FILED PURSUANT TO RULE 424(b)(4)
REGISTRATION NO. 333-37439

PROSPECTUS

2,200,000 Shares of
5 1/2% Convertible Preferred Stock

[LOGO OF AASTROM BIOSCIENCES INC]

Aastrom Biosciences, Inc. (the "Company") is hereby offering 2,200,000 shares of 5 1/2% Convertible Preferred Stock (the "Preferred Stock"). Dividends on the Preferred Stock are cumulative and accrue and are payable on a quarterly basis at an annual rate of $0.275 per share. The payment of such dividends shall be senior in priority to dividends on the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company. At the Company's option, the Company may pay dividends in either cash or shares of Common Stock, valued on the basis of the then current market price of such shares. The Preferred Stock is convertible into Common Stock at the option of the holder, and each share of Preferred Stock will automatically convert into Common Stock following the second anniversary of the initial sale date of the Preferred Stock in the event that the closing bid price of the Common Stock exceeds $10.00 per share for twenty consecutive trading days. The Preferred Stock will also automatically convert into Common Stock in the event that, at any time following the original issuance of the Preferred Stock, less than 500,000 shares of Preferred Stock remain outstanding or upon a merger in which the Company or its shareholders receive consideration of at least $10.00 per share and either the Company is not the surviving entity or the holders of the Company's voting securities before the transaction own less than 50% of the voting securities of the combined entity. Each share of Preferred Stock is convertible into one share of Common Stock, subject to adjustment upon the occurrence of certain events. The holders of the Preferred Stock are entitled to a liquidation preference of $5.00 per share, plus accrued but unpaid dividends. The payment of such liquidation preference shall be senior in priority to any payment with respect to the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company. The Preferred Stock will be voted together with the Common Stock at any annual or special meeting of the shareholders of the Company, and each share of Preferred Stock shall have voting rights equal to the voting rights of that number of shares of Common Stock into which such share of Preferred Stock would then be convertible. Except as required by law or in connection with any amendment to the liquidation preference or other rights of the Preferred Stock, the shares of Preferred Stock shall not vote as a separate class on any matter submitted for shareholder approval.

The Common Stock is traded on the Nasdaq National Market under the symbol "ASTM." The Preferred Stock will not be listed on any market or exchange, but the shares of Common Stock issuable upon conversion of the Preferred Stock will be approved for listing on the Nasdaq National Market upon conversion and delivery of the Preferred Stock. On November 24, 1997, the last reported sale price of the Common Stock on the Nasdaq National Market was $7.00 per share. See "Price Range of Common Stock."

THIS OFFERING INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 7 OF THIS PROSPECTUS.

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

	Price to Public	Commissions(1)	Proceeds to Company(2)(3)
Per Share	$5.00	$0.30	$4.70
Total	$11,000,000	$660,000	$10,340,000

(1) The shares of Preferred Stock offered hereby are being offered, on an all or none basis, directly by the Company principally to selected institutional investors. Cowen & Company (the "Placement Agent") has been retained to act, on a best efforts basis, on behalf of the Company in connection with the arrangement of this transaction. The Company has agreed (i) to pay the Placement Agent a fee in connection with the arrangement of this financing, and (ii) to indemnify the Placement Agent against certain liabilities, including liabilities under the Securities Act of 1933, as amended. See "Plan of Distribution."

(2) The termination date of this offering is December 2, 1997, subject to extension by mutual agreement of the Company and the Placement Agent. Prior to the closing of this offering, all investor funds will be placed in escrow with The Chase Manhattan Bank, as escrow agent (the "Escrow Agent"), in an escrow account established for the benefit of the investors. Upon receipt of notice from the Escrow Agent that investors have deposited the requisite funds in the escrow account for the purchase

of the shares of Preferred Stock offered hereby, the Company will deliver the certificates representing such shares to the Placement Agent for delivery to the investors and will collect the investor funds from the Escrow Agent. In the event that investor funds are not received in the full amount necessary to satisfy the requirements of this offering, all funds deposited in the escrow account will be returned promptly to the investors. See "Plan of Distribution."

(3) Before deducting expenses payable by the Company, estimated to be $350,000.

COWEN & COMPANY

November 26, 1997

[COLOR PHOTOGRAPH OF A PROTOTYPE OF THE AASTROM CPS WITH A CLINICIAN INNOCULATING CELLS]

A prototype of the Aastrom CPS is currently being used in clinical trials and ongoing development activities are directed at completing production level components of the Aastrom CPS. The Company may not market the Aastrom CPS unless and until FDA and other necessary regulatory approvals are received.

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and financial statements, including the notes thereto, appearing elsewhere in this Prospectus. Prospective investors should carefully consider the information set forth under the heading "Risk Factors."

THE COMPANY

Aastrom Biosciences, Inc. is developing proprietary process technologies and devices for a range of cell therapy applications, including stem cell therapies and selected emerging therapies such as immunotherapy, solid tissue repair and ex vivo gene therapy. The Company's lead product under development, the Aastrom Cell Production System (the "Aastrom CPS"), consists of a clinical cell culture system with single-use cassettes and reagents for use in the rapidly growing cell therapy market. The Company is currently conducting pre-pivotal trials at multiple sites in the United States and Europe of the Aastrom CPS for use in stem cell therapy in preparation for pivotal trials in the United States and potential marketing in Europe. The Company believes that the Aastrom CPS method will be a cost-effective, less invasive and less time consuming alternative to currently available stem cell collection methods and may enhance the clinical utility of umbilical cord blood ("UCB") transplants by expanding the number of cells available for transplant. For stem cell therapy, the Company has entered into a strategic collaboration for the marketing, distribution and customer service of the Aastrom CPS with Cobe BCT, Inc., a subsidiary of Gambro AB and a leading provider of blood cell processing products.

The Aastrom CPS is designed as a platform product which implements the Company's pioneering stem cell replication technology. The Company also believes that the Aastrom CPS can be modified to produce a wide variety of other cell types for selected emerging therapies being developed by other companies and institutions. The Company intends to develop additional strategic collaborations for the development of the Aastrom CPS in certain of these other cell therapy market segments. In ex vivo gene therapy, the Company is also developing the Aastrom Gene Loader, which is being designed to address the production of gene-modified cells.

Stem cell therapy is a rapidly growing form of cell therapy used to restore blood and immune system function to cancer patients following chemotherapy or radiation therapy. According to an industry source, approximately 32,000 stem cell therapy procedures were completed worldwide in 1995, and, according to another industry source, the number of such procedures utilizing donor-derived and patient-derived cells has been growing annually by approximately 15% and 20%, respectively. Other novel applications of stem cell therapy are under development by third parties, which include the treatment of autoimmune diseases and augmenting recipient acceptance of organ transplants. Current stem cell collection methods, including bone marrow harvest and peripheral blood progenitor cell mobilization, are costly, invasive and time-consuming for both medical personnel and patients. Technologies which facilitate a more readily available source of cells may contribute to additional growth in cell therapy procedures. UCB is emerging as a new source of cells for stem cell therapy, offering additional market opportunity, although the more widespread use of UCB transplants has been restricted by cell quantity limitations, which the Company believes may ultimately be addressed by the Aastrom CPS.

The Company believes that the Aastrom CPS will offer significant advantages over traditional stem cell collection methods. The Aastrom CPS is intended to be used to produce cells used for therapy from a small starting volume of bone marrow cells. Compared with current methods of harvest and infusion, the Aastrom CPS is expected to involve two patient care episodes rather than approximately eight to 21 care episodes and less than three hours of patient procedure time rather than approximately 16 to 39 hours of patient procedure time. The Aastrom CPS may also permit higher and more frequent doses of chemotherapy to be administered to cancer patients by enabling the production of multiple doses of cells from patient samples taken at the initial collection. Further, in an evaluation of seven tumor-contaminated bone marrow samples that were expanded with the Aastrom CPS process, the presence of breast cancer cells in each sample was either substantially reduced or was

no longer detectable. The Company believes that the combination of passive depletion during culture with the lower starting volume of tumor cells may result in a tumor-free or tumor-reduced cell product for transplant.

Aastrom is currently conducting a pre-pivotal stem cell therapy clinical trial in patients with Stage II, III and IV breast cancer at four U.S. sites. This clinical trial is designed to demonstrate that cells produced using the Aastrom CPS can provide hematopoietic recovery in accordance with trial endpoints in such patients who have received myeloablative chemotherapy. Pending a positive outcome of this and other related trials, the Company intends to seek FDA approval to begin a multi-center pivotal trial for use of the Aastrom CPS in stem cell therapy. It is anticipated that the results of this pivotal trial will be used to support the Company's Pre-Market Approval ("PMA") submission to the FDA. The Company has also initiated two clinical sites in Europe. The Company may not market the Aastrom CPS in the United States for stem cell therapy unless and until FDA and other necessary regulatory approvals are received and in Europe until CE Mark Registration is obtained.

For UCB transplants, the Aastrom CPS is intended to be used to enable production of more effective therapeutic doses of cells, which would otherwise not be available with the small volume of UCB typically available. The Company has initiated, under an IDE received from the FDA, a multiple-site U.S. clinical trial for UCB expansion and transplantation in adult and pediatric patients.

The Company's business strategy is to: (i) establish a consumable-based business model; (ii) focus initially on the currently-reimbursed stem cell therapy market; (iii) leverage Aastrom's cell production technology across multiple cell therapy market opportunities; and (iv) establish multiple strategic collaborations.

For stem cell therapy, Aastrom has entered into a strategic collaboration with Cobe BCT to be the Company's exclusive worldwide marketing, distribution and service provider for the Aastrom CPS. In 1993, the Company entered into a series of agreements, pursuant to which Cobe BCT purchased an aggregate of $20,000,000 of the Company's equity securities and acquired the worldwide distribution rights to the Aastrom CPS for stem cell therapy. Under the terms of the collaboration, Aastrom retains manufacturing rights and 58% to 62% of all revenue generated by Cobe BCT's sale of the Aastrom CPS, subject to the Company's obligation to make certain royalty payments. Aastrom also retains all marketing and distribution rights to the Aastrom CPS for other cell types and ex vivo gene therapy applications, including stem cells.

The Company has exclusive rights to 13 issued U.S. patents, including patents relating to production methods and composition of matter for stem and progenitor cells and the genetic modification of stem and other cell types, as well as patents for cell culture devices for human cells.

THE OFFERING

Securities offered.....	2,200,000 shares of 5 1/2% Convertible Preferred Stock.
Preferred Stock.....	Dividends on the Preferred Stock are cumulative and accrue and are payable on a quarterly basis at an annual rate of $.275 per share. The payment of such dividends shall be senior in priority to dividends on the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company. At the Company's option, the Company may pay dividends in either cash or shares of Common Stock, valued on the basis of the then current market price of such shares. The Preferred Stock is convertible into Common Stock at the option of the holder, and each share of Preferred Stock will automatically convert into Common Stock following the second anniversary of the initial sale date of the Preferred Stock in the event that the closing bid price of the Common Stock exceeds $10.00 per share for twenty consecutive trading days. The Preferred Stock will also automatically convert into Common Stock in the event that, at any time following the original issuance of the Preferred Stock, less than 500,000 shares of Preferred Stock remain outstanding or upon a merger in which the Company or its shareholders receive consideration of at least $10.00 per share and either the Company is not the surviving entity or the holders of the Company's voting securities before the transaction own less than 50% of the voting securities of the combined entity. Each share of Preferred Stock is convertible into one share of Common Stock, subject to adjustment upon the occurrence of certain events. The holders of the Preferred Stock are entitled to a liquidation preference of $5.00 per share, plus accrued but unpaid dividends. The payment of such liquidation preference shall be senior in priority to any payment with respect to the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company.
Common Stock outstanding before this offering.....	13,266,926
Common Stock to be outstanding after this offering.....	15,466,926(1)
Use of proceeds.....	For the development and manufacture of the Aastrom CPS for use in clinical trials, expanded clinical trials, research and development of other product candidates, working capital and other general corporate purposes.
Nasdaq National Market symbol of the Common Stock.....	ASTM

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(1) Includes 2,200,000 shares of Common Stock issuable upon conversion of the Preferred Stock and 2,000 shares of Common Stock that, to the Company's knowledge, will be canceled in connection with the repayment of a promissory note. Excludes (a) options and warrants outstanding as of September 30, 1997 to purchase 1,175,892 shares of Common Stock at a weighted average exercise price of $5.50 per share, (b) 6,789 shares of Common Stock which were canceled in October 1997 in connection with the repayment of a promissory note, and (c) warrants to purchase 200,000 shares of Common Stock at an exercise price of $7.24 per share that were issued in October 1997. See "Business--Strategic Relationships," "Management--Stock Option and Employee Benefit Plans," "Certain Transactions" and Note 4 of Notes to Financial Statements.

