend. The royalty rate will be 5% plus an additional .22% for each \$1,000,000 of annual net sales, up to a maximum royalty rate of 36%. 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.

Abbott has agreed that the Company may convert Abbott's exclusive license to a non-exclusive license or may terminate the license outright if certain minimum sales and royalty payments are not met. In order to terminate the license outright, the Company would pay a termination fee in an amount ranging from the milestone payments made by Abbott to an amount equal to three times prior year net sales, depending upon when termination occurs. Abbott's exclusive license also may terminate, without the payment of termination fees by the Company, if Abbott fails to market Hextend. Abbott has agreed to manufacture Hextend for sale by the Company in the event that Abbott's exclusive license is terminated in either case.

Abbott may also acquire additional licenses to manufacture and sell the Company's other plasma expander products in the United States and Canada. If Abbott exercises its right to acquire a license to sell such products for uses other than Hypothermic Surgery or Total Body Washout, in addition to paying royalties, Abbott will be obligated to pay a license fee based upon the Company's direct and indirect research, development and other costs allocable to the new product. If Abbott desires to acquire a license to sell any of the Company's products for use in Hypothermic Surgery or Total Body Washout, the license fees and other terms of the license will be subject to negotiation between the parties. For the purpose of determining the applicable royalty rates, net sales of any such new products licensed by Abbott will be aggregated with sales of Hextend. If Abbott does not exercise its right to acquire a new product license, the Company may manufacture and sell the product itself or may license others to do so.

The foregoing description of the License Agreement is a summary only and is qualified in all respects by reference to the full text of the License Agreement.

The Company is also discussing prospective licensing arrangements with other pharmaceutical companies, some of which have the capacity to produce the company's products, as well as market them, for various over-seas markets. In licensing arrangements that include marketing rights, the participating pharmaceutical company would be entitled to retain a large portion of the revenues from sales to end users and would pay the Company a royalty on net sales. There is no assurance that any such additional arrangements can be made.

Manufacturing

Facilities Required

The Company has sufficient equipment, space and personnel needed to synthesize the quantities of its products used in its research activity, but the Company does not have facilities to manufacture the solution in commercial quantities, or under "good manufacturing practice" required by the FDA. Any products that are used in clinical trials for FDA approval, or that are approved by the FDA for marketing, will have to be manufactured according to "good manufacturing practices" at a facility that has passed FDA inspection. In addition, any products that are approved by the FDA will have to be manufactured in commercial quantities, and with sufficient stability to withstand the distribution process, and in compliance with such federal and state regulatory requirements as may be applicable. The active ingredients and component parts of the products must be either USP or themselves manufactured according to "good manufacturing practices".

Abbott is providing Hextend manufactured under good manufacturing practices for use in the Company's clinical trials, and Abbott has the facilities to manufacture Hextend and other Company products in commercial quantities. If Abbott chooses not to obtain a license to manufacture and market another BioTime product, or to manufacture it under contract for BioTime, the Company will need to enter into licensing or product manufacturing arrangements with another established pharmaceutical company, or else the Company will have to acquire its own manufacturing facility.

Acquiring a manufacturing facility would involve significant expenditure of time and money for design and construction of the facility, purchasing equipment, hiring and training a production staff, purchasing raw material and attaining an efficient level of production. Although the Company has not determined the cost of constructing production facilities that meet FDA requirements, it expects that the cost would be substantial, and that the Company would need to raise additional capital in the future for that purpose. There can be no assurance that the Company will be able to obtain the capital required for the acquisition of production facilities. To avoid the incurrence of those expenses and delays, the Company is seeking contract and licensing arrangements with established pharmaceutical companies for the production of the Company's products, but there can be no assurance that satisfactory arrangements will be made.

Raw Materials

Although most ingredients in the products being developed by the Company are readily obtainable from multiple sources, the Company knows of only a few manufacturers of the hydroxyethyl starches that serve as the active ingredient in Hextend, Pentalyte and HetaCool. Abbott presently has a source of supply of the hetastarch used in Hextend and has agreed to maintain a supply sufficient to meet market demand for Hextend in the United States and Canada. McGaw, Inc., a wholly owned subsidiary of B. Braun Melsungen AG, a private German company selling intravenous solutions and other medical products around the world, has produced Hextend for BioTime's clinical trials and can produce the pentastarch used in Pentalyte. In order to manufacture its products for overseas markets, or products not presently licensed to Abbott for the United States and Canadian markets, the Company or a licensee would have to secure a supply or production agreement with Abbott, McGaw, Inc. or one of the other known hydroxyethyl starch manufacturers, but if

such an agreement could not be obtained, the Company or a licensee would have to acquire a manufacturing facility and the technology to produce the hydroxyethyl starch according to good manufacturing practices. The possibility of producing hydroxyethyl starches through a co-operative effort with a small, independent starch manufacturer has also been considered. The Company would have to raise additional capital to participate in the development and acquisition of the necessary production technology and facilities.

If arrangements cannot be made for a source of supply of hydroxyethyl starch, the Company would have to reformulate its solutions to use one or more other starches that are more readily available. In order to reformulate its products, the Company would have to perform new laboratory testing to determine whether the alternative starches could be used in a safe and effective synthetic plasma volume expander, low temperature blood substitute or organ preservation solution. If needed, such testing would be costly to conduct and would delay the Company's product development program, and there is no certainty that any such testing would demonstrate that an alternative ingredient, even if chemically similar to the one currently used, would be as safe or effective.

Marketing

The Company's proposed products and services are intended for sale to hospitals, medical centers and scientists engaged in the practice of specific areas of medicine or medical research, including transplantation, neurosurgery, cardiovascular surgery, anesthesiology, oncology, emergency room and trauma care, critical care, and biomedical research. The Company intends to license its products to pharmaceutical companies that have their own, well established marketing and sales organizations. A license to market Hextend in the United States and Canada has been granted to Abbott, and the Company is discussing product licensing arrangements with a number of companies for over-seas markets. Although such arrangements could permit the Company to receive revenues from the sale of its products expeditiously and with lower costs, the Company would have to share those revenues with the participating pharmaceutical companies. There can be no assurance that any additional pharmaceutical companies will be willing to enter into marketing arrangements on terms acceptable to the Company.

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

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

Government Regulation

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

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

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

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

Patents and Trade Secrets

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

patient. Additional patents were granted in 1996 and 1997 for other related company products. During February 1997, the United States Patent and Trademark Office informed the Company of the allowance of additional claims regarding the composition of Hextend and PentaLyte, and the Company expects that additional patents covering those claims will be issued. Additional patent applications have been filed in the United States and certain other countries for Hextend and other solutions. The Company also holds a United States Patent on its microcannula.

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

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

Licensed Products and Technology

The Company has obtained from Cryomedical Sciences, Inc. ("CMSI") a royalty-free, non-exclusive license to make, have made, use and sell certain experimental hypothermic blood substitute solutions for cryonics, cancer and AIDS research and treatment. The licensed solutions were developed by three of BioTime's scientists while they were employed by CMSI before BioTime was founded. The license granted by CMSI will terminate if Paul Segall, Harold Waitz, Hal Sternberg, Judith Segall, Lawrence Cohen, Donna Cohen, Victoria Bellport, Alan Gelband, Trans Time, Inc. (a corporation in which certain officers and directors of BioTime own an interest) and Ronald Barkin in the aggregate do not own at least 33-1/3% of the Company's Common Shares which are not sold to the public or otherwise owned by public shareholders (the "Insiders' Shares"). As of June 30, 1997, such persons owned an aggregate of 487,430 shares, representing 97% of the Insiders' Shares. The license is not assignable or transferable.

The technology and solutions licensed from CMSI were used by the Company's scientists in its initial experiments. However, the Company has developed its own patented blood substitute

and organ preservation solutions, and is no longer using CMSI's solutions in its research and development program and does not intend to pursue the commercial exploitation of those licensed solutions.

Competition

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

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

A generic plasma expander intended to compete with Hespan has recently been introduced in the United States market. As a result, competition in the plasma expander market has intensified and wholesale prices have declined. Competition in the areas of business targeted by the Company is likely to intensify as new products and technologies reach the market. Superior new products are likely to sell for higher prices and generate higher profit margins once acceptance by the medical community is achieved. Those companies that are successful in introducing new products and technologies to the market first may gain significant economic advantages over their competitors in the establishment of a customer base and track record for the performance of their products and technologies. Such companies will also benefit from revenues from sales which could be used to

strengthen their research and development, production, and marketing resources. All companies engaged in the medical products industry face the risk of obsolescence of their products and technologies as more advanced or cost effective products and technologies are developed by their competitors. As the industry matures, companies will compete based upon the performance and cost effectiveness of their products.

Employees

As of June 30, 1997, the Company employed 13 persons on a full-time basis and 2 persons on a part-time basis. Three of the full-time employees hold Ph.D. or Masters Degrees in one or more fields of science.

Risk Factors

Statements contained in this report 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. Some of the factors that could affect the Company's operations are:

Development Stage Company

The Company is in the development stage, and, to date, has been principally engaged in research and development activities. The Company has not generated a significant amount of operating revenue. As a result of the developmental nature of its business, the Company can be expected to sustain additional operating losses. There can be no assurance that the Company will generate sufficient revenues from the sale or licensing of its products and technologies to be profitable.