SUMMARY FINANCIAL DATA

	YEAR ENDED JUNE 30,					THREE MONTHS ENDED SEPTEMBER 30,	
	1993	1994	1995	1996	1997	1996	1997
STATEMENT OF OPERATIONS DATA:							
Total revenues.....	$ 784,000	$ 872,000	$ 517,000	$ 1,609,000	$ 378,000	$ 224,000	$ 16,000
Costs and expenses:							
Research and development.....	2,600,000	5,627,000	4,889,000	10,075,000	13,357,000	3,160,000	3,243,000
General and administrative.....	1,153,000	1,565,000	1,558,000	2,067,000	1,953,000	452,000	613,000
Total costs and expenses.....	3,753,000	7,192,000	6,447,000	12,142,000	15,310,000	3,612,000	3,856,000
Other income, net.....	122,000	180,000	213,000	616,000	644,000	115,000	215,000
Net loss.....	$(2,847,000)	$(6,140,000)	$(5,717,000)	$(9,917,000)	$(14,288,000)	$(3,273,000)	$(3,625,000)
Net loss per share(1)...	$ (.52)	$ (.82)	$ (.66)	$ (.98)	$ (1.26)	$ (.32)	$ (.27)
Weighted average number of shares outstanding(1).....	5,480,000	7,461,000	8,644,000	10,103,000	11,315,000	10,107,000	13,279,000

	SEPTEMBER 30, 1997	
	ACTUAL	AS ADJUSTED(2)
BALANCE SHEET DATA:		
Cash, cash equivalents and short-term investments.....	$ 13,631,000	$ 23,621,000
Working capital.....	12,113,000	22,103,000
Total assets.....	14,874,000	24,864,000
Deficit accumulated during the development stage.....	(44,938,000)	(44,938,000)
Total shareholders' equity.....	13,006,000	22,996,000

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(1) See Note 1 of Notes to Financial Statements for information concerning the computation of net loss per share and shares used in computing net loss per share.

(2) Adjusted to reflect the sale by the Company of 2,200,000 shares of Preferred Stock offered hereby at the public offering price of $5.00 per share, after deduction of commissions and estimated offering expenses. See "Use of Proceeds" and "Capitalization."

RISK FACTORS

In addition to the other information in this Prospectus, prospective investors should consider the following risk factors in evaluating the Company and its business before purchasing any of the Preferred Stock offered hereby. This Prospectus contains forward-looking statements which involve risks and uncertainties. The Company's actual results may differ significantly from the results discussed in the forward-looking statements. Factors that might cause such differences include, but are not limited to, those discussed below.

UNCERTAINTIES RELATED TO PRODUCT DEVELOPMENT AND MARKETABILITY

The Company has not completed the development or clinical trials of any of its cell culture technologies or product candidates and, accordingly, has not begun to market or generate revenue from their commercialization. Furthermore, the Company's technologies and product candidates are based on cell culture processes and methodologies which are not widely employed. Commercialization of the Company's lead product candidate, the Aastrom CPS, will require substantial additional research and development by the Company as well as substantial clinical trials. There can be no assurance that the Company will successfully complete development of the Aastrom CPS or its other product candidates, or successfully market its technologies or product candidates, which lack of success would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company or its collaborators may encounter problems and delays relating to research and development, regulatory approval and intellectual property rights of the Company's technologies and product candidates. There can be no assurance that the Company's research and development programs will be successful, that its cell culture technologies and product candidates will facilitate the ex vivo production of cells with the expected biological activities in humans, that its technologies and product candidates, if successfully developed, will prove to be safe and efficacious in clinical trials, that the necessary regulatory approvals for any of the Company's technologies or product candidates and the cells produced in such products will be obtained or, if obtained, will be as broad as sought, that patents will issue on the Company's patent applications or that the Company's intellectual property protections will be adequate. The Company's product development efforts are primarily directed toward obtaining regulatory approval to market the Aastrom CPS as an alternative to the bone marrow harvest and peripheral blood progenitor cell ("PBPC") stem cell collection methods. These stem cell collection methods have been widely practiced for a number of years, and there can be no assurance that any of the Company's technologies or product candidates will be accepted by the marketplace as readily as these or other competing processes and methodologies, or at all. The failure by the Company to achieve any of the foregoing would have a material adverse effect on the Company's business, financial condition and results of operations.

UNCERTAINTIES RELATED TO CLINICAL TRIALS

The approval of the U.S. Food and Drug Administration (the "FDA") will be required before any commercial sales of the Company's product candidates may commence in the United States, and approvals from foreign regulatory authorities will be required before international sales may commence. Prior to obtaining necessary regulatory approvals, the Company will be required to demonstrate the safety and efficacy of its processes and product candidates and the cells produced by such processes and in such products for application in the treatment of humans through extensive preclinical studies and clinical trials. The Company is currently conducting pre-pivotal clinical trials to demonstrate the safety and biological activity of patient-derived or UCB cells produced in the Company's prototype of the Aastrom CPS in a limited number of patients with breast cancer. If the results from these pre-pivotal trials are successful, the Company intends to seek clearance from the FDA to commence pivotal clinical trials. The results of preclinical studies and clinical trials of the Company's product candidates, however, may not necessarily be predictive of results that will be obtained from subsequent or more extensive clinical trials. Further, there can be no assurance that pre-pivotal or pivotal clinical trials of any of the Company's product candidates will demonstrate the safety, reliability and efficacy of such products, or of the cells produced in such products, to the extent necessary to obtain required regulatory approvals or market acceptance.

The ability of the Company to complete its clinical trials in a timely manner is dependent upon many factors, including the rate of patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of suitable patients to clinical sites and the eligibility criteria for the study. The Company has experienced delays in patient accrual in its current pre-pivotal clinical trials. Further delays in patient accrual, in the Company's current pre-pivotal clinical trials or in future clinical trials, could result in increased costs associated with clinical trials or delays in receiving regulatory approvals and commercialization, if any. Furthermore, the progress of clinical investigations with the Aastrom CPS and the Company's other product candidates will be monitored by the FDA, which has the authority to cease clinical investigations, at any time, due to patient safety or other considerations. Any of the foregoing would have a material adverse effect on the Company's business, financial condition and results of operations. See "--Uncertainty of Regulatory Approval; Extensive Government Regulation."

The Company's current pre-pivotal trials are designed to demonstrate specific biological safety and activity of cells produced in the Aastrom CPS, but are not designed to demonstrate long-term sustained engraftment of such cells. The patients enrolled in these pre-pivotal trials will have undergone extensive chemotherapy treatment prior to the infusion of cells produced in the Aastrom CPS. Such treatments will have substantially weakened these patients and may have irreparably damaged their hematopoietic systems. Due to these and other factors, it is possible that one or more of these patients may die or suffer severe complications during the course of the current pre-pivotal trials or future trials. For example, in the trials to date, a patient who was in the transplant recovery process died from complications related to the patient's clinical condition that, according to the physician involved, were unrelated to the Aastrom CPS procedure. Further, there can be no assurance that patients receiving cells produced with the Company's technologies and product candidates will demonstrate long-term engraftment in a manner comparable to cells obtained from current stem cell therapy procedures, or at all. The failure to adequately demonstrate the safety or efficacy of the Company's technologies and product candidates, including long-term sustained engraftment, or the death of, or occurrence of severe complications in, one or more patients could substantially delay, or prevent, regulatory approval of such product candidates and have a material adverse effect on the Company's business, financial condition and results of operations.

MANUFACTURING AND SUPPLY UNCERTAINTIES; DEPENDENCE ON THIRD PARTIES

The Company does not operate and has no current intention to operate manufacturing facilities for the production of its product candidates. The Company currently arranges for the manufacture of its product candidates and their components, including certain cytokines, serum and media, with third parties, and expects to continue to do so in the foreseeable future. The Company has entered into collaborative product development and supply agreements with SeaMED Corporation ("SeaMED"), Ethox Corporation ("Ethox") and Anchor Advanced Products Inc., Mid-State Plastics Division ("MSP"), for the collaborative development and manufacture of certain components of the Aastrom CPS and is dependent upon those suppliers to manufacture its products. The Company is also dependent upon Immunex Corporation ("Immunex"), Life Technologies, Inc. and Biowhittaker for the supply of certain cytokines, serum and media to be used in conjunction with the Aastrom CPS. With regard to cytokines that are not commercially available from other sources, Immunex is currently the Company's sole supplier and few alternative supply sources exist. Apart from SeaMED, Ethox, MSP and Immunex, the Company currently does not have contractual commitments from any of these manufacturers or suppliers. There can be no assurance that the Company's supply of such key cytokines, components and other materials will not become limited, be interrupted or become restricted to certain geographic regions. Additionally, there can be no assurance that the Company will not require additional cytokines, components and other materials to manufacture, use or market its product candidates, or that necessary key components will be available for use on a sustained basis, if at all, by the Company in the markets in which it intends to sell its products. There can also be no assurance that the Company will be able to obtain alternative components and materials from other manufacturers of acceptable quality, or on terms or in quantities acceptable to the Company or that the Company will not require additional cytokines, components and other materials to manufacture or use its product candidates. In the event that any of the Company's key manufacturers or suppliers fail to perform their respective obligations or the Company's supply of such cytokines, components or other

materials becomes limited or interrupted, the Company would not be able to market its product candidates on a timely and cost-competitive basis, if at all, which would have a material adverse effect on the Company's business, financial condition and results of operations.

Certain of the compounds used by the Company in its current stem cell expansion process involve the use of animal-derived products. The availability of these compounds for clinical and commercial use may become limited by suppliers or restricted by regulatory authorities, which may impose a potential competitive disadvantage for the Company's products compared to competing products and procedures. There can be no assurance that the Company will not experience delays or disadvantages related to the future availability of such materials. Any restriction on the use of such materials could have a material adverse effect on the Company's business, financial condition and results of operations, and there can be no assurance that the Company will be able to develop or obtain alternative compounds.

Like SeaMED, Ethox and MSP, other suppliers would need to meet FDA manufacturing requirements and undergo rigorous facility and process validation tests required by federal and state regulatory authorities. Any significant delays in the completion and validation of such facilities could have a material adverse effect on the ability of the Company to complete clinical trials and to market its products on a timely and profitable basis, which in turn would have a material adverse effect on the Company's business, financial condition and results of operations.

There can also be no assurance that the Company will be able to continue its present arrangements with its suppliers, supplement existing relationships or establish new relationships or that the Company will be able to identify and obtain the ancillary materials that are necessary to develop its product candidates in the future. The Company's dependence upon third parties for the supply and manufacture of such items could adversely affect the Company's ability to develop and deliver commercially feasible products on a timely and competitive basis.

HISTORY OF OPERATING LOSSES; ANTICIPATION OF FUTURE LOSSES

The Company is a development stage company and there can be no assurance that its product applications for cell therapy will be successful. The Company has not yet completed the development and clinical trials of any of its product candidates and, accordingly, has not yet begun to generate revenues from the commercialization of any of its product candidates. Aastrom was incorporated in 1989 and has experienced substantial operating losses since inception. As of September 30, 1997, the Company has incurred net operating losses totaling approximately $44.9 million. Such losses have resulted principally from costs incurred in the research and development of the Company's cell culture technologies and the Aastrom CPS, general and administrative expenses, and the prosecution of patent applications. The Company expects to incur significant and increasing operating losses for at least the next several years, primarily owing to the expansion of its research and development programs, including preclinical studies and clinical trials. The amount of future losses and when, if ever, the Company will achieve profitability, are uncertain. The Company's ability to achieve profitability will depend, among other things, on successfully completing the development of its product candidates, obtaining regulatory approvals, establishing manufacturing, sales and marketing arrangements with third parties, and raising sufficient funds to finance its activities. No assurance can be given that the Company's product development efforts will be successful, that required regulatory approvals will be obtained, that any of the Company's product candidates will be manufactured at a competitive cost and will be of acceptable quality, or that the Company will be able to achieve profitability or that profitability, if achieved, can be sustained.

LIMITED SALES AND MARKETING CAPABILITIES; DEPENDENCE ON COLLABORATIVE RELATIONSHIPS

The Company has limited internal sales, marketing and distribution capabilities. If any of the Company's product candidates are successfully developed and the necessary regulatory approvals are obtained, the Company intends to market such products through collaborative relationships with companies that have established sales, marketing and distribution capabilities. The Company has established a strategic alliance with Cobe Laboratories, Inc. and Cobe BCT, Inc. (collectively, "Cobe") for the worldwide distribution of the Aastrom CPS for stem cell

therapy and related uses. Cobe has the right to terminate its Distribution Agreement with the Company upon twelve months notice upon a change of control of the Company, other than to Cobe, or at any time after December 31, 1997, if Cobe determines that commercialization of the Aastrom CPS for stem cell therapy on or prior to December 31, 1998 is unlikely. See "--Consequences of Cobe Relationship."

The amount and timing of resources that Cobe commits to its strategic alliance activities with the Company are, to a significant extent, outside of the control of the Company. There can be no assurance that Cobe will pursue the marketing and distribution of the Company's products, continue to perform its obligations under its agreements with the Company or that the Company's strategic alliance with Cobe will result in the successful commercialization and distribution of the Company's technologies and product candidates. There can also be no assurance that Cobe will be successful in its efforts to market and distribute the Company's products for stem cell therapy. The suspension or termination of the Company's strategic alliance with Cobe or the failure of the strategic alliance to be successful would have a material adverse effect on the Company's business, financial condition and results of operations.

Subject to the contractual requirements of the Cobe relationship, the Company will seek to enter into other agreements relating to the development and marketing of product candidates and in connection with such agreements may rely upon corporate partners to conduct clinical trials, seek regulatory approvals for, manufacture and market its potential products. There can be no assurance that the Company will be able to establish collaborative relationships for the development or marketing of the Company's product candidates on acceptable terms, if at all, or, if such relationships are established, that they will be successful or sustained on a long-term basis. The inability of the Company to establish such collaborative relationships may require the Company to curtail its development or marketing activities with regard to its potential products which would have a material adverse effect on the Company's business, financial condition and results of operations.

FUTURE CAPITAL NEEDS; UNCERTAINTY OF ADDITIONAL FUNDING

To date, Aastrom has funded its operations primarily through the sale of equity securities and corporate collaborations. The Company anticipates that the net proceeds of this offering, together with the Company's available cash and expected interest income thereon, will be sufficient to finance the development and manufacture of the Aastrom CPS for use in clinical trials, expanded clinical trials, other research and development and working capital and other corporate requirements until late 1998. This estimate is based on certain assumptions which could be negatively impacted by the matters discussed under this heading and elsewhere under the caption "Risk Factors." In order to grow and expand its business, and to introduce its product candidates into the marketplace, the Company will need, among other things, to raise additional funds. The development of the Company's products for the expansion of additional cell types will require the Company to raise additional funds or to seek collaborative partners, or both, to finance related research and development activities.

The Company's future capital requirements will depend upon many factors, including, but not limited to, continued scientific progress in its research and development programs, costs and timing of conducting clinical trials and seeking regulatory approvals and patent prosecutions, competing technological and market developments, possible changes in existing collaborative relationships, the ability of the Company to establish additional collaborative relationships, and effective commercialization activities and facilities expansions if and as required. Because of the Company's potential long-term funding requirements, it may attempt to access the public or private equity markets if and whenever conditions are favorable, even if it does not have an immediate need for additional capital at that time. There can be no assurance that any such additional funding will be available to the Company on reasonable terms, or at all. If adequate funds are not available, the Company may be required to delay or terminate research and development programs, curtail capital expenditures, and reduce business development and other operating activities. If the Company is not successful in finding, entering into and maintaining arrangements with collaborative partners, its development efforts could be delayed. Furthermore, there can be no assurance that the Company will be able to implement collaborative development agreements under acceptable terms, if at all. Any of the foregoing capital constraints would have a material adverse effect on

the Company's business, financial condition and results of operations. See "Management's Discussion and Analysis of Financial Condition and Results of Operations--Liquidity and Capital Resources."

UNCERTAINTY OF REGULATORY APPROVAL; EXTENSIVE GOVERNMENT REGULATION

The Company's research and development activities, preclinical studies, clinical trials, and the anticipated manufacturing and marketing of its product candidates are subject to extensive regulation by the FDA and other regulatory authorities in the United States. These activities are also regulated in other countries where the Company intends to test and market its product candidates. The approval of the FDA will be required before any commercial sales of the Company's product candidates may commence in the United States. Additionally, the Company will be required to obtain approvals from foreign regulatory authorities before international sales may commence.

The Company's products are potentially subject to regulation as medical devices under the Federal Food, Drug, and Cosmetic Act, or as biological products under the Public Health Service Act, or both. Different regulatory requirements may apply to the Company's products depending on how they are categorized by the FDA under these laws. To date, the FDA has indicated that it intends to regulate the Aastrom CPS for stem cell therapy as a Class III medical device through the Center for Biologics Evaluation and Research. However, there can be no assurance that the FDA will ultimately regulate the Aastrom CPS for stem cell therapy as a medical device or that regulatory approval for such product will be obtained in a timely fashion or at all.

Further, it is unclear whether the FDA will separately regulate the cell therapies derived from the Aastrom CPS. The FDA is in the process of developing its requirements with respect to somatic cell therapy and gene cell therapy products, and recently proposed a new type of license for autologous cells manipulated ex vivo and intended for structural repair or reconstruction; autologous cells are cells obtained from, and administered to, the same patient. This proposal may indicate that the FDA will impose a similar approval requirement on other types of autologous cellular therapies, such as autologous cells for stem cell therapy. Any such additional regulatory or approval requirement could significantly delay the introduction of the Company's product candidates to the market, and have a material adverse effect on the Company's business, financial condition and results of operations. Until the FDA issues definitive regulations covering the Company's product candidates, the regulatory guidelines or requirements for approval of such product candidates will continue to be subject to significant uncertainty.

Before marketing, the Aastrom CPS or other product candidates developed by the Company must undergo an extensive regulatory approval process. The regulatory process, which includes preclinical studies and clinical trials to establish safety and efficacy, takes many years and requires the expenditure of substantial resources. Data obtained from preclinical and clinical activities are susceptible to varying interpretations which could delay, limit or prevent FDA approval. In addition, delays or rejections may be encountered based upon changes in FDA policy for medical product approvals during the period of product development and FDA regulatory review of applications submitted by the Company for product approval. Similar delays may also be encountered in foreign countries. There can be no assurance that, even after the expenditures of substantial time and financial resources, regulatory approval will be obtained for any products developed by the Company. Moreover, if regulatory approval of a product is obtained, such approval may be subject to limitations on the indicated uses for which it may be marketed. Further, even if such regulatory approval is obtained, a marketed product, its manufacturer and its manufacturing facilities are subject to continual review and periodic inspections by the FDA, and later discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on such product or manufacturer, including a 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. Further, additional government regulation may be established which could prevent or delay regulatory approval of the Company's products.

The Company believes that the Aastrom CPS will be regulated in Europe as a Class IIb medical device, under the authority of the new Medical Device Directives ("MDD") being implemented by European Union

("EU") member countries. In order for the Company to market its products in Europe, it must obtain a CE Mark from a Notified Body to certify that the Company and its operations comply with certain minimum quality standards and compliance procedures, or, alternatively, that its manufactured products meet a more limited set of requirements. There can be no assurance that the Company and its suppliers will be able to meet these minimum requirements, or, if met, that the Company and its suppliers will be able to maintain such compliance. The result of such non-compliance would have a material adverse effect on the Company's business, financial condition and results of operations. There can be no assurance, however, that the Aastrom CPS will be regulated in Europe as a Class IIb medical device, and, if the Aastrom CPS is not so regulated, the Company could be forced to obtain additional regulatory approvals and could be subjected to additional regulatory requirements and uncertainty, which would have a material adverse effect on the Company's business, financial condition and results of operations. See "Business--Government Regulation."

CONSEQUENCES OF COBE RELATIONSHIP

Cobe is the largest single shareholder of the Company, beneficially owning approximately 20.8% of the outstanding Common Stock following the completion of this offering (assuming the conversion of the 2,200,000 shares of Preferred Stock offered hereby into Common Stock). In addition, Cobe has certain preemptive rights to maintain its relative percentage ownership and voting interest in the Company. Cobe also has an option, until February 2000, to purchase from the Company an amount of Common Stock equal to 30% of the Company's fully diluted shares after the exercise of such option, at a purchase price equal to 120% of the public market trading price of the Company's Common Stock. If such option is exercised, Cobe would significantly increase its ownership interest in the Company and, as a consequence of such share ownership, obtain effective control of the Company. Such effective control would include the ability to influence the outcome of shareholder votes, including votes concerning the election of directors, the amendment of provisions of the Company's Restated Articles of Incorporation or Bylaws, and the approval of mergers and other significant transactions. Cobe also has been granted a "right of first negotiation" in the event that the Company determines to sell all, or any material portion, of its assets to another company or to merge with another company. Furthermore, the Company has agreed to use reasonable and good faith efforts to cause a nominee designated by Cobe to be elected to the Board of Directors for as long as Cobe owns at least 15% of the outstanding Common Stock. In addition, Edward C. Wood, Jr., the President of Cobe BCT, is a director of the Company. The agreements establishing the Company's relationship with Cobe provide the Company with an option (the "Put Option") to require Cobe to purchase the lesser of 20%, or $5,000,000, in an initial public offering ("IPO") or a private offering meeting certain minimum requirements. In the event that the Company exercises the Put Option, Cobe then has the option to purchase up to 40% of that offering. While the Put Option was not exercised by the Company in connection with the IPO, Cobe voluntarily elected to purchase an additional 714,200 shares of Common Stock in the IPO, for an aggregate purchase price of approximately $5,000,000. The Put Option does not apply to any public offerings, including this offering. The Company and Cobe are evaluating whether or not the Put Option remains in effect as to any future private offerings of the Company's equity securities. The existence of the foregoing rights or the exercise of such control by Cobe could have the effect of delaying, deterring or preventing certain takeovers or changes in control of the management of the Company, including transactions in which shareholders might otherwise receive a premium for their shares over then current market prices. See "Description of Capital Stock--Rights of Cobe."

COMPETITION AND TECHNOLOGICAL CHANGE

The Company is engaged in the development of medical products and processes which will face competition in a marketplace characterized by rapid technological change. Many of the Company's competitors have significantly greater resources than the Company, and have developed and may develop product candidates and processes that directly compete with the Company's products. Moreover, competitors that are able to achieve patent protection, obtain regulatory approvals and commence commercial sales of their products before the Company, and competitors that have already done so, may enjoy a significant competitive advantage. The Company's product development efforts are primarily directed toward obtaining regulatory approval to market

the Aastrom CPS for stem cell therapy. That market is currently dominated by the bone marrow harvest and PBPC collection methods. The Company's clinical data, although early, suggests that cells expanded in the Aastrom CPS using its current process will enable hematopoietic recovery within the time frames currently achieved by bone marrow harvest, however, neutrophil and platelet recovery times may be slower than with PBPC collection methods. The Company is evaluating techniques and methods to optimize the cells produced in the Aastrom CPS to reduce the recovery time of neutrophils and platelets in patients. There can be no assurance that if such procedure optimization does not lead to recovery times equal to or faster than those of PBPC collection methods, such outcome would not have a material adverse effect on the Company's business, financial condition and results of operations. In addition, the bone marrow harvest and PBPC collection methods have been widely practiced for a number of years and, recently, the patient costs associated with these procedures have begun to decline. There can be no assurance that the Aastrom CPS method, if approved for marketing, will prove to be competitive with these established collection methods on the basis of hematopoietic recovery time, cost or otherwise. The Company also is aware of certain other products manufactured or under development by competitors that are used for the prevention or treatment of certain diseases and health conditions which the Company has targeted for product development. In particular, the Company is aware that competitors such as Amgen, Inc., CellPro, Incorporated, Novartis, A.G., Baxter Healthcare Corp. and Rhone-Poulenc Rorer Inc. ("RPR") are in advanced stages of development of technologies and products for use in stem cell therapy and other market applications currently being pursued by the Company. In addition, Cobe, a significant shareholder of the Company, is a market leader in the blood cell processing products industry and, accordingly, a potential competitor of the Company. There can be no assurance that developments by others will not render the Company's product candidates or technologies obsolete or noncompetitive, that the Company will be able to keep pace with new technological developments or that the Company's product candidates will be able to supplant established products and methodologies in the therapeutic areas that are targeted by the Company. The foregoing factors could have a material adverse effect on the Company's business, financial condition and results of operations.

UNCERTAINTY REGARDING PATENTS AND PROPRIETARY RIGHTS

Aastrom's success depends in part on its ability, and the ability of its licensors, to obtain patent protection for its products and processes, preserve its trade secrets, defend and enforce its rights against infringement and operate without infringing the proprietary rights of third parties, both in the United States and in other countries. The validity and breadth of claims in medical technology patents involve complex legal and factual questions and, therefore, may be highly uncertain. No assurance can be given that any patents based on pending patent applications or any future patent applications of the Company or its licensors will be issued, that the scope of any patent protection will exclude competitors or provide competitive advantages to the Company, that any of the patents that have been or may be issued to the Company or its licensors will be held valid if subsequently challenged or that others will not claim rights in or ownership of the patents and other proprietary rights held or licensed by the Company. Furthermore, there can be no assurance that others have not developed or will not develop similar products, duplicate any of the Company's products or design around any patents that have been or may be issued to the Company or its licensors. Since patent applications in the United States are maintained in secrecy until patents issue, the Company also cannot be certain that others did not first file applications for inventions covered by the Company's and its licensors' pending patent applications, nor can the Company be certain that it will not infringe any patents that may issue to others on such applications. The Company relies on certain licenses granted by the University of Michigan and Dr. Cremonese for the majority of its patent rights. If the Company breaches such agreements or otherwise fails to comply with such agreements, or if such agreements expire or are otherwise terminated, the Company may lose its rights under the patents held by the University of Michigan and Dr. Cremonese, which would have a material adverse effect on the Company's business, financial condition and results of operation. See "Business--Patents and Proprietary Rights--Research and License Agreements." The Company also relies on trade secrets and unpatentable know-how which it seeks to protect, in part, by confidentiality agreements with its employees, consultants, suppliers and licensees. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for any breach, or that the Company's trade secrets or unpatentable know-how will not otherwise become known or be independently developed by competitors.

The Company's success will also depend in part on its ability to develop commercially viable products without infringing the proprietary rights of others. The Company has not conducted freedom of use patent searches and no assurance can be given that patents do not exist or could not be filed which would have an adverse effect on the Company's ability to market its products or maintain its competitive position with respect to its products. If the Company's technology components, devices, designs, products, processes or other subject matter are claimed under other existing United States or foreign patents or are otherwise protected by third party proprietary rights, the Company may be subject to infringement actions. In such event, the Company may challenge the validity of such patents or other proprietary rights or be required to obtain licenses from such companies in order to develop, manufacture or market its products. There can be no assurance that the Company would be able to obtain such licenses or that such licenses, if available, could be obtained on commercially reasonable terms. Furthermore, the failure to either develop a commercially viable alternative or obtain such licenses could result in delays in marketing the Company's proposed products or the inability to proceed with the development, manufacture or sale of products requiring such licenses, which could have a material adverse effect on the Company's business, financial condition and results of operations. If the Company is required to defend itself against charges of patent infringement or to protect its own proprietary rights against third parties, substantial costs will be incurred regardless of whether the Company is successful. Such proceedings are typically protracted with no certainty of success. An adverse outcome could subject the Company to significant liabilities to third parties, and force the Company to curtail or cease its development and sale of its products and processes. See "Business--Patents and Proprietary Rights."