Uncertainty as to Human Application of Products

Clinical trials of Hextend in human patients have not yet been completed, and the Company's other experimental products and technologies have not been applied in human medicine and have only been used in laboratory studies on animals. There can be no assurance that the Company's products will prove to be safe and efficacious in the human medical applications for which they were developed. However, based on observations during the Phase III clinical trials, the Company believes that Hextend will prove to be safe for use in clinical medicine.

Uncertainty of Future Sales

The Company's ability to generate substantial operating revenue depends upon its success in developing and marketing its products. Due to the high degree of risk associated with the application of new technologies and products in the field of human medicine, the acceptance of the

Company's products and technologies by the medical profession may take time to develop. There can be no assurance that any products that receive FDA or foreign regulatory approval will be successfully marketed or that the Company will receive sufficient revenues from product sales to meet its operating expenses.

FDA and Other Regulatory Approvals Required

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

Additional Financing May Be Required

Additional financing may be required for continued research and product development, additional clinical trials of new products, and production and marketing of Hextend and any other Company products that may be approved by FDA or foreign regulatory authorities. The time frame in which the Company may generate internally the funds necessary to carry on its planned operations depends upon its success in developing products and obtaining FDA and other regulatory approvals. It often takes many months for the FDA to complete its review of an NDA after clinical trials are complete and it can take several months for a pharmaceutical company to introduce a new drug to the market. Therefore, the Company may need to raise capital from time to time to meet its operating expenses until such time as it is able to generate sufficient revenues from product sales or royalties. There can be no assurance that the Company will be able to raise additional funds on favorable terms or at all, or that such funds, if raised, will be sufficient to permit the Company to develop and market its products. Unless the Company is able to raise additional funds when needed, it is likely that it will be unable to continue its planned activities, notwithstanding the progress of

its research and development projects.

Uncertainty as to Results of Research and Development of New Products

The Company's business involves the attempt to develop new medical products and technologies. Such experimentation is inherently costly, time consuming and uncertain as to its results. If the Company is successful in developing a new technology or product, refinement of the new technology or product and definition of the practical applications and limitations of the technology or product may take years and require the expenditure of large sums of money. From the date of the Company's inception through June 30, 1997, the Company spent \$6,909,353 on research and development, and the Company expects to continue to incur substantial research and development expenses.

Absence of Manufacturing and Marketing Capabilities

The Company presently does not have adequate facilities or resources to manufacture its products in commercial quantities or in compliance with FDA standards. Accordingly, the Company plans to enter into arrangements with pharmaceutical companies for the production and marketing of the Company's products. Abbott has obtained an exclusive license from the Company to manufacture and market Hextend in the United States and Canada, but there can be no assurance that the Company will be successful in licensing other products in the United States, Canada or other countries. If licensing or manufacturing arrangements cannot be made on acceptable terms, the Company would be required to construct or acquire its own manufacturing facilities and to establish its own marketing organization, which would entail significant expenditures of time and money.

Competition

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

Uncertainty of Patent Protection

The Company has obtained patents in the United States and South Africa, and has filed patent applications in certain foreign countries, for certain products, including Hextend and PentaLyte. No assurance can be given that any foreign patents will be issued to the Company, or that, if issued, those patents and the Company's United States patents will provide the Company with meaningful patent protection, or that others will not successfully challenge the validity or enforceability of any

patent issued to the Company. The costs required to uphold the validity and prevent infringement of any patent issued to the Company could be substantial, and the Company might not have the resources available to defend its patent rights.

Uncertainty of Health Care Reimbursement and Reform

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

Potential Disputes Over Ownership of Technology

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

Dependence Upon Key Personnel

The Company depends to a considerable degree on the continued services of Dr. Paul Segall, Dr. Hal Sternberg and Dr. Harold Waitz. Although the Company maintains key man life insurance in the amount of \$1,000,000 on the life of Dr. Segall, the loss of the services of any of these individuals could have a material adverse effect on the Company. In addition, the success of the Company will depend, among other factors, upon successful recruitment and retention of additional highly skilled and experienced management and technical personnel.

No Dividends

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

Possible Volatility of Market for Common Shares

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

Requirements for Continued Listing of Securities on Nasdaq

The Company's Common Shares are traded on Nasdaq and on the Boston Stock Exchange. Both Nasdaq and the Boston Stock Exchange have adopted rules that establish criteria for initial and continued listing of securities. Under the Nasdaq rules for continued listing, a company must maintain net tangible assets of at least \$2,000,000, or a market capitalization of at least \$35,000,000, or to have earned net income of at least \$500,000 during two of the last three years. Although the Company had more than \$6,500,000 of net tangible assets and a market capitalization in excess of \$103,000,000 at June 30, 1997, there is no assurance that future losses from operations will not cause the Company's total assets, net worth, net tangible assets, or market capitalization to decline below the current or proposed criteria in the future. If the Common Shares are delisted by Nasdaq, trading in the Common Shares would thereafter be conducted on the Boston Stock Exchange and in the over-the-counter market on an electronic bulletin board established for securities that do not meet the Nasdaq listing requirements. The Common Shares could also be delisted on the Boston Stock Exchange if the Company fails to maintain \$1,000,000 in total assets and \$500,000 in shareholders' equity. If the Common Shares

were delisted from Nasdaq, they would be subject to the so-called penny stock rule that imposes restrictive sales practice requirements on broker-dealers who sell such securities. Consequently, delisting, if it occurred, could affect the ability of shareholders to sell their Common Shares in the secondary market.

Item 2. Facilities.

The Company presently occupies an approximately 5,200 square foot office and laboratory facility in Berkeley, California under a lease that will expire on May 31, 1999. The current rent is \$5,300 per month, plus the cost of utilities. This facility serves as the Company's principal executive office and laboratory for small animal experiments.

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

Item 3. Legal Proceedings.

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

Item 4. Submission of Matters to a Vote of Security Holders.

The 1996 Annual Meeting of Shareholders of BioTime, Inc. was held May 23, 1997. The Board of Directors of the Company presently consists of seven members, who are elected to hold office for a one year term until the 1997 Annual Meeting of Shareholders. The following table shows the directors who were elected and the number of votes each director received.

Director	Votes For	Votes Withheld				
Ronald S. Barkin	3,018,459	4,923				
Victoria Bellport	3,019,459	3,923				
Jeffrey B. Nickel	3,018,091	5, 291				
Judith Segall	3,019,039	4,343				
Paul Segall	3,019,459	3,923				
Hal Sternberg	3,019,459	3,923				
Harold Waitz	3,019,459	3,923				

The second proposal brought before the shareholders was the vote to amend the Company's 1992 Employee Stock Option Plan by increasing the number of shares available under the Plan. The results of the voting were as follows:

For Against		Abstained	Not Voted			
1,318,882	39,129	6,571	1,658,800			

The third proposal brought before the shareholders was the vote to amend the Company's Articles of Incorporation to increase the number of authorized common shares to 25,000,000. The results of the voting were as follows:

For	Against	Abstained			
2,939,849	70,424	13,109			

The fourth proposal brought before the shareholders was the vote to ratify the appointment of $% \left(1\right) =\left(1\right) +\left(1$

Deloitte & Touche LLP as the independent accountants of the Company for the fiscal year ending June 30, 1997. The results of the voting were as follows:

For	Against	Abstained
3,018,520	250	4,612

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.

The Company's Common Shares are traded in the over-the-counter market on the Nasdaq SmallCap Market under the symbol BTIM, and on the Boston Stock Exchange under the symbol BTM. The closing price of the Company's Common Shares on the Nasdaq SmallCap Market on September 22, 1997 was \$45 1/8.

The following table sets forth the range of high and low bid prices for the Common Shares for the fiscal years ended June 30, 1996 and 1997, based on transaction data as reported on the Nasdaq SmallCap Market.

Quarter Ended	Low	
September 30, 1995	\$5 3/8	\$1 1/4
December 31, 1995	4 3/8	2 3/8
March 31, 1996	10 1/8	2 5/8
June 30, 1996	22 1/4	8 1/4
September 30, 1996	23	14
December 31, 1996	28	141/2
March 31, 1997	40 1/4	24 1/4
June 30, 1997	37	22 3/4

As of September 5, 1997, there were 153 shareholders of record of the Common Shares based upon information from the Registrar and Transfer Agent.

The Company has paid no dividends on its Common Shares since its inception and does not plan to pay dividends on its Common Shares in the foreseeable future.

Item 6. Selected Financial Data.

The selected financial data as of June 30, 1997 and 1996 and for three years ended June 30, 1997 and the period from inception (November 30, 1990) to June 30, 1997 presented below have been derived from the financial statements of the Company which have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report appearing elsewhere herein (which expresses an unqualified opinion and includes an explanatory paragraph related to the development stage of the Company's operations). The selected financial data should be read in conjunction with the Company's financial statements and notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere.