NO ASSURANCE OF THIRD PARTY REIMBURSEMENT

The Company's ability to successfully commercialize its product candidates will depend in part on the extent to which payment for the Company's products and related treatments will be available from government healthcare programs, such as Medicare and Medicaid, as well as private health insurers, health maintenance organizations and other third party payors. Government and other third-party payors are increasingly attempting to contain health care costs, in part by challenging the price of medical products and services. Reimbursement by third-party payors depends on a number of factors, including the payor's determination that use of the product is safe and effective, not experimental or investigational, medically necessary, appropriate for the specific patient and cost-effective. Since reimbursement approval is required from each payor individually, seeking such approvals is a time-consuming and costly process which will require the Company to provide scientific and clinical support for the use of each of the Company's products to each payor separately. Significant uncertainty exists as to the payment status of newly approved medical products, and there can be no assurance that adequate third-party payments will be available to enable the Company to establish or maintain price levels sufficient to realize an appropriate return on its investment in product development. If adequate payment levels are not provided by government and third-party payors for use of the Company's products, the market acceptance of those products will be adversely affected.

There can be no assurance that reimbursement in the United States or foreign countries will be available for any of the Company's product candidates, that any reimbursement granted will be maintained, or that limits on reimbursement available from third-party payors will not reduce the demand for, or negatively affect the price of, the Company's products. The unavailability or inadequacy of third-party reimbursement for the Company's product candidates would have a material adverse effect on the Company. Finally, the Company is unable to forecast what additional legislation or regulation relating to the healthcare industry or third-party coverage and reimbursement may be enacted in the future, or what effect such legislation or regulation would have on the Company's business.

HAZARDOUS MATERIALS

The Company's research and development activities involve the controlled use of hazardous materials, chemicals and various radioactive compounds. The Company is subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste

products. In the event of any contamination or injury from these materials, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. Furthermore, the failure to comply with current or future regulations could result in the imposition of substantial fines against the Company, suspension of production, alteration of its manufacturing processes or cessation of operations. There can be no assurance that the Company will not be required to incur significant costs to comply with any such laws and regulations in the future, or that such laws or regulations will not have a material adverse effect on the Company's business, financial condition and results of operations. Any failure by the Company to control the use, disposal, removal or storage of, or to adequately restrict the discharge of, or assist in the cleanup of, hazardous chemicals or hazardous, infectious or toxic substances could subject the Company to significant liabilities, including joint and several liability under certain statutes. The imposition of such liabilities would have a material adverse effect on the Company's business, financial condition and results of operations.

POTENTIAL PRODUCT LIABILITY; AVAILABILITY OF INSURANCE

The Company is, and will continue to be, subject to the risk of product liability claims alleging that the use of its products has adverse effects on patients. This risk exists for product candidates tested in human clinical trials as well as products that are sold commercially, if any. Further, given the medical conditions for which the Aastrom CPS is expected to be utilized, any product liability claim could entail substantial compensatory and punitive damages. The assertion of product liability claims against the Company could result in a substantial cost to, and diversion of efforts by, the Company. There can be no assurance that the Company would prevail in any such litigation or that product liability claims, if made, would not result in a recall of the Company's products or a change in the indications for which they may be used. The Company maintains product liability insurance coverage up to an aggregate of $5,000,000 for claims arising from the use of its product candidates in clinical trials. There can be no assurance that the Company will be able to maintain such insurance or obtain product liability insurance in the future to cover any of its product candidates which are commercialized or that such existing or any future insurance and the resources of the Company would be sufficient to satisfy any liability resulting from product liability claims. Consequently, a product liability claim or other claim with respect to uninsured or underinsured liabilities could have a material adverse effect on the Company's business, financial condition and results of operations.

DEPENDENCE ON KEY PERSONNEL

The success of the Company depends in large part upon the Company's ability to attract and retain highly qualified scientific and management personnel. The Company faces competition for such personnel from other companies, research and academic institutions and other entities. There can be no assurance that the Company will be successful in hiring or retaining key personnel. See "Business--Employees" and "Management."

SHARES ELIGIBLE FOR FUTURE SALE

Sales of substantial amounts of Common Stock in the public market following this offering could adversely affect the prevailing market price of the Common Stock and the Company's ability to raise capital in the future. Upon completion of this offering, the Company will have a total of 13,266,926 shares of Common Stock outstanding, based upon the number of shares outstanding as of October 31, 1997, all of which are eligible for sale in the public market, subject in some cases to certain volume restrictions and other conditions imposed by Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"). In addition, the 2,200,000 shares of Common Stock issuable upon conversion of the Preferred Stock will also be freely tradeable. However, 6,161,496 outstanding shares of Common Stock are subject to lock-up agreements expiring 90 days following the date of this Prospectus. Such agreements provide that Cowen & Company may, in its sole discretion and at any time without notice, release all or a portion of the shares subject to these lock-up agreements. Certain existing shareholders, as well as the purchasers of the Preferred Stock in this offering, have certain rights to include shares of Common Stock owned by them in future registrations by the Company for the sale of Common Stock or to request that the Company register their shares under the Securities Act. See "Description of Capital Stock--Registration Rights," "Shares Eligible for Future Sale" and "Plan of Distribution."

CONTROL BY EXISTING MANAGEMENT AND SHAREHOLDERS

Upon completion of this offering, the Company's directors, executive officers, and certain principal shareholders, including Cobe, affiliated with members of the Board of Directors and their affiliates will beneficially own approximately 31.0% of the outstanding shares of Common Stock (assuming the conversion of the shares of Preferred Stock offered hereby into Common Stock). Accordingly, such shareholders, acting together, may have the ability to exert significant influence over the election of the Company's Board of Directors and other matters submitted to the Company's shareholders for approval. The voting power of these holders may discourage or prevent certain takeovers or changes in control of the management of the Company unless the terms are approved by such holders. See "Principal Shareholders."

POSSIBLE STOCK PRICE VOLATILITY

The price of the Company's Common Stock has experienced significant volatility. The trading price of the Common Stock and the price at which the Company may sell securities in the future could be subject to wide fluctuations in response to announcements of clinical results, research activities, technological innovations or new products by the Company or competitors, changes in government regulation, developments concerning proprietary rights, variations in the Company's operating results, announcements by the Company of regulatory developments, litigation, disputes concerning patents or proprietary rights or public concern regarding the safety, efficacy or other implications of the products or methodologies to be developed by the Company or its collaborators or enabled by the Company's technology, general market conditions, the liquidity of the Company or its ability to raise additional funds, and other factors or events. In addition, the stock market has experienced extreme fluctuations in price and volume. This volatility has significantly affected the market prices for securities of emerging biotechnology companies for reasons frequently unrelated to or disproportionate to the operating performance of the specific companies. These market fluctuations, as well as shortfalls in revenue or earnings as compared with public market analysts' expectations, changes in such analysts' recommendations or projections and fluctuations in the stock markets generally may adversely affect the market price of the Common Stock. In addition, since the Company's initial public offering in February 1997, the average daily trading volume of the Common Stock on the Nasdaq National Market has generally been relatively low. There can be no assurance that a more active trading market will develop in the future.

ANTI-TAKEOVER EFFECT OF CHARTER AND BYLAW PROVISIONS AND MICHIGAN LAW

The Company's Restated Articles of Incorporation authorize the Board of Directors to issue, without shareholder approval, an additional 2,800,000 shares of preferred stock with voting, conversion, and other rights and preferences that could materially and adversely affect the voting power or other rights of the holders of Common Stock. The issuance of preferred stock or of rights to purchase preferred stock could be used to discourage an unsolicited acquisition proposal. The Company's Bylaws contain procedural restrictions on director nominations by shareholders and the submission of other proposals for consideration at shareholder meetings. The possible issuance of Preferred Stock and the procedures required for director nominations and shareholder proposals could discourage a proxy contest, make more difficult the acquisition of a substantial block of Common Stock, or limit the price that investors might be willing to pay in the future for shares of Common Stock. The Company's Restated Articles of Incorporation eliminate the right of shareholders to act without a meeting, do not provide for cumulative voting in the election of directors and provide that the holders of at least two-thirds of the outstanding shares of Common Stock must approve certain transactions resulting in a change of control of the Company. In addition, certain provisions of Michigan law applicable to the Company, including, but not limited to, provisions requiring class or series votes in certain circumstances with respect to proposed business combinations, could also delay or make more difficult a merger, tender offer or proxy contest involving the Company. See "Description of Capital Stock."

IMMEDIATE AND SUBSTANTIAL DILUTION; ABSENCE OF DIVIDENDS

Upon conversion of their shares of Preferred Stock to Common Stock, purchasers of the Preferred Stock in this offering will experience immediate and substantial book value dilution. Additional dilution is likely to occur upon the exercise of outstanding options or warrants granted by the Company. The Company has never paid cash dividends and does not anticipate paying any cash dividends in the foreseeable future. See "Dilution" and "Dividend Policy."

FORWARD-LOOKING STATEMENTS

This Prospectus contains certain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, including, but not limited to, statements regarding: uncertainties related to product development and marketability; uncertainties related to clinical trials; manufacturing and supply uncertainties and dependence on third parties; history of operating losses and anticipation of future losses; limited sales and marketing capabilities and dependence on collaborative relationships; future capital needs and uncertainty of additional funding; uncertainty of regulatory approval and extensive government regulation; consequences of Cobe relationship; competition and technological change; uncertainty regarding patents and proprietary rights; no assurance of third party reimbursement; hazardous materials; and potential product liability and availability of insurance. These statements are subject to risks and uncertainties, including those set forth under this caption, and actual results could differ materially from those expressed or implied in these statements. All forward-looking statements included in this Prospectus are made as of the date hereof, and the Company assumes no obligation to update any such forward-looking statement or reason why actual results might differ.

THE COMPANY

Aastrom was incorporated in Michigan in March 1989 under the name Ann Arbor Stromal, Inc. In 1991, the Company changed its name to Aastrom Biosciences, Inc. The Company's principal executive offices are located at 24 Frank Lloyd Wright Drive, P.O. Box 376, Ann Arbor, Michigan 48106, and its telephone number is (313) 930-5555. Aastrom(TM) and the Company's stylized logo are trademarks of the Company. Leukine and Neupogen are registered trademarks of Immunex Corporation and Amgen, Inc., respectively.

USE OF PROCEEDS

The net proceeds to the Company from the sale of the 2,200,000 shares of Preferred Stock offered hereby are estimated to be $9,990,000 at the public offering price of $5.00 per share and after deducting commissions and estimated offering expenses payable by the Company.

The Company currently intends to use approximately $5,000,000 of the net proceeds from the offering to fund product and clinical development activities for the Aastrom CPS, including pre-pivotal and pivotal clinical trials, and approximately $3,000,000 for other research activities, with the remaining amount being used for working capital and other general corporate purposes, including scheduled repayments of obligations under equipment leases. The Company has $147,000 of outstanding equipment lease commitments as of September 30, 1997, with final payments due between December 1997 and May 1999 that bear interest ranging from 9.7% to 12.1%.

Based on its current operating plan, the Company anticipates that the net proceeds of this offering, together with the Company's available cash and expected interest income thereon, should be sufficient to finance the development and manufacture of the Aastrom CPS for use in clinical trials, expanded clinical trials, other research and development and working capital and other corporate requirements until late 1998. This estimate is based on certain assumptions which could be negatively impacted by the matters discussed in "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations--Liquidity and Capital Resources." Pending such uses, the net proceeds will be invested in short-term, interest bearing investment grade securities.

PRICE RANGE OF COMMON STOCK

The Company effected an initial public offering of its Common Stock during February 1997 at a price of $7.00 per share. Commencing on February 4, 1997, the Company's Common Stock has been quoted on the Nasdaq National Market under the symbol "ASTM." The Preferred Stock will not be listed on any market or exchange, but the shares of Common Stock issuable upon conversion of the Preferred Stock will be approved for listing on the Nasdaq National Market upon conversion and delivery of the Preferred Stock. The following table sets forth, for the periods indicated, the high and low sale prices per share of the Common Stock as reported on the Nasdaq National Market.

	HIGH	LOW
YEAR ENDED JUNE 30, 1997		
3rd Quarter (from February 4, 1997)	$ 7 5/8	$ 5 3/4
4th Quarter	8 1/2	3 1/2
YEAR ENDING JUNE 30, 1998		
1st Quarter	9 15/16	3 1/4
2nd Quarter (through November 24, 1997)	8 1/8	4 3/4

On November 24, 1997, the last reported sale price of the Common Stock on the Nasdaq National Market was $7.00 per share. As of September 30, 1997, there were approximately 125 shareholders of record of the Common Stock.

DIVIDEND POLICY

The Company has never declared or paid any cash dividends on its Common Stock and does not anticipate paying such cash dividends in the foreseeable future. Dividends will be payable on the Preferred Stock in cash or in shares of Common Stock, at the Company's option. The Company anticipates that such dividends will be paid in shares of Common Stock. The Company currently anticipates that it will retain all future earnings, if any, for use in the development of its business.

DILUTION

The Company's net tangible book value at September 30, 1997 was approximately $13,006,000, or $.98 per share. Net tangible book value per share represents the amount of the Company's shareholders' equity, less intangible assets, divided by 13,272,674, the number of shares of Common Stock outstanding as of September 30, 1997.