Statement of Operations Data:

	June 30,			(November 30, 1990) to June 30, 1997			
	 1997		1996	 1995			
REVENUE: Licensing Fee	\$ 62,500				\$	62,500	
EXPENSES: Research and development General and administrative	\$ (2,136,325) (1,209,546)		(1,142,168) (954,049)	(1,791,698) (808,432)	\$	(6,909,353) (5,230,321)	
Total expenses	 (3,345,871)		(2,096,217)	(2,600,130)		(12,139,674)	
INTEREST AND OTHER INCOME: Interest Other	183,781 5,380		127,212 3,770	218,416 3,967		862,479 56,014	
Total Interest and Other Income	 189,161		130,882	222, 383		918,493	
Net loss	(3,094,210)	\$	(1,965,335)	\$ (2,377,747)		(11,158,681) ========	
Net loss per share	\$ (1.05)	\$		\$	\$	(5.31)	
Shares used in calculating per share data	2,959,008		2,609,244	2,633,464		2,100,969 ======	
Balance Sheet Data:							
		J	June 30,				
	 1997		1996	 1995			
Cash, cash equivalents and short term investments Working Capital Total assets Shareholders' equity			\$ 2,443,121 2,727,986 2,968,474 2,839,245	\$ 3,440,896 3,180,200 3,610,330 3,231,603			

Period from Inception

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview 0

Since inception, the Company has been engaged primarily in research and product development activities. The Company has not yet generated significant operating revenues, and as of June 30, 1997 the Company had incurred a cumulative net loss of \$11,158,681.

Most of the Company's research and development efforts have been devoted to the development of the Company's first three blood volume replacement products: Hextend, PentaLyte, and HetaCool. The Company is presently completing a Phase III clinical trial of Hextend in human patients. The clinical trial was designed to test whether Hextend can be used to treat hypovolemia (loss of blood volume) by adequately maintaining blood pressure and volume during high blood loss surgery. These clinical trials began in October 1996 and are being conducted at the Duke University Medical Center in Durham, North Carolina and at Mt. Sinai School of Medicine in New York, New York. The trials have proceeded in accordance with the Company's expectations. If the clinical trials are successful, the Company will prepare a New Drug Application for FDA approval to manufacture and market Hextend.

In July 1997, the Company began clinical trials of Hextend using human volunteers at Middlesex Hospital in London, England. The results of those trials are being analyzed and will be used in the design of multinational trials aimed at expanding indications for the use of Hextend and obtaining regulatory approval.

Additional studies are being designed for new products under development and to assess the safety and efficacy of Hextend in other surgical applications. In order to commence clinical trials of new products and certain new therapeutic uses of Hextend, it will be necessary for the Company to prepare and file with the FDA an Investigational New Drug Application ("IND") or an amendment to expand the present IND for Hextend. The cost of preparing those IND filings and conducting those clinical trials is not presently determinable, but could be substantial. It may be necessary for the Company to obtain additional financing in order to complete any clinical trials that may begin for its new products or for new uses of Hextend.

On April 23, 1997, BioTime and Abbott Laboratories entered into a License Agreement under which BioTime has granted to Abbott an exclusive license to manufacture and sell Hextend in the United States and Canada for all therapeutic uses other than those involving hypothermic surgery, or the replacement of substantially all of a patient's circulating blood volume. BioTime has retained all rights to manufacture, sell or license Hextend and other products in all other countries.

Under the License Agreement, Abbott has agreed to pay BioTime up to \$40,000,000 in license fees based upon product sales and the achievement of certain milestones, and to provide assistance to BioTime in connection with the Company's Phase III clinical trials of Hextend. In addition to the license fees, Abbott will pay BioTime a royalty on annual net sales of Hextend. The

royalty rate will be 5% plus an additional .22% for each \$1,000,000 of annual net sales, up to a maximum royalty rate of 36%. 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. Abbott has also agreed to manufacture Hextend for sale by BioTime in the event that Abbott's exclusive license is terminated prior to expiration.

Discussions are continuing between the Company and a number of overseas and multinational companies for licenses to manufacture and market the Company's products in Europe, Asia, Latin America and other parts of the world.

The Company plans to continue to provide funding for its 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 the Company's financial status.

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

Results of Operations

Years Ended June 30, 1997 and June 30, 1996

From inception (November 30, 1990) through June 30, 1997, the Company generated \$980,993 of revenue, comprised of \$62,500 in license fee income, and \$918,493 in interest and other income. For the year ended June 30, 1997, the Company generated \$251,661 of revenues, including \$62,500 from the signing of the License Agreement with Abbott, and \$189,161 in interest and other income. The Company deferred recognition of \$1,337,500 of revenue received for signing the License Agreement and achieving a license fee milestone pertaining to the allowance of certain patent claims pending (See Note 3 to the accompanying financial statements). For the year ended June 30, 1996, the Company generated total revenues of \$130,882, comprised of interest and other income. The increase in interest and other income is attributable to the increase in cash and cash equivalents from the subscription rights offering, completed February 5, 1997. Limited marketing of the Company's laboratory research equipment, through advertisements in trade publications and sales to distributors, has resulted in sales of a small number of microcannulas. Although the Company may continue to market its laboratory research equipment, and to promote its ability to perform research services, the Company's ability to generate substantial operating revenue depends upon its success in developing and marketing or licensing its plasma volume expanders and organ preservation solutions and technology for medical use.

From inception (November 30, 1990) through June 30, 1997, the Company incurred $\,$

\$6,909,353 of research and development expenses, including salaries, supplies and other expense items. Research and development expenses increased to \$2,136,325 for the year ended June 30, 1997, from \$1,142,168 for the year ended June 30, 1996. The increase in research and development expenses is attributable to ongoing Phase III human clinical trials, initiation of a clinical trial at Middlesex Hospital in London, England, and an accrual for bonuses granted after June 30, 1997. It is expected that research and development expenses will increase as the Company continues clinical testing of Hextend and commences clinical studies of other products.

From inception (November 30, 1990) through June 30, 1997, the Company incurred \$5,230,321 of general and administrative expenses. General and administrative expenses increased to \$1,209,546 for the year ended June 30, 1997, from \$954,049 for the year ended June 30, 1996. This increase is attributable to an amortization expense associated with agreements the Company entered into with certain financial advisors and consultants in exchange for warrants to purchase the Company's stock, an increase in the general operations of the Company, an increase in personnel, and bonus awards.

Years Ended June 30, 1996 and June 30, 1995

For the year ended June 30, 1996, the Company generated \$130,882 of revenues from interest and other income. For the year ended June 30, 1995, the Company generated total revenues of \$222,383, comprised of interest and other income. The decrease in interest and other income is attributable to the decrease in cash and cash equivalents from 1995 to 1996.

Research and development expenses decreased to \$1,142,168 for the year ended June 30, 1996, from \$1,791,698 for the year ended June 30, 1995. The decrease in research and development expenses is attributable to a decrease in the number and scope of research collaborations the Company is sponsoring, since there has been a shift in the focus of the Company from research to clinical studies.

General and administrative expenses increased to \$954,049 for the year ended June 30, 1996, from \$808,432 for the year ended June 30, 1995. This increase is primarily attributable to an amortized expense of \$143,000 associated with a two year agreement the Company entered into with a financial advisor in exchange for warrants to purchase the Company's stock. Otherwise, general and administrative expenses decreased, due to a general concentration of resources and personnel on development and testing of the Company's products.

Taxes

At June 30, 1997, the Company had a cumulative net operating loss carryforward of approximately \$ 11,500,000 for federal income tax purposes.

Liquidity and Capital Resources

Since inception, the Company has primarily financed its operations through the sale of equity securities and licensing fees, and at June 30, 1997, the Company had cash and cash equivalents of over \$7,800,000. On February 4, 1997, the Company completed a subscription rights offering, raising \$5,491,583 through the sale of 283,109 common shares. In addition, from December 26, 1996 through February 10, 1997, the Company received \$772,271 through the exercise of certain underwriters' warrants. Management believes that additional funds may be required for the successful completion of the Company's product development activities. The Company plans to obtain financing for its future operations through additional sales of equity or debt securities, and through the licensing of its products to pharmaceutical companies.

Under its License Agreement with Abbott, the Company has received \$1,400,000 of license fees for signing the agreement and achieving a milestone pertaining to the allowance of certain patent claims pending. An additional \$1,100,000 of license fees under the License Agreement will become payable in installments upon the achievement of specific milestones pertaining to the filing and approval of a New Drug Application for Hextend and the commencement of sales of the product. Up to \$37,500,000 of additional license fees will be payable based upon annual net sales of Hextend at the rate of 10% of annual net sales if annual net sales exceed \$30,000,000 or 5% if annual net sales are between \$15,000,0000 and \$30,000,000. Abbott's obligation to pay licensing fees on sales of Hextend will expire on the earlier of January 1, 2007 or, on a country by country basis, when all patents protecting Hextend in the applicable country expire or any third party obtains certain regulatory approvals to market a generic equivalent product in that country. In addition to license fees, the Company will receive royalties upon the sale of Hextend.

License fees and royalties will also be sought from Abbott or other pharmaceutical companies for United States and Canadian licenses of new products and uses of Hextend that are not covered by Abbott's license, and for licenses to manufacture and market the Company's products abroad.

The future availability and terms of equity and debt financings, and the amount of license fees and royalties that may be earned through the licensing and sale of the Company's products cannot be predicted. The unavailability or inadequacy of financing or revenues to meet future capital needs could force the Company to modify, curtail, delay or suspend some or all aspects of its planned operations.

Statements contained in this report 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. See "Risk Factors" elsewhere in this report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not Applicable - The disclosures are not required for the current fiscal year.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders BioTime, Inc.:

We have audited the accompanying balance sheets of BioTime, Inc. (a development stage company) as of June 30, 1997 and 1996, and the related statements of operations, shareholders' equity and cash flows for the period from November 30, 1990 (inception) to June 30, 1997, and for each of the three years in the period ended June 30, 1997. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of BioTime, Inc. as of June 30, 1997 and 1996, and the results of its operations and its cash flows for the period from November 30, 1990 (inception) to June 30, 1997, and for each of the three years in the period ended June 30, 1997 in conformity with generally accepted accounting principles.