After giving effect to the sale of 2,200,000 shares of Preferred Stock in this offering at the public offering price of $5.00 per share and the conversion of such shares into Common Stock, and after deducting commissions and estimated offering expenses payable by the Company, the net tangible book value of the Company as of September 30, 1997 would have been $22,996,000, or $1.49 per share. This represents an immediate increase in net tangible book value of $.51 per share to existing shareholders and an immediate dilution in net tangible book value of $3.51 per share to purchasers of Preferred Stock in this offering, as illustrated in the following table:

Public offering price per share		$5.00
Net tangible book value per share as of September 30, 1997	$.98	
Increase per share attributable to new investors	.51	
Net tangible book value per share after this offering		1.49
Dilution per share to new investors		$3.51

The foregoing excludes (i) options and warrants outstanding as of September 30, 1997 to purchase 1,175,892 shares of Common Stock at a weighted average exercise price of $5.50 per share, (ii) 1,041 shares of Common Stock that were issued subsequent to September 30, 1997 upon the exercise of stock options, and (iii) warrants to purchase 200,000 shares of Common Stock at an exercise price of $7.24 per share that were issued subsequent to September 30, 1997. The foregoing includes 6,789 shares of Common Stock that were canceled subsequent to September 30, 1997 in connection with the repayment of a promissory note and 2,000 shares of Common Stock that, to the Company's knowledge, will be canceled in connection with the repayment of a promissory note. See "Business--Strategic Relationships," "Management--Stock Option and Employee Benefit Plans," "Certain Transactions" and Note 4 of Notes to Financial Statements.

CAPITALIZATION

The following table sets forth the capitalization of the Company (i) as of September 30, 1997, and (ii) as adjusted to reflect the receipt of the estimated net proceeds from the Company's sale of 2,200,000 shares of Preferred Stock in this offering at the public offering price of $5.00 per share. See "Use of Proceeds."

	SEPTEMBER 30, 1997	
	ACTUAL	AS ADJUSTED
Long-term portion of capital lease obligations(1)..	$ 48,000	$ 48,000
Shareholders' equity(2):		
Preferred stock, no par value: 5,000,000 shares authorized; no shares issued and outstanding, actual, and 2,200,000 shares issued and outstanding, as adjusted.....	--	9,990,000
Common stock, no par value: 40,000,000 shares authorized; 13,272,674 shares issued and outstanding, actual and as adjusted; in each case net of shareholder notes and other.....	57,944,000	57,944,000
Deficit accumulated during the development stage.	(44,938,000)	(44,938,000)
Total shareholders' equity.....	13,006,000	22,996,000
Total capitalization.....	$ 13,054,000	$ 23,044,000

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(1)See Note 7 of Notes to Financial Statements.

(2) Excludes options and warrants outstanding as of September 30, 1997 to purchase 1,175,892 shares of Common Stock at a weighted average exercise price of $5.50 per share, (ii) 1,041 shares of Common Stock that were issued subsequent to September 30, 1997 upon the exercise of stock options, and (iii) warrants to purchase 200,000 shares of Common Stock at an exercise price of $7.24 per share that were issued subsequent to September 30, 1997. Includes 6,789 shares of Common Stock that were canceled subsequent to September 30, 1997 in connection with the repayment of a promissory note and 2,000 shares of Common Stock that, to the Company's knowledge, will be canceled in connection with the repayment of a promissory note. See "Business--Strategic Relationships," "Management--Stock Option and Employee Benefit Plans," "Certain Transactions" and Note 4 of Notes to Financial Statements.

SELECTED FINANCIAL DATA

The statement of operations data for the fiscal years ended June 30, 1995, 1996 and 1997 and for the period from Inception to June 30, 1997 and the balance sheet data at June 30, 1996 and 1997, are derived from, and are qualified by reference to, the audited financial statements included elsewhere in the Prospectus and should be read in conjunction with those financial statements and notes thereto. The statement of operations data for the fiscal years ended June 30, 1993 and 1994, and the balance sheet data at June 30, 1993, 1994 and 1995, are derived from audited financial statements not included herein. The information presented below for the three-month periods ended September 30, 1996 and 1997, for the period from Inception to September 30, 1997 and as of September 30, 1997 have been derived from the unaudited financial statements of the Company. In the opinion of the Company's management, the unaudited financial statements have been prepared by the Company on a basis consistent with the Company's audited financial statements and include all adjustments, consisting of only normal recurring accruals, necessary for a fair presentation of the financial position and the results of operations for those periods. Operating results for the three-month period ended September 30, 1997 are not necessarily indicative of the results that will be achieved for the entire year ended June 30, 1998. The data set forth below are qualified by reference to, and should be read in conjunction with, the financial statements and notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	YEAR ENDED JUNE 30,					INCEPTION TO JUNE 30,	THREE MONTHS ENDED SEPTEMBER 30,	
	1993	1994	1995	1996	1997	1997	1996	1997
STATEMENT OF OPERATIONS DATA:								
Revenues:								
Research and development agreements	$ --	$ 49,000	$ 396,000	$ 1,342,000	$ 230,000	$ 2,017,000	$ 195,000	$ 3,000
Grants	784,000	823,000	121,000	267,000	148,000	2,143,000	29,000	13,000
Total revenues	784,000	872,000	517,000	1,609,000	378,000	4,160,000	224,000	16,000
Costs and expenses:								
Research and development	2,600,000	5,627,000	4,889,000	10,075,000	13,357,000	38,432,000	3,160,000	3,243,000
General and administrative	1,153,000	1,565,000	1,558,000	2,067,000	1,953,000	9,042,000	452,000	613,000
Total costs and expenses	3,753,000	7,192,000	6,447,000	12,142,000	15,310,000	47,474,000	3,612,000	3,856,000
Loss from operations	(2,969,000)	(6,320,000)	(5,930,000)	(10,533,000)	(14,932,000)	(43,314,000)	(3,388,000)	(3,840,000)
Other income (expense):								
Interest income	148,000	245,000	279,000	678,000	676,000	2,252,000	126,000	220,000
Interest expense	(26,000)	(65,000)	(66,000)	(62,000)	(32,000)	(251,000)	(11,000)	(5,000)
Net loss	$(2,847,000)	$(6,140,000)	$(5,717,000)	$(9,917,000)	$(14,288,000)	$(41,313,000)	$(3,273,000)	$(3,625,000)
Net loss per share(1)	$ (.52)	$ (.82)	$ (.66)	$ (.98)	$ (1.26)		$ (.32)	$ (.27)
Weighted average number of shares outstanding(1)	5,480,000	7,461,000	8,644,000	10,103,000	11,315,000		10,107,000	13,279,000

	INCEPTION TO SEPTEMBER 30, 1997
STATEMENT OF OPERATIONS DATA:	
Revenues:	
Research and development agreements	$ 2,020,000
Grants	2,156,000
Total revenues	4,176,000
Costs and expenses:	
Research and development	41,675,000

General and administrative...	9,655,000
Total costs and expenses.....	51,330,000
Loss from operations.....	(47,154,000)
Other income (expense):	
Interest income.	2,472,000
Interest expense.....	(256,000)
Net loss.....	$(44,938,000)
Net loss per share(1).....	
Weighted average number of shares outstanding(1)..	

	JUNE 30,					SEPTEMBER 30,
	1993	1994	1995	1996	1997	1997
BALANCE SHEET DATA:						
Cash, cash equivalents and short-term investments.....	$ 3,085,000	$ 6,730,000	$ 11,068,000	$ 10,967,000	$ 17,007,000	$ 13,631,000
Working capital.....	2,744,000	6,187,000	10,319,000	9,851,000	15,600,000	12,113,000
Total assets.....	4,156,000	8,227,000	12,551,000	12,673,000	18,410,000	14,874,000
Long-term capital lease obligations.....	311,000	425,000	412,000	189,000	65,000	48,000
Deficit accumulated during the development stage.....	(5,251,000)	(11,391,000)	(17,108,000)	(27,025,000)	(41,313,000)	(44,938,000)
Total shareholders' equity.....	3,268,000	6,985,000	11,186,000	10,850,000	16,583,000	13,006,000

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(1) See Note 1 of Notes to Financial Statements for information concerning the computation of net loss per share and shares used in computing net loss per share.

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

OVERVIEW

Since its inception, the Company has been in the development stage and engaged in research and product development, conducted principally on its own behalf but also in connection with various collaborative research and development agreements with other entities. The Company does not expect to generate positive cash flows from operations for at least the next several years and, until product sales commence, the Company expects that its revenue sources will continue to be limited to grant revenue, research funding and milestone payments and licensing fees from potential future corporate collaborators. The timing and amount of such future cash payments and revenues, if any, will be subject to significant fluctuations, based in part on the success of the Company's research activities, the receipt of necessary regulatory approvals, the timing of the achievement of certain other milestones and the extent to which associated costs are reimbursed under grant or other arrangements. Substantially all of the Company's revenues from product sales, if any, will be subject to the Company's obligation to make aggregate royalty payments of up to 5% to certain licensors of its technology. Further, under the Company's Distribution Agreement with Cobe, Cobe will perform marketing and distribution activities and in exchange will receive approximately 38% to 42% of the Company's product sales in the area of stem cell therapy, subject to negotiated discounts and volume-based adjustments. Research and development expenses may fluctuate due to the timing of expenditures for the varying stages of the Company's research and clinical development programs. Research and development expenses will increase as product development programs and applications of the Company's products progress through research and development stages. Under the Company's License Agreement with Immunex, annual renewal fees of $1,000,000 are payable in each of the next three fiscal years. Under the Company's Distribution Agreement with Cobe, regulatory approval activities for the Company's products for stem cell therapies outside of the United States will be conducted, and paid for, by Cobe. As a result of these and other factors, the Company's results of operations have fluctuated and are expected to continue to fluctuate significantly from year to year and from quarter to quarter and therefore may not be comparable to or indicative of the result of operations for any future periods.

Over the past several years, the Company's net loss has primarily increased, consistent with the growth in the Company's scope and size of operations. In the near term, the Company plans additional moderate growth in employee headcount necessary to address increasing requirements in the areas of product development, research, clinical and regulatory affairs, quality systems and administration. Assuming capital is available to finance such growth, the Company's operating expenses will continue to increase as a result. At least until such time as the Company enters into arrangements providing research and development funding or initiates product sales, the net loss will continue to increase as well. The Company has never been profitable and does not anticipate having net income for at least the next several years. Through September 30, 1997, the Company had an accumulated deficit of $44,938,000. There can be no assurance that the Company will be able to achieve profitability on a sustained basis, if at all.

This Prospectus contains, in addition to historical information, forward-looking statements that involve risks and uncertainties. The Company's actual results could differ materially from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those discussed under this caption, as well as those discussed under the caption "Risk Factors" and elsewhere in this Prospectus.

RESULTS OF OPERATIONS

THREE MONTHS ENDED SEPTEMBER 30, 1997 AND 1996

Total revenues were $16,000 for three months ended September 30, 1997, compared to $224,000 for the same period in 1996. Revenues in 1996 consist primarily of research and development revenues under the Company's research collaboration with RPR, which ended in September 1996.

Total costs and expenses were $3,856,000 for the three months ended September 30, 1997, compared to $3,612,000 for the same period in 1996. The increase in costs and expenses in 1997 is the result of an increase

in research and development expenses to $3,243,000 in 1997 from $3,160,000 in 1996 and in general and administrative expenses, which increased to $613,000 for the three months ended September 30, 1997 from $452,000 for the same period in 1996.

Interest income was $220,000 for the three months ended September 30, 1997, compared to $126,000 for the same period in 1996. This increase primarily reflects an increase in the level of short-term investments throughout the period in 1997.

The Company's net loss increased to $3,625,000 for the three months ended September 30, 1997, from $3,273,000 for the same period in 1996.

YEARS ENDED JUNE 30, 1997, 1996 AND 1995

Total revenues were $378,000 in 1997, $1,609,000 in 1996 and $517,000 in 1995. Grant revenues decreased to $148,000 in 1997 from $267,000 in 1996 and were $121,000 in 1995, reflecting the timing of grant awards and related research activities, to the extent that such associated costs are reimbursed under the grants. Grant revenues accounted for 39%, 17% and 23% of total revenues for the years ended June 30, 1997, 1996 and 1995, respectively, and are recorded on a cost-reimbursement basis. Revenues from research and development agreements totaled $230,000 in 1997, $1,342,000 in 1996 and $396,000 in 1995, reflecting research funding received by the Company under its collaboration with RPR which commenced in September 1995 and ended in September 1996. Revenues from RPR accounted for 52%, 83% and 48% of such revenue in 1997, 1996 and 1995, respectively.

Total costs and expenses were $15,310,000 in 1997, $12,142,000 in 1996 and $6,447,000 in 1995. The increases in costs and expenses in 1997 and 1996 are primarily the result of increases in research and development expense to $13,357,000 in 1997 from $10,075,000 in 1996 and $4,889,000 in 1995. Research and development expense includes charges of $1,000,000 and $1,500,000 for the years ended June 30, 1997 and 1996, respectively, representing license fee payments pursuant to the Company's supply agreement with Immunex. The increase in research and development expense reflects an increase in research, clinical development and product development activities. General and administrative expenses were $1,953,000 in 1997, $2,067,000 in 1996 and $1,558,000 in 1995. General and administrative expenses, which decreased slightly in 1997 compared to 1996, are expected to increase as a result of increasing finance, legal and other administrative and marketing expenses in support of the Company's increasing product development and research activities.