The Company is in the development stage as of June 30, 1997. As discussed in Note 1 to the financial statements, successful completion of the Company's product development program and ultimately the attainment of profitable operations is dependent upon future events, including maintaining adequate financing to fulfill its development activities, obtaining regulatory approval for products ultimately developed, and achieving a level of sales adequate to support the Company's cost structure.

DELOITTE & TOUCHE LLP San Francisco, California August 25, 1997

BIOTIME, INC. (A Development Stage Company)

BALANCE SHEETS

ASSETS		June 30,				
		1997 		1996		
CURRENT ASSETS Cash and cash equivalents Research and development supplies on hand Prepaid expenses and other current assets	\$	7,811,634 100,000 259,109	\$	2,443,121 200,000 214,094		
Total current assets		8,170,743		2,857,215		
EQUIPMENT, Net of accumulated depreciation of \$139,241 and \$98,218 DEPOSITS AND OTHER ASSETS	MENT, Net of accumulated depreciation of \$139,241 and \$98,218 ITS AND OTHER ASSETS			101,559 9,700 2,968,474		
TOTAL ASSETS	\$	8,297,774	\$	2,968,474		
LIABILITIES AND SHAREHOLDERS' EQUITY						
CURRENT LIABILITIES Accounts payable Accrued compensation Deferred revenue - current portion	\$	249,168 175,000 900,000	\$	129,229		
Total current liabilities		1,324,168				
DEFERRED REVENUE		437,500 1,761,668				
Total liabilities		1,761,668		129,229		
COMMITMENTS (Note 5)						
SHAREHOLDERS' EQUITY: Preferred Shares, no par value, undesignated as to Series, authorized 1,000,000 shares; none outstanding (Note 4) Common Shares, no par value, authorized 25,000,000 shares; issued						
and outstanding 3,203,193 and 2,756,521 shares (Note 4) Contributed Capital Deficit accumulated during development stage	(11	17,625,646 93,972 1,183,512)	(10,834,575 93,972 8,089,302)		
Total shareholders' equity		6,536,106		2,839,245		
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$	8,297,774	\$	2,968,474		

See notes to financial statements.

STATEMENTS OF OPERATIONS

	Y	Period from Inception (November 30, 1990)			
	1997	1996	1995	to June 30, 1997	
REVENUE: License fee	\$ 62,500			\$ 62,500	
EXPENSES: Research and development General and administrative	(2,136,325) (1,209,546)		\$ (1,791,698) (808,432)	(6,909,353) (5,230,321)	
Total expenses	(3,345,871)	(2,096,217)	(2,600,130)	(12,139,674)	
INTEREST AND OTHER INCOME: Interest Other Total interest and other income	183,781 5,380 189,161	127,212 3,670 130,882	218,416 3,967 	862,479 56,014 918,493	
NET LOSS	\$ (3,094,210)	\$ (1,965,335)	\$ (2,377,747)	\$ (11,158,681)	
NET LOSS PER SHARE	\$ (1.05) ======	\$ (.75) =======	\$ (.90)	\$ (5.31) =======	
SHARES USED IN PER SHARE COMPUTATION	2,959,008 ======	2,609,244 =======	2,633,464 =======	2,100,969 ======	

See notes to financial statements.

STATEMENTS OF SHAREHOLDERS' EQUITY

	Series A Convertible Preferred Shares		Common Shares			Deficit Accumulated During
	Number of Shares	Amount	Number of Shares	Amount	Contributed Capital	Development Stage
BALANCE, November 30, 1990 (date of inception) NOVEMBER 1990 Common shares issued for cash DECEMBER 1990:			 437,587	 \$ 263		
Common shares issued for stock of a separate entity at fair valu Contributed equipment at appraised value Contributed cash	e		350,070	137,400	\$ 16,425 77,547	
MAY 1991: Common shares issued for cash less offering costs Common shares issued for stock			33,725	54,463	·	
of a separate entity at fair value JULY 1991: Common shares issued for			33,340	60,000		
services performed AUGUST-DECEMBER 1991 Preferred shares issued for			10,000	18,000		
cash less offering costs of \$125,700 MARCH 1992: Common shares issued for	120,000	\$474,300				
cash less offering costs of \$1,015,873 Preferred shares converted			724,500	4,780,127		
Dividends declared and paid on preferred shares MARCH 1994:	(120,000)	(474,300)	120,000	474,300		\$(24,831)
Common shares issued for cash less offering costs of \$865,826 NET LOSS SINCE INCEPTION			935,200	3,927,074		(3,721,389)
BALANCE AT JUNE 30, 1994		\$	2,644,422	\$ 9,451,627	\$ 93,972	\$ (3,746,220)
See notes to condensed financial stateme	ents.					(Continued)

STATEMENTS OF SHAREHOLDERS' EQUITY

	Series A Convertible Preferred Shares		Common Shares			Deficit Accumulated During	
	Number of Shares	Amount	Number of Shares	Amount	Contributed Capital	Development Stage	
BALANCE AT JUNE 30, 1994 Common shares repurchased with cash NET LOSS	\$		2,644,422 (84,600)	\$ 9,451,627 (190,029)	\$ 93,972	\$ (3,746,220) \$ (2,377,747)	
BALANCE AT JUNE 30, 1995	 \$		2,559,822	9,261,598	\$ 93,972	(6,123,967)	
Common shares issued for cash (exercise of options and warrants)			165,507	1,162,370		(1) 2/22 /	
Common shares issued for cash (lapse of recision) Common shares repurchased			37,392	67,300			
with cash Common shares warrants and options			(6,200)	(12,693)			
granted for services NET LOSS				356,000		(1,965,335)	
BALANCE AT JUNE 30, 1996	\$		2,756,521	10,834,575	93,972	(8,089,302)	
Common shares issued for cash less offering costs of \$170,597 Common shares issued for cash (exercise of options and warrants)			283,109	5,491,583			
			163,563	1,194,488			
Common shares warrants and options granted for service NET LOSS				105,000		(3,094,210)	
BALANCE AT JUNE 30, 1997		\$ =======	, ,	\$17,625,646 =======	\$ 93,972 ======	\$ (11,183,512) ========	

See Notes to condensed financial statements.

(Concluded)

STATEMENTS OF CASH FLOWS

	1997	1996	1995	Period from Inception (November 30, 1990) to June 30, 1997
OPERATING ACTIVITIES: Net loss Adjustments to reconcile net loss to net	\$ (3,094,210)	\$ (1,965,335)	\$ (2,377,747)	\$ (11,158,681)
cash used in operating activities: Deferred revenue Depreciation Cost of services - options and warrants Supply reserves Changes in operating assets and liabilities:	(62,500) 41,023 240,821 100,000	35,886 167,932	32,051	(62,500) 139,241 438,956 100,000
Research and development supplies on hand Prepaid expenses and other current		(200,000)		(200,000)
assets Deposits and other assets Accounts payable Accrued compensation Deferred revenue	(180,837) (24,722) 119,939 175,000 1,400,000	24,705 (182,198)	53,543 (5,400) 267,326	(206,862) (34,422) 249,168 175,000 1,400,000
Net cash used in operating activities	(1,285,486)	(2,119,010)	(2,030,227)	(9,160,100)
INVESTING ACTIVITIES: Sale of investments Purchase of short-term investments Redemption of short-term investments Purchase of equipment and furniture Net cash provided by (used in) investing activities	(32,072) (32,072)	(28, 442) (28, 442)	(3,000,000) 8,000,000 (59,624) 	197,400 (9,946,203) 9,934,000 (215,425)
FINANCING ACTIVITIES: Issuance of preferred shares for cash Preferred shares placement costs Issuance of common shares for cash Common shares placement costs Net proceeds from exercise of common share options and warrants Contributed capital - cash Dividends paid on preferred shares Repurchase of common shares	5,662,180 (170,597) 1,194,488	1,162,370	(188, 299)	600,000 (125,700) 16,373,106 (2,052,296) 2,356,858 77,547 (24,831) (202,722)
Net cash provided by (used in) financing activities	6,686,071	1,149,677	(188,299)	17,001,962
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	5,368,513	(997,775)	2,721,850	7,811,634
CASH AND CASH EQUIVALENTS: At beginning of period	2,443,121	3,440,896	719,046	
At end of period	\$ 7,811,634 =======	\$,443,121 =======	\$ 3,440,896 =======	\$ 7,811,634 =======

(Continued)

See notes to financial statements.

STATEMENTS OF CASH FLOWS

	Year Ended June 30,					Period from Inception (November 30, 1990)	
	 1997		1996	1995	•	e 30, 1990)	
NONCASH FINANCING AND INVESTING ACTIVITIES: Receipt of contributed equipment Issuance of common shares in exchange for shares of common stock of Cryomedical Sciences, Inc. in a stock-for-stock transaction Granting of options and warrants for services	\$ 105,000	\$	356,000		\$ \$	16,425 197,400 479,000	
See notes to financial statements.					(Cor	ncluded)	

NOTES TO CONDENSED FINANCIAL STATEMENTS

GENERAL AND DEVELOPMENT STAGE ENTERPRISE

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

Certain Significant Risks and Uncertainties - The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Such management estimates include certain accruals. Actual results could differ from those estimates.

The Company's operations are subject to a number of factors that can affect its operating results and financial condition. Such factors include, but are not limited to the following: the results of clinical trials of the Company's products; the Company's ability to obtain United States Food and Drug Administration and foreign regulatory approval to market its products; competition from products manufactured and sold or being developed by other companies; the price of and demand for any Company products that are ultimately sold; the Company's ability to obtain additional financing and the terms of any such financing that may be obtained; the Company's ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products; the availability of ingredients used in the Company's products; and the availability of reimbursement for the cost of the Company's products (and related treatment) from government health administration authorities, private health coverage insurers and other organizations.

Development Stage Enterprise - Since inception, the Company has been engaged in research and development activities in connection with the development of synthetic plasma expanders, blood volume substitute solutions and organ preservation products. The Company has not had any significant operating revenues and has incurred operating losses of \$11,158,681 from inception to June 30, 1997. The successful completion of the Company's product development program and, ultimately, achieving profitable operations is dependent upon future events including maintaining adequate capital to finance its future development activities, obtaining regulatory approvals for the products it develops and achieving a level of sales adequate to support the Company's cost structure.

2. SIGNIFICANT ACCOUNTING POLICIES

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

Patent costs associated with obtaining patents on products being developed are expensed as research and development expenses when incurred. These costs totaled \$95,362 for the year ended June 30, 1997, \$95,598 for the year ended June 30, 1996, \$83,430 for the year ended June 30, 1995, and cumulatively, \$371,979 for the period from inception (November 30, 1990) to June 30, 1997.

Research and development supplies on hand are comprised of a quantity of the Company's Hextend solution for use in human clinical trials, and are stated at lower of cost or net realizable value.

Research and development costs, consisting principally of salaries, payroll taxes, research and laboratory fees, hospital and consultant fees related to the clinical trials, are expensed as incurred.

Stock-based Compensation - The Company accounts for stock-based awards to employees using the intrinsic value method in accordance with APB No. 25, Accounting for Stock Issued to Employees.

Net Loss Per Share is based on the weighted average number of common shares outstanding during the periods presented. For all periods presented, all unexercised warrants and options are considered to be antidilutive and were not included in the computation.

Recently issued accounting standards - During February 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 128, "Earnings per Share" (SFAS 128). The Company is required to adopt SFAS 128 in the second quarter of fiscal 1998 and will restate at that time earnings per share (EPS) data for prior periods to conform with SFAS 128. Earlier application is not permitted.

SFAS 128 replaces current EPS reporting requirements and requires a dual presentation of basic and diluted EPS. Basic EPS excludes dilution and is computed by dividing net income available to common shareholders by the weighted average number of common shares outstanding during the period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common shares were exercised or converted to common shares.

If SFAS 128 had been in effect during the current and prior periods, basic EPS and diluted EPS would not have been significantly different than primary EPS and fully diluted EPS currently reported for the period. Fully diluted EPS, as with diluted EPS, is not reported for the current and prior periods due to its antidilutive affect on EPS.

During June 1997, the Financial Accounting Standards Board issued Statements of Financial Accounting Standards No. 130, "Reporting Comprehensive Income," which requires that an enterprise report the change in its net assets from nonowner sources by major components and as a single total. The Board also issued Statements of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information," which establishes annual and interim reporting standards for an enterprise's operating segments and related disclosures about its products, services, geographic areas, and major customers. Adoption of these statements will not impact the Company's consolidated financial position, results of operations or cash flows, and any effect will be limited to the form and content of its disclosures. Both statements are effective for fiscal years beginning after December 15, 1997, with earlier application permitted.

Reclassification - Certain prior year amounts have been reclassified to conform to the fiscal 1997 presentation. The changes do not have a material effect on the financial statements.

3. LICENSE AGREEMENT

In April 1997, BioTime and Abbott Laboratories ("Abbott") entered into an Exclusive License Agreement (the "License Agreement") under which BioTime has granted to Abbott an exclusive license to manufacture and sell BioTime's proprietary blood plasma volume expander solution Hextend in the United States and Canada for certain therapeutic uses.

Under the License Agreement, Abbott has agreed to pay the Company up to \$40,000,000 in license fees; of which \$1,000,000 due upon signing of the License Agreement (the "signing payment"), and \$400,000 due upon the achievement of a patent claims milestone (the "patent payment") were received prior to June 30, 1997; an additional \$1,100,000 will become payable in installments upon the achievement of specific milestones (the milestone payments) pertaining to the filing and approval of a New Drug Application for Hextend and the commencement of sales of the product. Up to \$37,500,000 of additional license fees will be payable based upon annual net sales of Hextend at the rate of 10% of annual net sales if annual net sales exceed \$30,000,000 or 5% if annual net sales are between \$15,000,0000 and \$30,000,000. Abbott's obligation to pay license fees on sales of Hextend will expire on the earlier of January 1, 2007 or, on a country by country basis, when all patents protecting Hextend in the applicable country expire or any third party obtains certain regulatory approvals to market a generic equivalent product in that country.

In addition to the license fees, Abbott will pay the Company a royalty on annual net sales of Hextend. The royalty rate will be 5% plus an additional .22% for each \$1,000,000 of annual net sales, up to a maximum royalty rate of 36%. 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.

Abbott has agreed that the Company may convert Abbott's exclusive license to a non-exclusive license or may terminate the license outright if certain minimum sales and royalty payments are not met. In order to terminate the license outright, BioTime would pay a termination fee in an amount ranging from the milestone payments made by Abbott to an amount equal to three times prior year net sales, depending upon when termination occurs. Abbott's exclusive license also may terminate, without the payment of termination fees by the Company, if Abbott fails to market Hextend. Management believes that the probability of payments of any termination fee by the Company is remote.

As of June 30, 1997, the Company received \$1,400,000 from Abbott under the License Agreement, and has deferred recognition of \$1,337,500. The Company will recognize the signing payment over the estimated development period (two years) and the patent payment when the related patent has been issued. Further milestone payments will be recognized as achieved. Additional license fees and royalty payments will be recognized as the related sales are made and reported as earned to the Company by Abbott.

4. SHAREHOLDERS' EQUITY

On February 5, 1997, the Company completed a subscription rights offering raising \$5,662,180 (less offering costs of \$170,597), through the sale of 283,109 common shares.

In September 1996, the Company entered into an agreement with an individual to act as an advisor to the Company. In exchange for services, as defined, to be rendered by the advisor through September 1999, the Company issued warrants, with five year terms, to purchase 40,000 common shares at a price of \$18.75 per share. Warrants for 25,000 common shares vested and became exercisable and transferable when issued; warrants for the remaining 15,000 common shares vest ratably through September 1997 and become exercisable and transferable as vesting occurs. The estimated value of the services to be performed is \$60,000 and that amount has been capitalized and is being amortized over the three year term of the agreement.

During September 1995, the Company entered into an agreement with a firm to act as its financial advisor. In exchange for financial consulting services associated in part with a plan to secure additional capital, the Company issued to the financial advisor warrants to purchase 100,000 common shares at a price of \$6 per share, and the Company agreed to issue additional warrants to purchase up to an additional 200,000 common shares at a price equal to the greater of (a) 150% of the average market price of the common shares during the three months prior to grant or (b) \$6 per share. The additional warrants were issued in equal quarterly installments over a two year period, beginning October 15, 1995. The Company had the right to terminate the financial advisory agreement on 30 days notice, in which case the next warrant issuance would be accelerated to the date on which notice of termination is given, but no additional warrants would be issued. Through June 30, 1997, the advisor had received warrants to purchase 275,000 common shares; 150,000 of which are exercisable at a price of \$6 per share, 25,000 of which are

exercisable at a price of \$7.32 per share, 25,000 of which are exercisable at a price of \$30.04 per share, 25,000 of which are exercisable at \$29.33 per share, 25,000 of which are exercisable at \$32.65 per share, and 25,000 of which are exercisable at \$49.01 per share. As of July 15, 1997, the advisor received warrants to purchase an additional 25,000 shares at a price of \$42.79 per share. The total value of these 300,000 warrants at the agreement date, estimated to be \$300,000, was capitalized in fiscal 1996 and is being amortized over the two year term of the agreement.

In June 1994, the Board of Directors authorized management to repurchase up to 200,000 of the Company's common shares at market price at the time of purchase. As of June 30, 1997, 90,800 shares have been repurchased and retired. No shares have been repurchased since August 28, 1995.

5. STOCK OPTION PLAN

The Board of Directors of the Company adopted the 1992 Stock Option Plan (the "Plan") in September 1992, which was approved by the shareholders at the 1992 Annual Meeting of Shareholders on December 1, 1992. Under the Plan, as amended, the Company has reserved 600,000 common shares for issuance under options granted to eligible persons. No options may be granted under the Plan more than ten years after the date the Plan was adopted by the Board of Directors, and no options granted under the Plan may be exercised after the expiration of ten years from the date of grant.

Under the Plan, options to purchase common shares may be granted to employees, directors and certain consultants at prices not less than the fair market value at date of grant for incentive stock options and not less than 85% of fair market value for nonstatutory stock options. These options expire five to ten years from the date of grant and may be fully exercisable immediately, or may be exercisable according to a schedule or conditions specified by the Board of Directors or the Option Committee. At June 30, 1997, 217,000 shares were available for future grants under the Option Plan.