Interest income was $676,000 in 1997, $678,000 in 1996 and $279,000 in 1995. The fluctuations in interest income are due primarily to corresponding changes in the levels of cash, cash equivalents and short-term investments for such periods. Interest expense was $32,000 in 1997, $62,000 in 1996 and $66,000 in 1995, reflecting decreasing amounts outstanding under capital leases during these periods.

The Company's net loss was $14,288,000 in 1997, $9,917,000 in 1996 and $5,717,000 in 1995. The Company expects to report substantial net losses for at least the next several years.

The Company has not generated any profits to date and therefore has not paid any federal income taxes since inception. At June 30, 1997, the Company's federal tax net operating loss and tax credit carryforwards were $40,420,000 and $971,000, respectively, which will expire from 2004 through 2012, if not utilized. The Company underwent an ownership change in October 1993, which has resulted in a limitation under which the Company can utilize a portion of its federal net operating loss carryforward amounting to $1,153,000 per year. As of June 1997, the portion of the Company's net operating loss that remains subject to this limitation is $2,490,000 and therefore is not expected to ultimately effect the Company's ability to utilize this benefit. If certain changes in ownership should occur again in the future, the Company's ability to utilize its net operating loss and tax credit carryforwards may become subject to further annual limitation.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations since inception primarily through public and private sales of its equity securities, which, from inception through September 30, 1997, have totaled approximately $57,942,000,

and, to a lesser degree, through grant funding, payments received under research agreements and collaborations, interest earned on cash, cash equivalents, and short-term investments, and funding under equipment leasing agreements. These financing sources have historically allowed the Company to maintain adequate levels of cash and other liquid investments. Under the Company's primary equipment leasing agreement, the lessor is granted a security interest in all of the Company's property and assets.

The Company's combined cash, cash equivalents and short-term investments totaled $17,007,000 at June 30, 1997, an increase of $6,040,000 from June 30, 1996. The primary uses of cash, cash equivalents and short-term investments during the year ended June 30, 1997 included $13,214,000 to finance the Company's operations and working capital requirements, $424,000 in capital equipment additions and $223,000 in scheduled debt payments. On February 7, 1997, the Company completed an underwritten initial public offering of 3,000,000 shares of its Common Stock at an offering price of $7.00 per share. On March 5, 1997, the underwriters elected to purchase an additional 250,000 shares of Common Stock pursuant to the underwriters' over-allotment option at a price of $7.00 per share. Proceeds from the offering, net of underwriters' commissions and expenses, were $19,885,000.

The Company's combined cash, cash equivalents and short-term investments totaled $13,631,000 at September 30, 1997, a decrease of $3,376,000 from June 30, 1997. The primary uses of cash, cash equivalents and short-term investments during the three months ended September 30, 1997, included $3,331,000 to finance the Company's operations and working capital requirements, $44,000 in capital equipment additions and $42,000 in scheduled debt payments. The Company plans to continue its policy of investing excess funds in short-term, investment-grade, interest-bearing instruments.

The Company's future cash requirements will depend on many factors, including continued scientific progress in its research and development programs, the scope and results of clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patents, competing technological and market developments and the cost of product commercialization. The Company does not expect to generate a positive cash flow from operations for at least the next several years due to the expected increase in spending for research and development programs and the expected cost of commercializing its product candidates. The Company intends to seek additional funding through research and development agreements with suitable corporate collaborators, grants and through public or private financing transactions. The Company anticipates that the net proceeds of this offering, together with the Company's available cash and expected interest income thereon, will be sufficient to finance the development and manufacture of the Aastrom CPS for use in clinical trials, expanded clinical trials, other research and development and working capital and other corporate requirements until late 1998. This estimate is based on certain assumptions which could be negatively impacted by the matters discussed under this heading and elsewhere under the caption "Risk Factors." The Company expects that its primary sources of capital for the foreseeable future will be through collaborative arrangements and through the public or private sale of its debt or equity securities. There can be no assurance that such collaborative arrangements, or any public or private financing, will be available on acceptable terms, if at all, or can be sustained. Several factors will affect the Company's ability to raise additional funding, including, but not limited to, market volatility of the Company's Common Stock and economic conditions affecting the public markets generally or some portion or all of the technology sector. If adequate funds are not available, the Company may be required to delay, reduce the scope of, or eliminate one or more of its research and development programs, which may have a material adverse effect on the Company's business. See "Risks Factors--Future Capital Needs; Uncertainty of Additional Funding" and Notes to Financial Statements.

RECENT ACCOUNTING PRONOUNCEMENT

During March 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 128, "Earnings Per Share" ("SFAS 128"), which amends the standards for computing earnings per share previously set forth in Accounting Principles Board Opinion No. 15, "Earnings per Share" ("APB 15"). SFAS 128, which will be adopted by the Company for the period ending December 31, 1997, will not have a material effect on the computation of the Company's historical net loss per share amounts.

BUSINESS

OVERVIEW

Aastrom is developing proprietary process technologies and devices for a range of cell therapy applications, including stem cell therapies and selected emerging therapies such as immunotherapy, solid tissue repair and ex vivo gene therapy. The Company's lead product under development, the Aastrom Cell Production System (the "Aastrom CPS"), consists of a clinical cell culture system with single-use cassettes and reagents for use in the rapidly growing cell therapy market. The Company is currently conducting "pre-pivotal" trials at multiple sites in the United States and Europe of the Aastrom CPS for use in stem cell therapy in preparation for pivotal trials in the United States and potential marketing in Europe. The Company believes that the Aastrom CPS procedure will be a cost-effective, less invasive and less time consuming alternative to currently available stem cell collection methods and may enhance the clinical utility of umbilical cord blood ("UCB") transplants by expanding the number of cells available for transplant. For stem cell therapy, the Company has entered into a strategic collaboration for the marketing, distribution and customer service of the Aastrom CPS with Cobe BCT, Inc., a subsidiary of Gambro AB and a leading provider of blood cell processing products.

The Aastrom CPS is designed as a platform product which implements the Company's pioneering stem cell replication technology. The Company believes that the Aastrom CPS can be modified to produce a wide variety of other cell types for selected emerging therapies being developed by other companies and institutions. The Company intends to develop additional strategic collaborations for the development of the Aastrom CPS in certain of these other cell therapy market segments. In ex vivo gene therapy, the Company is also developing the Aastrom Gene Loader, which is being designed to address the production of gene-modified cells.

CELL THERAPY

Cell therapy or ex vivo gene therapy involves the use of human cells to treat a medical disorder. The most common types of cell therapy, blood and platelet transfusions, have been widely used for many decades. More recently, bone marrow-derived and UCB cells have been used to restore the bone marrow and the blood and immune system cells which are damaged by chemotherapy and radiation therapy during the treatment of many types of cancer. Transplantation of these cells is known as stem cell therapy. Other cell therapies have recently been used for generating skin and cartilage tissue, and additional cell therapies are being developed by various companies and researchers to restore immune system cells as well as bone, kidney, liver, vascular and neuronal tissues.

Cell therapies require the collection of cells, either from the patient or a suitably matched donor. These cells are typically processed and stored for administration to the patient. Although cell therapy is being developed for use in an increasing number of diseases, widespread application of new cell therapies remains limited by the difficulties and expense associated with current cell collection and processing procedures. The problems of current cell collection techniques are exemplified in the area of stem cell therapy where the patient or donor undergoes invasive, time-consuming and costly procedures to collect the large volume of cells currently required for effective treatment. The Company believes an alternative to collecting the required therapeutic dose of cells is to grow these cells ex vivo from a small starting volume. However, ex vivo cell expansion, when biologically possible, has typically required costly techniques, facilities and operations to comply with FDA current good manufacturing practices ("cGMP"), which are not generally available in hospitals. As a result, cells needed for such therapies often require specialized cell production facilities which use labor-intensive, manual cell culture techniques.

In ex vivo gene therapy, genes are introduced into target cells in order to selectively correct or modulate disease conditions, or to modify cells for production of a therapeutic protein. The Company believes that the successful practice of ex vivo gene therapy will require the development of processes and products for the reliable, high-efficiency transfer of genes into cells and a means to produce the necessary dose of the genetically modified cells under cGMP conditions.

STEM CELL THERAPY

Stem cell therapy is used to treat cancer patients who undergo chemotherapy or radiation therapy at dose levels that are toxic to the hematopoietic system, which is comprised of the bone marrow and the cells of the blood and immune systems. The objective of stem cell therapy is to restore the hematopoietic system via the infusion and subsequent engraftment of healthy cells to replace bone marrow and result in the rapid recovery of neutrophils and platelets that have been destroyed by chemotherapy and radiation therapy. Stem cell therapy reduces the risk of life-threatening infections and bleeding episodes following cancer treatments. In order to treat many cancers, high intensity chemotherapy or radiation is often required, which may severely destroy ("myeloablation") or partially destroy ("myelosuppression") the patient's hematopoietic system.

Cells required for effective stem cell therapy include stem cells, to replenish depleted bone marrow and provide a long-term ongoing source of the multilineage progenitor cells of the blood and immune systems, and early and late stage hematopoietic progenitor cells, to provide for rapid neutrophil and platelet recoveries. Stromal accessory cells are believed to further augment the growth of bone marrow. In the adult, all of these cell types originate in the bone marrow. These cells are currently collected from the donor or patient directly through multiple syringe aspirations under anesthesia, known as bone marrow collection, or through blood apheresis following treatment with drugs which cause cells to be released or mobilized from the bone marrow into the blood. This latter technique is known as a peripheral blood progenitor cell ("PBPC") collection. See "--Current Stem Cell Collection Methods."

Recently, it has been demonstrated that the blood cells found in the umbilical cord of newborn infants include cells effective for stem cell therapy. This source of cells is being explored by physicians as a significant new development in stem cell therapy, but is currently limited by difficulties in obtaining sufficient quantities of these cells and by prolonged engraftment times for the cells once transplanted into the patient.

Once collected, the stem cell mixture is infused intravenously and the stem and stromal accessory cells migrate into the bone cavity where they engraft to form a new marrow. The hematopoietic progenitor cell components of the cell mixture provide early restoration of circulating white blood cells and platelets. The replenished bone marrow will normally provide long-term hematopoietic function, but complete restoration of bone marrow may take years following myeloablative cancer therapy. When the patient's hematopoietic system is malignant, such as in the case of leukemia, cells from a suitable donor are generally required in order to avoid reintroducing the disease during cell infusion. Such donor derived transplants are termed "allogeneic" transplants. Procedures using cells derived from the patient are termed "autologous" transplants.

STEM CELL THERAPY MARKET OPPORTUNITY

The benefits of stem cell therapy in the treatment of cancer patients have been well established over the past two decades. Stem cell therapy, in the form of bone marrow transplantation, was originally used in patients who had received treatment for blood and bone marrow cancers such as leukemia, and genetic diseases of the blood. However, because stem cell therapy has been shown to promote the rapid recovery of hematopoietic function, it is now being increasingly used to enable patients with other forms of cancer to receive high dose or multicycle chemotherapy and radiation treatments. These high-intensity therapies have a greater probability of eradicating dose-sensitive cancers but, because of their hematopoietic toxicity, cannot generally be given without stem cell therapy. As a result, some patients are treated with lower and less effective doses, and fewer cycles of therapy than might otherwise be used.

According to an industry source, approximately 32,000 stem cell therapy procedures were completed worldwide in 1995, and, according to another industry source, the number of such procedures utilizing donor-derived and patient-derived cells has been growing annually by approximately 15% and 20%, respectively. This growth has been driven by encouraging clinical results in the treatment of dose-sensitive solid tumors, such as breast and ovarian cancers. The Company expects that the number of stem cell therapy procedures will continue

to grow due to increased incidence and prevalence of cancer, continued clinical demand for myelotoxic cancer treatment, and the increased cost effectiveness of stem cell therapy treatments.

Stem cell therapy may also enhance the effectiveness of blood cell growth factors. The timing and extent of additional cycles of chemotherapy is often limited by the recovery of a patient's white blood cells and platelets because a delayed recovery of these cells can leave the patient susceptible to life-threatening infection and bleeding episodes, and this limitation may allow for the regrowth of residual tumor cells. Many cancer patients are routinely treated with growth factors including G-CSF, such as Neupogen and GM-CSF, such as Leukine, which enhance the development of mature circulating white blood cells and platelets from the early progenitor bone-marrow derived cells, thereby decreasing the time between cycles of therapy and the probability of infection. However, during high dose or multicycle therapy, the stem and progenitor cells on which these growth factors act are often depleted. Without these cells, growth factors have a limited or negligible effect. Stem cell therapy generally enhances the effectiveness of growth factors by introducing target stem and progenitor cells for growth factors to act upon such that patients generally exhibit a more rapid and consistent hematopoietic recovery.

CURRENT STEM CELL COLLECTION METHODS

Currently, the bone marrow-derived cells required for stem cell therapy are collected primarily either through the bone marrow harvest method or the PBPC collection method.

Bone Marrow Harvest

A traditional bone marrow harvest is a costly and invasive surgical procedure in which a physician removes approximately one liter of bone marrow from a patient or donor. This volume of bone marrow is removed using needles inserted into the cavity of the hip bone. The bone marrow harvest procedure typically requires between two to four hours of operating room time, with the physician often making more than 90 separate puncture sites in the hip bone to collect the necessary amount of bone marrow. Due to the length of the procedure and the trauma to the patient, general surgical anesthesia is administered and the patient is often hospitalized for a day. Frequently, the patient suffers pain from the procedure for several days after being discharged from the hospital. Furthermore, complications resulting from the general anesthesia or invasive nature of the procedure occur in a small percentage of patients. Bone marrow harvest provides a reliable source of stem and stromal accessory cells and has been the preferred source of cells in allogeneic transplants.