Option activity under the Plan is as follows:

	Number of Shares	Weighted Average Exercise Price
Outstanding, July 1, 1994 (172,000 exercisable at a weighted average price of \$7.65)	213,000	\$6.82
Granted	12,000	3.35
Exercised		

	Number of Shares	Weighted Average Exercise Price
Outstanding, July 1, 1995 (184,000 exercisable at a weighted average price of \$7.36) Granted (weighted average fair value of \$2.21 per	225,000	\$ 6.64
share, on 2,000 employee options)	62,000	3.22
Exercised Canceled	57,000 	5.42
Outstanding, June 30, 1996 (179,000 exercisable at a		
weighted average price of \$6.77) Granted (weighted average fair value of \$20.48 per	230,000	6.02
share, on 41,000 employee options)	96,000	21.72
Exercised	46,000	7.12
Canceled		
Outstanding, June 30, 1997 (226,000 exercisable at a		
weighted average price of \$12.65)	280,000	\$ 11.35

Additional information regarding options outstanding as of June 30, 1997 is as follows:

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number Outstanding	Weighted Avg. Remaining Contractual Life (yrs)	Weighted Avg. Exercise Price	Number Exercisable	Weighted Avg. Exercise Price	
\$1.99-3.38	109,000	4.75	\$3.26	60,000	\$4.13	
9.22-18.81	136,000	2.09	12.78	163,000	12.78	
31.00	35,000	4.75	31.00	30,000	31.00	
	280,000			226,000		

As discussed in Note 1, the Company continues to account for its employee stock-based awards using the intrinsic value method in accordance with Accounting Principles Board No. 25, Accounting for Stock Issued to Employees and its related interpretations. Accordingly, no compensation expense has been recognized in the financial statements for employee stock

arrangements. Options to purchase 110,000 shares were outstanding to employees at June 30, 1997. Options granted to non-employees have been recognized in the financial statements at the estimated fair value of the services or benefit provided. Options to purchase 170,000 shares were outstanding to non-employees at June 30, 1997.

Statement of Financial Accounting Standards No. 123, Accounting for Stock-Based Compensation, (SFAS 123) requires the disclosure of pro forma net income and earnings per share had the Company adopted the fair value method as of the beginning of fiscal 1995. Under SFAS 123, the fair value of stock-based awards to employees is calculated through the use of option pricing models, even though such models were developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differ from the Company's stock option awards. These models also require subjective assumptions, including future stock price volatility and expected time to exercise, which greatly affect the calculated values. The Company's calculations were made using the Black-Scholes option pricing model with the following weighted average assumptions: expected life, 24-60 months following vesting; stock volatility, 95% in 1997 and 92% in 1996; risk free interest rates, 5.96% in 1997 and 5.75% in 1996; and no dividends during the expected term. The Company's calculations are based on a multiple option valuation approach and forfeitures are recognized as they occur. If the computed fair values of the 1996 and 1997 awards had been amortized to expense over the vesting period of the awards, pro forma net loss would have been \$1,969,755 (\$0.75 per share) in 1996 and \$3,983,890 (\$1.33 per share) in 1997. However, the impact of outstanding non-vested stock options granted prior to 1996 has been excluded from the pro forma calculation; accordingly, the 1996 and 1997 pro forma adjustments are not indicative of future period pro forma adjustments, when the calculation will apply to all applicable stock options.

6. COMMITMENTS AND CONTINGENCIES

The Company has employment agreements with six officers/shareholders for five-year terms, five of which expire in June 2001 and one which expires in April 2002, and all provide for base salaries with annual increases. The agreements provide for severance payments equal to the greater of (a) 2.99 times the average annual compensation for the preceding five years and (b) the balance of the base salary for the unexpired portion of the term of the employment agreement. These officers/shareholders have signed intellectual property agreements with the Company as a condition of their employment.

In December 1990, the Company was granted a fully paid, royalty-free worldwide irrevocable nonexclusive license to make, have made, use and sell CMSI's hypothermic blood substitute solution that exists in CMSI's patent application. The license granted by CMSI will terminate if certain officers/shareholders in the aggregate do not own at least 33 1/3% of the interest in the Company not sold to the public or otherwise owned by public shareholders. At June 30, 1997 the license is still in effect.

In June 1993, the Company entered into a two-year lease agreement for its principal office and research facilities. Rent expense totaled \$59,376, \$58,188, and \$53,388 for each of the three years ended June 30, 1997, 1996 and 1995, respectively; and cumulatively, \$226,702 for the period from inception to June 30, 1997. During March 1997, the Company exercised an option to renew the lease for an additional 24 month period. Rent during the option period will be \$5,300 per month for the first twelve months, then \$5,500 per month for the last twelve months, plus the cost of utilities.

The Company has agreements with three hospitals regarding the Company's clinical trials. As of June 30, 1997, the total obligation of the Company to the hospitals providing services under these agreements is \$346,962.

7. INCOME TAXES

The primary components of the net deferred tax asset as of June 30 are:

Deferred Tax Asset: NOL Carryforwards Deferred Tax Liability:	\$4,221,000	\$3,078,000
Other, net	(171,000)	(103,000)
Total Valuation allowance	4,050,000 (4,050,000)	2,975,000 (2,975,000)
Net deferred tax asset	-0- =========	-0- ==========

1997

1996

No tax benefit has been recorded through June 30, 1997 because of the net operating losses incurred and full valuation allowance provided. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized. The Company established a 100% valuation allowance at June 30, 1997 and 1996 due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets.

As of June 30, 1997, the Company has net operating loss carryforwards of approximately \$11,500,000 for federal and \$5,800,000 for state tax purposes, which expire during fiscal years 2011 and 2001, respectively.

Internal Revenue Code Section 382 places a limitation (the "Section 382 Limitation") on the amount of taxable income which can be offset by net operating loss ("NOL") carryforwards after a change in control (generally greater than 50% change in ownership) of a loss corporation. California has similar rules. Generally, after a control change, a loss corporation cannot deduct NOL carryforwards in excess of the Section 382 Limitation. Due to these "change in ownership" provisions, utilization of the NOL and tax credit carryforwards may be subject to an annual limitation regarding their utilization against taxable income in future periods.

8. RELATED PARTY TRANSACTIONS

During the years ended June 30, 1995, 1996, and 1997, \$81,043, \$19,940 and \$126,754 in fees for consulting services was paid to a member of the Board of Directors.

O. QUARTERLY RESULTS (UNAUDITED)

Summarized $% \left(1\right) =\left(1\right) \left(1\right)$ results of operations $% \left(1\right) =\left(1\right) \left(1\right)$ for each quarter of fiscal 1997 and 1996 are as follows:

1997	First Quarter	Second Quarter	Third Ouarter	Fourth Ouarter	Total Year
Revenue Net loss Net loss per share	\$718,356 \$.26	\$754,487 \$.27	\$520,282 \$.17	\$62,500 \$1,101,085 \$.37	\$62,500 \$3,094,210 \$ 1.05
1996 Net loss Net loss per share	\$377,407 \$.13	\$463,395 \$.18	\$413,230 \$.16	\$711,303 \$.27	\$1,965,335 \$.75

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

PART III

Item 10. Directors and Executive Officers of the Registrant.

Directors and Executive Officers

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

Paul Segall, Ph.D., 54, is the Chairman, President and Chief Executive Officer and has served as a director of the Company since 1990. He was a research scientist for Cryomedical Sciences, Inc. ("CMSI") and a member of its Board of Directors from 1987 to December 1990, serving as Director of Research and Vice President of Research for CMSI, from April 1988 until 1989. Dr. Segall received a Ph.D. in Physiology from the University of California at Berkeley in

Victoria Bellport, 32, is the Chief Financial Officer and Vice President and has been a director of the Company since 1990. Ms. Bellport received a B.A. in Biochemistry from the University of California at Berkeley in 1988.

Hal Sternberg, Ph.D., 44, is the Vice President of Research and has been a director of the Company since 1990. He was a research scientist for CMSI from 1987 to December 1990, serving as Vice President of Biochemistry for CMSI from November 1987 to 1989. Dr. Sternberg was a visiting scientist and research Associate at the University of California at Berkeley from 1985-1988, where he supervised a team of researchers studying Alzheimer's Disease. Dr. Sternberg received his Ph.D. from the University of Maryland in Biochemistry in 1982.

Harold Waitz, Ph.D., 55, is the Vice President of Engineering and has been a director of the Company since 1990. He was a research scientist for CMSI from 1987 to December 1990, serving as Vice President of Technology for CMSI from November 1987 to 1989. From 1986-1988, Dr. Waitz served as Vice President of Research at the Winters Institute, a non-profit biomedical research institution, at which Dr. Waitz studied arteriosclerosis in primates. He received his Ph.D. in Biophysics and Medical Physics from the University of California at Berkeley in 1983.

Ronald S. Barkin, 51, is the Executive Vice President and has been a director of the Company since 1990. Mr. Barkin practiced civil and corporate law for more than 25 years before becoming an executive officer of the Company during April 1997.

Judith Segall, 44, is the Vice President of Technology and Secretary, and has been a director of the Company from 1990 through 1994, and from 1995 through the present date. She performed services on a contract basis as a biochemist for CMSI during 1989, until the formation of BioTime. Ms. Segall received a B.S. in Nutrition and Clinical Dietetics from the University of California at Berkeley in 1989.

Jeffrey B. Nickel, Ph.D., 53, joined the Board of Directors of the Company during March 1997. Dr. Nickel is the President of Nickel Consulting through which he has served as a consultant to companies in the pharmaceutical and biotechnology industries since 1990. Prior to starting his consulting business, Dr. Nickel served in a number of management positions for Syntex Corporation and Merck & Company. Dr. Nickel received his Ph.D. in Organic Chemistry from Rutgers University in 1970.

Executive Officers

Paul Segall, Ronald S. Barkin, Victoria Bellport, Hal Sternberg, Harold Waitz and Judith Segall are the only executive officers of ${\tt BioTime}$.

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

Directors' Meetings, Compensation and Committees of the Board

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

The Board of Directors has a Stock Option Committee that administers the Company's 1992 Stock Option Plan and makes grants of options to key employees, consultants, scientific advisory board members and independent contractors of the Company, but not to officers or directors of the Company. The members of the Stock Option Committee are Paul Segall, Ronald S. Barkin, and Victoria Bellport. The Stock Option Committee was formed during September 1992.

During the fiscal year ended June 30, 1997, the Board of Directors met six times. No director attended fewer than 75% of the meetings of the Board or any committee on which they served.

Directors of the Company who are not employees receive an annual fee of \$20,000. Directors of the Company and members of committees of the Board of Directors who are employees of the Company are not compensated for serving as directors or attending meetings of the Board or committees of the Board. Directors are entitled to reimbursements for their out-of-pocket expenses incurred in attending meetings of the Board or committees of the Board. Directors who are employees of the Company are also entitled to receive compensation in such capacity.

Executive Compensation

The Company has entered into five-year employment agreements (the "Employment Agreements") with Paul Segall, the President and Chief Executive Officer; Victoria Bellport, the Chief Financial Officer; Judith Segall, Vice President of Technology and Corporate Secretary; Hal

Sternberg, Vice President of Research; and Harold Waitz, Vice President of Engineering. The Employment Agreements will expire on December 31, 2000 but may terminate prior to the end of the term if the employee (1) dies, (2) leaves the Company, (3) becomes disabled for a period of 90 days in any 150 day period, or (4) is discharged by the Board of Directors for failure to carry out the reasonable policies of the Board, persistent absenteeism, or a material breach of a covenant. Under the Employment Agreement, the executive officers are presently receiving an annual salary of \$92,000, and will receive a one-time cash bonus of \$25,000 if the Company receives at least \$1,000,000 of equity financing from a pharmaceutical company. Each executive officer will be entitled to seek a modification of his or her Employment Agreement before the expiration of the five year term if the market value of the Company's outstanding capital stock exceeds \$75,000,000.

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

Each executive officer has also executed an Intellectual Property Agreement which provides that the Company is the owner of all inventions developed by the executive officer during the course of his or her employment.

The following table summarizes certain information concerning the compensation paid to the Company's five most highly compensated executive officers during the last three fiscal years.

SUMMARY COMPENSATION TABLE

		Annual Compensation		Long-Term Compensation	
Name and Principal Position	Year	Salary(\$)	Bonus	Stock Options (Shares)	
Paul Segall	1997	\$90,583	_	_	
Chief Executive Officer	1996 1995	\$76,041 \$67,500			
Hal Sternberg	1997	\$90,583	\$25,000	_	
Vice President of Research	1996 1995	\$76,041 \$67,500	_ _	<u> </u>	
Harold Waitz	1997	\$90,583	\$50,000	_	
Vice President of Engineering	1996 1995	\$76,041 \$67,500	_	<u> </u>	

	Annual Compensation			Long-Term Compensation	
Name and Principal Position	Year	Salary(\$)	Bonus	Stock Options (Shares)	
Victoria Bellport					
Vice President and	1997	\$90,583	\$25,000	<u>—</u>	
Chief Financial Officer	1996	\$76,041	_		
	1995	\$67,500	_	_	
Judith Segall	1997	\$90,583	\$25,000		
Vice President and Corporate Secretary	1996	\$76,041	Ψ23,000		
vice President and Corporate Secretary	1995	. ,			
	1992	\$67,500	_	_	

Stock Options

The following table provides information with respect to the Company's five most highly compensated executive officers, concerning the exercise of options during the last fiscal year and unexercised options held as of June 30, 1997.

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

	Number of Shares Acquired on	Value Realized	Number of Unexercised Options at June 30, 1997		Value of Unexercised In-the-Money Options at June 30, 1997(1)	
Name	Exercise	(\$)	Exercisable	Unexercisable	Exercisable	Unexercisable
Paul Segall	0		21,000	0	\$679,980	0
Hal Sternberg	0		21,000	0	679,980	0
Harold Waitz	0		21,000	0	679,980	0
Victoria Bellport	0		0	0	0	0
Judith Segall	0		0	0	0	0

⁽¹⁾ Based on the average of the high and low bid prices of a Common Share (\$32.38) as reported on the Nasdaq Small Cap Market System on such date.

Item 12. Security Ownership of Certain Beneficial Owners and Management.

The following table sets forth information as of September 25, 1997 concerning beneficial ownership of Common Shares by each shareholder known by the Company to be the beneficial owner of 5% or more of the Company's Common Shares, and the Company's executive officers and directors. Information concerning certain beneficial owners of more than 5% of the Common Shares is based upon information disclosed by such owners in their reports on Schedule 13D.

	Number of Shares	Percent of Total
Alfred D. Kingsley (1) Gary K. Duberstein Greenbelt Corp. Greenway Partners, L.P. Greenhouse Partners, L.P. 277 Park Avenue, 27th Floor New York, New York 10017	412,750	11.6%
WisdomTree Associates, L.P. (2) WisdomTree Capital Management, Inc. 1633 Broadway, 38th Floor New York, New York 10019 WisdomTree Offshore, Ltd. (2) Zephyr House, 5th Floor P.O. Box 1561 Mary Street Grand Cayman, Cayman Islands British West Indies	261,850	8.0
Paul and Judith Segall (3)	236,638	7.2
Harold D. Waitz	167,069	5.1
Hal Sternberg	158,379	4.8
Victoria Bellport	65,389	2.0
Ronald S. Barkin (4)	63,337	2.0
Jeffrey B. Nickel	_	_
All officers and directors as a group (7 persons)(4)	690,812	21.1%

- (1) Includes 300,000 Common Shares issuable upon the exercise of certain warrants owned beneficially by Greenbelt Corp. Mr. Kingsley and Mr. Duberstein may be deemed to beneficially own the warrant shares that Greenbelt Corp. beneficially owns. Includes 27,500 Common Shares owned by Greenway Partners, L.P. Greenhouse Partners, L.P. is the general partner of Greenway Partners, L.P. and Mr. Kingsley and Mr. Duberstein are the general partners of Greenhouse Partners, L.P. Greenhouse Partners, L.P., Mr. Kingsley and Mr. Duberstein may be deemed to beneficially own the Common Shares that Greenway Partners, L.P. beneficially owns. Includes 81,950 Common Shares owned solely by Mr. Kingsley, as to which Mr. Duberstein disclaims beneficial ownership. Includes 3,300 Common Shares owned solely by Mr. Duberstein, as to which Mr. Kingsley disclaims beneficial ownership.
- (2) Includes 217,350 Common Shares owned by WisdomTree Associates, L.P. and 44,500 Common Shares owned by WisdomTree Offshore, Ltd. WisdomTree Capital Management, Inc. is the general partner of WisdomTree Associates, L.P. and is the investment manager of WisdomTree Offshore,
- (3) Includes 172,459 shares held of record by Paul Segall and 64,179 shares held of record by Judith Segall.
- (4) Includes 45,000 Common Shares issuable upon the exercise of certain options.

COMPLIANCE WITH SECTION 16(a) OF THE SECURITIES EXCHANGE ACT OF 1934

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires the Company's directors and executive officers and persons who own more than ten percent (10%) of a registered class of the Company's equity securities to file with the Securities and Exchange Commission (the "SEC") initial reports of ownership and reports of changes in ownership of Common Shares and other equity securities of the Company. Officers, directors and greater than ten percent beneficial owners are required by SEC regulation to furnish the Company with copies of all reports they file under Section 16(a).

To the Company's knowledge, based solely on its review of the copies of such reports furnished to the Company and written representations that no other reports were required, all Section 16(a) filing requirements applicable to its officers, directors and greater than ten percent beneficial owners were complied with during the fiscal year ended June 30, 1997.

Item 13. Certain Relationships and Related Transactions.

During the twelve months ended June 30, 1997, \$87,254 in fees for legal and consulting services was paid to Ronald S. Barkin, Executive Vice President and a member of the Board of Directors. Such fees were paid prior to April 1, 1997, when Mr. Barkin became a salaried employee. During the twelve months ended June 30, 1997, \$39,500 in fees for consulting services was paid to Jeffrey B. Nickel, a member of the Board of Directors.