PBPC Mobilization and Collection

PBPC mobilization is a technique in which bone marrow-derived cells are harvested from a patient's or donor's circulating blood, rather than from bone marrow. In a PBPC mobilization procedure, the patient receives multiple injections of growth factors or cytotoxic drugs, or both, over the course of a week or more, which cause stem and progenitor cells resident in the bone marrow to mobilize into the circulating blood. The mobilized cells are then collected by connecting the patient to a blood apheresis device, which draws and returns large volumes of the patient's or donor's blood in order to selectively remove the therapeutic volume of stem and progenitor cells. Each collection procedure typically lasts for two to six hours and is typically repeated on two to five consecutive days, however, procedure time has decreased and is expected to continue to decrease as the procedure is further optimized. Specialized laboratory testing over the period of mobilization and cell harvesting is necessary to determine that a sufficient quantity of desired cells has been collected, adding to the cost of the procedure. The PBPC process has become the predominant procedure in autologous stem cell therapy.

Procedure Considerations

Although stem cell therapy is being utilized to treat more patients for a broader range of diseases, its availability continues to be limited by the high costs of procuring cells, the invasive nature of traditional cell procurement techniques, and by the technical difficulties related to those collection procedures. The Company

believes that current charges for bone marrow harvest, processing and infusion are approximately $10,000 to $15,000 per procedure, with considerable variability between institutions. The Company believes that current charges for PBPC collection, including mobilization and infusion, are approximately $12,000 to $20,000 for a two to three cycle procedure, with considerable variability between institutions depending on the mobilization regimen and the total volume, time and number of aphereses required.

Overall costs of stem cell therapy include the costs of the cell collection and infusion procedures, and the costs associated with supporting the patient during post-transplant recovery. Post-transplant costs include hospitalization time, antibiotic support, management of adverse reactions to the large volume cell infusions, and infusions of platelets and red blood cells. Any new stem cell therapy process will generally need to provide similar recovery endpoints to be competitive with the current procedures. In this regard, PBPC procedures have gained popularity compared with bone marrow harvests because the number of platelet transfusions is reduced for some patients.

Recently, products to implement a cell isolation method known as CD34 selection have been developed by other companies in conjunction with bone marrow harvest and PBPC collections. CD34 selection is a process designed to isolate specific types of cells in order to decrease storage and infusion problems associated with the large volume of fluids collected in bone marrow or multiple apheresis procedures. CD34 selection is used after the initial collection of stem and progenitor cells and, therefore, does not address the difficulties or costs associated with the basic cell collection procedures. A future objective of CD34 selection is to assist in depleting tumor cells from the transplant cells collected, thereby expanding the availability of stem cell therapy to new patient populations.

UMBILICAL CORD BLOOD

UCB, which is collected directly from the umbilical cord of newborn infants, without pain or risk to the infant or the mother, is emerging as a new source of cells for stem cell therapy. UCB has been reported to have stem cell concentrations that are much higher than that typically obtained from traditional bone marrow and PBPC collection methods. After collection, UCB is typically frozen for later use in a stem cell therapy procedure. Storage of UCB samples involves small volumes of cells, compared to typical bone marrow or PBPC storage. Accordingly, the costs of collection and storage of UCB cells are comparatively low. This source of cells is also "tumor-free," such that UCB would be preferred for many current stem cell therapy procedures in metastatic cancer patients. Before UCB can become a major supply source for stem cell therapy, a coordinated UCB banking system must emerge. In this regard, several UCB banking institutions have been established to date, and the group is growing in both number and size. The establishment of these UCB banking institutions is an initial step which may lead to a coordinated UCB banking system.

Current disadvantages of UCB include the relatively low number of available cells which may contribute to prolonged engraftment times for the cells once transplanted into the patient. Unlike bone marrow or PBPC harvest, where the collection of more cells to meet a particular treatment is typically achievable, the number of cells available from a UCB donor is limited. This problem is exacerbated by the required cryopreservation of the cells, which causes significant cell loss. The resultant low cell number is believed to be responsible for the longer hematopoietic recovery times observed with UCB transplants, as compared with bone marrow or PBPC transplants. Further, because of the low cell number, UCB transplants are typically restricted to small patients. Therefore, increasing the number of therapeutic cells from a UCB sample may facilitate the more widespread use of UCB transplants. Aastrom believes that providing the transplant site with the capability to carry out the UCB cell expansion will be a major factor in the increased use of UCB for stem cell therapy and a significant business opportunity.

AASTROM TECHNOLOGY

Aastrom is developing proprietary process technologies that are pioneering the ex vivo production of human stem and progenitor cells. The Company has also developed a proprietary cell culture device that mimics the

biological and physical environment necessary for the growth of certain human cells and tissues, including bone marrow. The Company's initial product candidate, the Aastrom CPS, utilizes the Company's process technology and is designed to enable the ex vivo production of human stem and progenitor cells as an alternative to bone marrow harvest and PBPC mobilization methods and to enhance the clinical utility of UCB cells. The Company believes that the Aastrom CPS may be used for other cell production processes, such as immunotherapy and solid tissue repair, which are being developed by third parties and, in combination with the Company's proprietary gene transfer process, may have application in the developing field of ex vivo gene therapy.

CORE TECHNOLOGY

Stem Cell Growth Process

Aastrom has developed proprietary process technologies for ex vivo production of therapeutic stem and progenitor cells as well as other key cells found in human bone marrow. The Company's proprietary process entails the placement of a stem cell mixture in a culture environment that mimics the biology and physiology of natural bone marrow. This process enables the stem and early and late-stage progenitor cells needed for an effective stem cell therapy procedure to be concurrently expanded. Growth factors can be added to stimulate specific cell lineages to grow or to increase cell growth to meet a particular therapeutic objective. The stem cell growth process can best be completed with little or no additional stem cell selection or purification procedures. This stem cell replication process can also enable or augment the genetic modification of cells by providing the cell division step needed for new genes to integrate into the stem cell DNA. Currently available cell culture methods tend to result in a loss of stem cells, either through death or through differentiation into mature cells. The Company has exclusive rights to several issued U.S. patents that cover these processes and cell compositions. See "--Additional Stem Cell and Other Cell Therapies."

Aastrom Cell Culture Chamber

Aastrom has developed a proprietary cell culture chamber to implement the Company's process technology. The culture chamber produces cells on a clinical scale and allows for simple, sterile recovery of the cells for therapeutic use. The Company believes that the Aastrom cell culture chamber may also be used for growing other human therapeutic cells, such as T-Cells and dendritic cells used for immunotherapies, chondrocytes for cartilage replacement, and mesenchymal tissues for bone and cartilage replacement. The Company holds exclusive rights to issued U.S. patents and additional applications for its cell culture chamber device technology. See "--Additional Stem Cell and Other Cell Therapies."

Efficient Gene Transfer

Aastrom has developed proprietary processes and device technology that may enable increased efficiency of vector-mediated gene transfer into cells as compared to conventional procedures. This directed-motion gene transfer or gene loading technology is being pursued by the Company for application in most cell and tissue types and most vector technologies. The Company intends to develop products based upon its gene loading technology. Development of additional products, however, will require the Company to raise additional funds or to seek collaborative partners, or both, to finance related research and development activities, as to which there can be no assurance of success. Furthermore, due to the uncertainties involved, the Company is unable to estimate the length of time such development may take. If successfully developed into products, the Company believes that such products would facilitate the advancement of numerous gene therapy protocols into the clinic and ultimately the market. The Company has exclusive rights to three issued U.S. patents, and has additional applications pending, for this technology. See "Aastrom Product Candidates For Ex Vivo Gene Therapy."

THE AASTROM CPS

The Aastrom CPS is the Company's lead product under development. While potentially applicable to multiple cell therapy applications such as immunotherapy, solid tissue repair and ex vivo gene therapy, the Aastrom CPS is being developed initially by the Company for stem cell therapy. The Aastrom CPS is a

proprietary system that the Company believes will enable the large scale ex vivo production of a variety of therapeutic cells at healthcare facilities, independent laboratories, transplant centers and blood banks, and has been designed to implement Aastrom's stem cell growth process as well as processes for the production of other cell types.

The Aastrom CPS is comprised of several components, including single-use Cell Cassettes and reagents and microprocessor-controlled instruments, which are at various stages of development. The Cell Cassette is a single-use cartridge which contains the Aastrom cell culture chamber and the related media supply waste reservoirs and harvest bag. The microprocessor-controlled instruments include the Incubator which controls the culture conditions for the operation of the Cell Cassette, and the Processor which automates the priming and harvesting of the cells from the Cell Cassette. The System Manager is a user interface computer that is being developed to simultaneously track and monitor the cell production process in over thirty CPS Incubators and record relevant process variables and operator actions. Prototype components of the Aastrom CPS are currently being used in clinical trials and ongoing development activities are directed at completing other production level components of the Aastrom CPS.

The Aastrom CPS is designed to be operated with minimal operator activity by a medical or laboratory technician and can implement clinical scale cell production at the patient care site. The end product of the Aastrom CPS process is a blood-bag container with the cell product. The control and documentation features of the Aastrom CPS have been designed to meet cGMP requirements for the therapeutic production of cells.

AASTROM CPS FOR STEM CELL THERAPY

The Company's initial application for the Aastrom CPS is expected to be in the growing field of stem cell therapy, where the Company believes that the Aastrom CPS may address many of the limitations of existing procedures. The Aastrom CPS is based on a comparatively simple process in which a small volume of bone marrow cells are collected from the patient or donor using a needle aspiration procedure typically under a local anesthetic or sedative. This cell mixture is quantified, and an appropriate volume of cells is then inoculated into one or more Cell Cassettes with the necessary growth media. Growth-factor-stimulated cells are produced using the Aastrom CPS in approximately 12 to 13 days, with no further patient involvement. Depending upon the cell quantity necessary for a therapeutic application, single or multiple Cell Cassettes may be required, with a different volume requirement of starting cells taken from the patient at the initial visit. The Aastrom CPS has been designed to minimize operator involvement during the cell production process, and the steps required before and after the Aastrom CPS are standard laboratory procedures. Cells derived from UCB may also serve as a tumor-free source of stem and progenitor cells for expansion in the Aastrom CPS.

Potential Advantages of Aastrom CPS

The Company believes that the Aastrom CPS, if approved for commercial sale by the FDA and foreign regulatory agencies, may provide certain improvements and efficiencies over traditional cell collection and infusion processes. The following table, which sets forth estimates based on a 1996 survey conducted by the Company of 11 stem cell transplant physicians at different transplant institutions throughout the United States, compares estimated patient care episodes and procedure time for currently established cell collection and infusion techniques with the Aastrom CPS method of cell procurement:

CELL SOURCE	CARE EPISODES(1)	PROCEDURE TIME (HOURS)(1)
Bone Marrow Harvest (2).....	8	16
PBPC Mobilization and Collection (3).....	21	39
Aastrom CPS (4).....	2	1-3

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(1) Includes all outpatient, inpatient, and home care episodes.
(2) Includes operating room procedure and all preparatory and recovery procedures.
(3) Based on an average of three rounds of apheresis following cell mobilization injections.
(4) Projections, based on data accumulated during the Company's research and clinical trials.

The Company believes that the Aastrom CPS may provide the following benefits when compared to current cell collection and infusion methods:

Cost-Effectiveness. The Company believes the Aastrom CPS has the potential to cost-effectively replace the labor intensive and invasive cell collection and infusion procedures currently employed for stem cell therapy and to reduce physician, staff and patient time requirements.

Reduced Patient and Physician Burden. Cell production with the Aastrom CPS is expected to require the collection of a small volume of starting material compared to current collection procedures, eliminating the requirement for general surgical anesthesia, multiple drug injections or blood apheresis. Patient benefits are expected to include fewer needle sticks than with current cell collection and infusion methods and a reduction in overall patient procedure time. Additionally, Aastrom's process for cell expansion is expected to minimize the time requirement for physicians compared with bone marrow harvest.

Enhanced Multicycle High-Dose Chemotherapy. The long restoration period for the hematopoietic system following myeloablative therapy effectively limits patients to one opportunity for cell collection prior to cancer therapy. The Aastrom CPS may enhance the practice of multicycle, high-dose chemotherapy by providing the ability to produce a therapeutic dose of cells from a small starting volume. The initial cell collection can be divided into multiple samples and stored frozen until expansion at a later time is required.

Reduced Quantity of Lymphocytes. The Company believes its approach to stem cell therapy may provide an additional benefit over current methods by depleting potentially harmful cells such as T-cells and B-cells. These cells are believed to be primarily responsible for graft-versus-host disease, a common manifestation of allogeneic transplants in which the grafted donor's cells attack the host's tissues and organs.

Tumor Cell Purging. Cancer patients with tumor metastases, in which the cancer has spread to the blood and bone marrow, have not traditionally been candidates for autologous stem cell transplants because such transplant might reintroduce cancer cells into the patient. Additionally, patients may have undetected tumor cells present in their marrow or PBPC transplant, which could re-establish cancer in the patient following transplant. The Company's initial clinical results, as well as studies conducted by third-party investigators, have shown that some primary human tumor cells die or do not grow during hematopoietic cell culture. The smaller volume of starting cells used for the Aastrom CPS compared with bone marrow harvest or PBPC transplants may provide approximately 10 to 70 fold less tumor cells in a transplant. Further, in an evaluation of seven tumor-contaminated bone marrow samples that were expanded with the Aastrom CPS process, the presence of breast cancer cells in each sample was either substantially reduced or was no longer detectable. The Company believes that this combination of passive depletion during culture with the lower starting volume of tumor cells may result in a tumor-free or tumor-reduced cell product for transplant. The clinical benefit of such tumor depletion, if any, will vary depending upon the type of cancer and state of disease.