During September 1995, the Company entered into an agreement for financial advisory services with Greenbelt Corp., a corporation controlled by Alfred D. Kingsley and Gary K. Duberstein. Under this agreement the Company issued to the financial advisor warrants to purchase 100,000 common shares at a price of \$6 per share, and the Company agreed to issue additional warrants to purchase up to an additional 200,000 common shares at a price equal to the greater of (a) 150% of the average market price of the common shares during the three months prior to issuance and (b) \$6 per share. The additional warrants were issued in equal quarterly installments over a two year period, beginning October 15, 1995. The Company may terminate the financial advisory agreement on 30 days notice. The exercise price and number of common shares for which the warrants may be exercised are subject to adjustment to prevent dilution in the event of a stock split, combination, stock dividend, reclassification of shares, sale of assets, merger or similar transaction. As of June 30, 1997, the total number of warrants to purchase common shares issued was 275,000. The warrants are exercisable at the following prices: 150,000 at \$6 per share; 25,000 at \$7.32 per share; 25,000 at \$30.04 per share; 25,000 at \$29.33 per share; 25,000 at \$32.65 per share; and 25,000 at \$49.01 per share. As of July 15, 1997, warrants to purchase an additional 25,000 shares were issued and are exercisable at a price of \$42.79 per share.

Under the agreement, upon the request of Greenbelt Corp., the Company will file a registration statement to register the warrants and underlying Common Shares for sale under the Securities Act of 1933, as amended (the "Act") and applicable state securities or "Blue Sky" laws. The Company will bear the expenses of registration, other than any underwriting discounts that may be incurred by Greenbelt Corp. in connection with a sale of the warrants or common shares. The Company shall not be obligated to file more than two such registration statements, other than registration statements on Form S-3. Greenbelt Corp. also is entitled to include warrants and common shares in any registration statement filed by the Company to register other securities for sale under the Act.

The Company has agreed to reimburse Greenbelt Corp. for all reasonable out-of-pocket expenses incurred in connection with its engagement as financial advisor, and to indemnify Greenbelt Corp. and the officers, affiliates, employees, agents, assignees, and controlling person of Greenbelt Corp. from any liabilities arising out of or in connection with actions taken on behalf of the Company under the agreement.

PART IV

Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K (a-1) Financial Statements.

The following financial statements of $\ensuremath{\mathsf{BioTime}},$ Inc. are filed in the Form 10-K:

	rage
Independent Auditors' Report	35
Balance Sheet at June 30, 1997 and 1996	36
Statements of Operations for each of the three years in the period ending June 30, 1997, and for the period from	
November 30, 1990 (inception) to June 30, 1997	37
Statements of Shareholders' Equity for the period from November 30, 1990 (inception) to June 30, 1997	38-39
Statements of Cash Flows for each of the three years in the period ending June 30, 1997, and for the period	
from November 30, 1990 (inception) to June 30, 1997	40-41
Notes to Financial Statements	42-50

(a-3) Exhibits.

Exhibit Numbers	Description				
3.1	Articles of Incorporation as Amended.**				
3.3	By-Laws, As Amended.#				
4.1	Specimen of Common Share Certificate.+				
10.1	Lease Agreement dated July 1, 1994 between the Registrant and Robert and Norah Brower, relating to principal executive offices of the Registrant.*				
10.2	Employment Agreement dated June 1, 1996 between the Company and Paul Segall.++				
10.3	Employment Agreement dated June 1, 1996 between the Company and Hal Sternberg.++				
10.4	Employment Agreement dated June 1, 1996 between the Company and Harold Waitz.++				
10.5	Employment Agreement dated June 1, 1996 between the Company and Judith Segall.++				
10.6	Employment Agreement dated June 1, 1996 between the Company and Victoria Bellport.++				
10.7	Intellectual Property Agreement between the Company and Paul Segall.+				
10.8	Intellectual Property Agreement between the Company and Hal Sternberg.+				
10.9	Intellectual Property Agreement between the Company and Harold Waitz.+				
10.10	Intellectual Property Agreement between the Company and Judith Segall.+				
10.11	Intellectual Property Agreement between the Company and Victoria Bellport.+				
10.12	Agreement between CMSI and BioTime Officers Releasing Employment Agreements, Selling Shares, and Transferring Non-Exclusive License.+				
10.13	Agreement for Trans Time, Inc. to Exchange CMSI Common Stock for BioTime, Inc. Common Shares.+				
10.14	1992 Stock Option Plan, as amended.^				
10.15	Employment Agreement dated April 1, 1997 between the Company and Ronald S. Barkin.^				
10.16	Intellectual Property Agreement between the Company and Ronald S. Barkin.^				

Consent of Deloitte & Touche LLP**

- + 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.
- # 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.
- * Incorporated by reference to the Company's Form 10-K for the fiscal year ended June 30, 1994.
- ++ Incorporated by reference to the Company's Form 10-K for the fiscal year ended June 30, 1996.
- $^{\wedge}$ Incorporated by reference to the Company's Form 10-Q for the quarter ended March 31, 1997.
- ** Filed herewith.

23.1

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on the 25th day of September 1997.

BIOTIME, INC.

/s/: Paul E. Segall

Paul E. Segall, Ph.D.
President and Chief Executive
Officer (Principal executive officer)

Signature	Title	Date
/s/: Paul E. Segall		
Paul E. Segall, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	September 25, 1997
/s/: Ronald S. Barkin		
Ronald S. Barkin	Executive Vice President and Director	September 25, 1997
/s/: Harold D. Waitz		
Harold D. Waitz, Ph.D.	Vice President and Director	September 25, 1997
/s/:Hal Sternberg		
Hal Sternberg, Ph.D.	Vice President and Director	September 25, 1997
/s/:Victoria Bellport		
Victoria Bellport	Chief Financial Officer and Director (Principal Financial and Accounting Officer)	September 25, 1997
/s/:Judith Segall		
Judith Segall	Vice President, Corporate Secretary and Director	September 25, 1997
Jeffrey B. Nickel	Director	September 25, 1997

AMENDED ARTICLES OF INCORPORATION OF BIOTIME, INC.

Paul Segall and Judith Segall certify that:

- 1. They are the President and the Secretary, $\,$ respectively, of BioTime, Inc., a California Corporation.
- 2. The Articles of $\,$ Incorporation $\,$ of this $\,$ corporation $\,$ are amended to read in full as follows:

"ONE: The name of this corporation is BioTime, Inc.

TWO: The purpose of the corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of California other than the banking business, the trust company business, or the practice of a profession permitted to be incorporated by the California Corporations Code.

THREE: The corporation is authorized to issue two classes of shares, which shall be designated "Common Shares" and "Preferred Shares". The number of Common Shares which the corporation is authorized to issue is 5,000,000 and the number of Preferred Shares which the corporation is authorized to issue is 1,000,000. The Preferred Shares may be issued in one or more series as the board of directors may by resolution determine. The board of directors is authorized to fix the number of shares of any series of Preferred Shares and to determine or alter the rights, preferences, privileges, and restrictions granted to or imposed on the shares of Preferred Shares as a class, or upon any wholly unissued series of any Preferred Shares. The board of directors may, by resolution, increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series of Preferred Shares subsequent to the issue of shares of that series. Upon the amendment of this article to read as herein set forth, each outstanding share of common stock is converted into or reconstituted as 0.1667 Common Share.

FOUR: The liability of the directors of the corporation for monetary damages shall be eliminated to the fullest extent permissible under California law. The corporation is authorized to indemnify "agents", as such term is defined in Section 317 of the California Corporations Code, to the fullest extent permissible under California law."

- 3. The foregoing $% \left(1\right) =\left(1\right) +\left(1\right) +\left$
- 4. The foregoing amendment of articles of incorporation has been duly approved by the required vote of shareholders in accordance with Section 902 of the Corporations Code. The total number of outstanding shares of the corporation is 3,203,193. The number of shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

1

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this amendment are true and correct of our own knowledge.

Date: July 15, 1991

/s/: Paul Segall
----Paul Segall, President

/s/: Judith Segall
----Judith Segall, Secretary

CERTIFICATE OF AMENDMENT OF ARTICLES OF INCORPORATION

Paul E. Segall and Judith Segall certify that:

They are the President and Secretary, respectively, of $\ensuremath{\operatorname{BioTime}}$, $\ensuremath{\operatorname{Inc.}}$, a California corporation.

The sentence of Article THREE of the Articles of Incorporation that now reads "The number of Common Shares which the Corporation is authorized to issue is 5,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000" is amended to read as follows:

"The number of Common Shares which the Corporation is authorized to issue is 25,000,000 and the number of Preferred Shares which the Corporation is authorized to issue is 1,000,000."

The foregoing amendment of Articles of Incorporation has been duly approved by the board of directors.

The foregoing amendment of Articles of Incorporation has been duly approved by the required vote of shareholders in accordance with section 902 of the Corporations Code. The total number of outstanding Common Shares of the corporation is 3,203,193. There are no Preferred Shares outstanding. The number of Common Shares voting in favor of the amendment equaled or exceeded the vote required. The percentage vote required was more than 50%.

We further declare under penalty of perjury under the laws of the State of California that the matters set forth in this certificate are true and correct of our own knowledge.

Executed at Berkeley, California on June 20, 1997.

/s/: Paul E. Segall

Paul E. Segall, President

/s/: Judith Segall

Judith Segall, Secretary

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement Nos. 33-56766, 33-88968 and 333-30603 of BioTime, Inc. on Form S-8 of our report dated August 25, 1997 (which 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 of BioTime, Inc. for the year ended June 30, 1997.

We also consent to the reference to us under the heading "Selected Financial Data" in such Form 10- $\ensuremath{\mathrm{K}}.$

San Francisco, California September 23, 1997

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JUN-30-1997
JUL-01-1996
JUN-30-1997
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8,170,743
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62,500
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0
0
(3,094,210)
0
0
(3,094,210)
(1.05)
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