CLINICAL DEVELOPMENT

The Company's clinical development plan is initially to obtain regulatory approval in the United States to market the Aastrom CPS for autologous stem cell therapy and UCB transplantation, and in Europe for more general cell therapy applications. The Company also intends to pursue approval of the Aastrom CPS for additional clinical indications.

The Company believes that the Aastrom CPS for stem cell therapy will be regulated as a medical device and that the Company will be required to submit a PMA application to, and obtain approval from, the FDA to allow it to market this product in the United States. In order to obtain PMA registration, the Company will be required to complete clinical trials under an IDE. See "--Government Regulation--Devices."

Aastrom is currently conducting a pre-pivotal stem cell therapy clinical trial at four U.S. sites. This clinical trial is designed to demonstrate that cells produced using the Aastrom CPS can alone provide hematopoietic recovery in accordance with trial endpoints in breast cancer patients who have received myeloablative

chemotherapy. Bone marrow or mobilized PBPC obtained from the patients by traditional methods will be available for precautionary reasons at defined clinical stages.

Initial patient data from one trial site have been presented and demonstrate that cells produced in the Aastrom CPS can lead to engraftment of stem cells in patients within a recovery time frame that is comparable with that of conventional bone marrow transplantation following ablative chemotherapy. These patients started to recover their white blood cell counts within a median time of approximately seven days post-transplant and reached safe levels of neutrophils at approximately 16 days and platelets at approximately 23 days. Prior to implementing the trial protocol used for these patients, the Company had evaluated the cells produced in the Aastrom CPS in Stage IV breast cancer patients who had received significant prior cytotoxic therapy for their advanced cancer.

The Company has also initiated clinical trials at one site for adult patients and at another site for pediatric patients to evaluate the use of the Aastrom CPS to expand cells obtained from UCB for use in patients who have received myeloablative radiation or chemotherapy.

The objective of the current and anticipated future trials is to establish the protocols for pivotal trials of the Aastrom CPS in stem cell therapy. Provided that these pre-pivotal trials provide further evidence of the feasibility and safety of cells produced in the Aastrom CPS, the Company anticipates initiating pivotal clinical trials at multiple sites no earlier than late 1997, with patient enrollment to support a PMA filing, although this schedule is subject to numerous risks and uncertainties.

Aastrom, in partnership with Cobe, has initiated two clinical sites in Europe to evaluate the use of Aastrom CPS cells to promote hematopoietic recovery in breast cancer patients undergoing aggressive myelosuppressive or myelotoxic chemotherapy. Assuming the successful completion of these and other clinical trials, the Company intends to seek approval to market the Aastrom CPS in Europe through CE Mark Registration. See "--Government Regulation--Regulatory Process in Europe."

The ongoing trials were preceded by earlier studies designed to evaluate safety and process feasibility. Aastrom completed the first feasibility trial of its cell production system technology at the M.D. Anderson Cancer Center in October 1995. In this trial, ten breast cancer patients, who were subjected to myeloablative chemotherapy, were treated with cells obtained from a standard bone marrow harvest and with cells produced from a sample of such cells with a predecessor of the Aastrom CPS. The patients exhibited standard clinical recoveries, providing evidence of the clinical safety of cells obtained from the Company's cell production process and of the feasibility of cell production with a predecessor of the Aastrom CPS by clinical personnel at an investigational site. With this study completed, a five-patient study was then conducted to begin to evaluate the use of cells obtained from the Company's cell production process alone in the transplant setting.

The results from these patients provided evidence of the clinical safety of the Aastrom CPS-produced cells in patients and that the hematopoietic recovery endpoints specified for the trial are achievable. Four of these five patients received the delayed administration of the precautionary bone marrow pursuant to the trial protocol. Following further review by the FDA, the IDE was amended to expand the trail to the four additional sites where the clinical trail is now ongoing. The amended IDE provided for the enrollment of Stage II, III and IV patients, and a delayed use of the precautionary bone marrow.

In a dose-ranging study conducted by the University of Michigan (the "University") in 1993, ex vivo produced cells utilizing the Company's proprietary cell production technology were infused into seven patients with non-Hodgkin's lymphoma after they received myeloablative chemotherapy. These patients also received cells obtained from either an autologous bone marrow harvest or PBPC procedure. No safety issues attributable to the infused cells were observed in this trial and the patients exhibited recovery profiles consistent with traditional transplantation techniques.

The preliminary results of the Company's pre-pivotal trials may not be predictive of results that will be obtained from subsequent patients in the trials or from more extensive trials. Further, there can be no assurance

that the Company's pre-pivotal or pivotal trials will be successful, or that PMA registration or required foreign regulatory approvals for the Aastrom CPS will be obtained in a timely fashion, or at all. Due to severe illness, the effects of chemotherapy and other factors, it is possible that one or more of the patients enrolled in the Company's current pre-pivotal trials or future trials may die or suffer severe complications during the course of the trials. See "Risk Factors--Uncertainties Related to Clinical Trials."

BUSINESS STRATEGY

Aastrom's objective is to build a leadership position in cell therapy process technology. The primary elements of the Company's business strategy are as follows:

Establish Consumable Based Business Model. Aastrom's strategy is to sell the Aastrom CPS to institutions, hospitals, and other clinical care or commercial cell production facilities that are producing cells for patient treatments. The Company plans to obtain ongoing revenue from the sale of single-use Cell Cassettes and related cell culture media and reagents, which are utilized in individual cell therapy applications. After cells are cultured, the Cell Cassette is discarded and a new Cell Cassette is utilized for a subsequent cell production procedure. Cell Cassettes are specifically designed for particular cell types, allowing for different marketing strategies for different cell therapy indications. Along with ongoing revenue from the sale of instruments and single-use Cell Cassettes and reagents for cell therapy applications, the Company believes it will be able to obtain license revenue from its stem cell therapy applications for its proprietary stem cell processes.

Focus Initially on Established and Reimbursed Therapies. Aastrom will seek to establish the use of the Aastrom CPS in the field of stem cell therapy for the treatment of hematopoietic system toxicity resulting from many cancer therapies, including those for breast cancer, lymphoma, ovarian cancer, germ cell cancers, leukemias and aplastic anemias. Stem cell therapy is a well-established and growing treatment modality in cancer therapy, and current cell collection procedures are widely reimbursed by third party payors.

Leverage Platform Technology Across Multiple Market Opportunities. In addition to stem cell therapy applications, the Company believes that the Aastrom CPS may serve as a platform product that can be used to produce a variety of other cells for multiple therapeutic applications, such as T-cells and dendritic cells for use in cellular immunotherapies, chondrocytes for cartilage replacement, and mesenchymal cells for use in certain solid tissue repair applications. The Company believes that by providing systems with broad cell processing capabilities, hospitals or other cell production facilities may use the Aastrom CPS for multiple cell therapy applications.

Enter Into Collaborative Relationships. The Company plans to market its products and establish reimbursement for such products through corporate collaborations. The Company currently plans to establish corporate relationships in its targeted market segments, which include immunotherapy, solid tissue repair and ex vivo gene therapy. For the stem cell therapy market segment, the Company has formed a strategic collaboration with Cobe, a leading provider of blood processing equipment systems. Under the terms of this agreement, Cobe will be the Company's exclusive worldwide marketing, distribution and service provider for the Aastrom CPS for stem cell therapy applications, other than stem cell gene therapy. For selected emerging cell therapies, additional alliances will be sought by the Company to (i) secure additional technology, such as gene vectors or growth factors, or regulatory or marketing capability which may augment the Aastrom CPS or Aastrom Gene Loader; (ii) assist with regulatory and reimbursement matters for new therapy applications; and (iii) assist with marketing new therapy applications to physicians. To assist the Company in securing new strategic alliances, the Company has entered into an agreement with Burrill & Company, LLC ("Burrill"). Under this agreement, Burrill will work with the Company to identify and transact cell therapy collaborations, and a majority of Burrill's compensation under the agreement is contingent upon the Company successfully entering into new corporate alliances. See "--Strategic Relationships."

ADDITIONAL STEM CELL AND OTHER CELL THERAPIES

The Company believes that the Aastrom CPS hardware and single-use Cell Cassettes may be developed to serve as platform products for application in a variety of other emerging cell therapies in addition to stem cell therapy. The Company believes that the Aastrom CPS has the potential to supplant current manual cell culture methods to produce therapeutic quantities of cell types such as T-cells, chondrocytes, mesenchymal cells, keratinocytes, neuronal cells and dendritic cells. Other than a limited application of chondrocyte therapy, novel cell therapies are still in early stages of development by third parties, and no assurance can be given that such other cell therapies will be successfully developed. Potential advantages of the Aastrom CPS in these therapies may include: (i) reducing labor and capital costs; (ii) enhancing process reliability; (iii) automating quality assurance; (iv) reducing the need for specialized, environmentally controlled facilities; and (v) providing greater accessibility of these procedures to care providers and patients and, in certain cases, providing a more biologically active cell product.

Modification of such processes and application of the Company's products to the expansion of other cell types may require substantial additional development of specialized cell culture environments which may need to be incorporated within the Company's existing Cell Cassettes. Such modifications may require the Company to raise substantial additional funds, or to seek additional collaborative partners, or both. There can be no assurance that the Company will be able to successfully modify or develop existing or future products to enable such additional cell production processes. The Company's business opportunity is dependent upon successful development and regulatory approval of these novel cell therapies. No assurance can be given that such novel therapies will be successfully developed by other companies or approved by applicable regulatory authorities, or that the Company's processes or product candidates will find successful application in such therapies. In addition, the Company may be required to obtain license rights to such technologies in order to develop or modify existing or future products for use in such therapies. No assurance can be given that the Company will be able to obtain such licenses or that such licenses, if available, could be obtained on commercially reasonable terms. See "--Business Strategy" and "--Clinical Development," "Use of Proceeds," and "Risk Factors--Future Capital Needs; Uncertainty of Additional Funding."

Immunotherapies

Immunotherapy involves using cells of the immune system to eradicate a disease target. T-cell lymphocytes and dendritic cells are being actively investigated by other companies for this purpose, and the Company anticipates that many of these procedures will require ex vivo cell production.

T-cells, a class of lymphocyte white blood cells, play a critical role in the human immune system and are responsible for the human immune response in a broad spectrum of diseases, including cancers and infectious diseases. Cytotoxic T-lymphocytes ("CTLs") is a new process that involves collecting T-cells from a patient and culturing them in an environment resulting in T-cells with specificity for a particular disease target. Clinical trials by third parties have been initiated to demonstrate CTL effectiveness. The ex vivo production of these cells under conditions for use in medical treatment represents a critical step in the advancement of this therapy.

Dendritic cells (the potent antigen presenting cells) are believed to play an important role in the function of the immune system. Researchers believe that cultured dendritic cells could augment the natural ability of a patient to present antigens from the infectious agents to the immune system and aid in the generation of a cytotoxic T-cell response to the infectious agent.

Solid Tissue Cell Therapies

One of the newest areas of cell therapy involves the production of chondrocytes for the restoration of cartilage. Chondrocyte therapy involves the surgical removal of a small amount of tissue from the patient's knee and a therapeutic quantity of chondrocytes is produced from this surgical biopsy. The cells are then implanted into the patient's knee. Published reports indicate that such cells then reestablish mature articular cartilage.

Currently, this cell production process is completed in highly specialized laboratory facilities using trained scientists and manual laboratory procedures. The Company believes that the Aastrom CPS may have the potential to reduce costs associated with the cell production procedure and, if successfully developed by the Company for this application, may eventually facilitate the transfer of the cell production capability away from specialized facilities directly to the clinical care sites.

Other Stem Cell Therapies

Autoimmune Diseases. Stem cell therapy is under clinical investigation by third parties for the treatment of other diseases. Clinical studies have suggested a potential role for stem cell therapy in treatment of autoimmune diseases such as rheumatoid arthritis, multiple sclerosis and lupus erythematosus. The generic cause of these diseases is a malfunctioning immune system, including T-lymphocytes. Clinical trials in which the patient receives treatment resulting in immune ablation (usually involving myelotoxic cancer drugs or radiation), followed by stem cell therapy to restore the bone marrow and cells of the blood and immune system, have demonstrated remission of the autoimmune disease in some patients.

Organ Transplantation. Recently, a number of academic and corporate researchers and companies have identified the potential use of stem cell therapy to facilitate successful solid organ and tissue transplants between human donors and recipients, as well as using organs from non-human species for transplantation into humans. These proposed applications are based on the observation that donor-specific bone marrow, infused concurrent with or prior to the organ transplant, can provide for reduction of the normal immune rejection response by the transplant recipient (e.g. heart, lung, liver or kidney transplants).

A major limitation to the use of stem cell therapy in solid organ transplant is the limited availability of sufficient amounts of bone marrow to obtain a desired therapeutic response of immune tolerization. This limitation is particularly problematic when cadaveric donor organs are used, which has traditionally been the source of cells for these procedures. Bone marrow is also often available from the cadaveric donor, but only in a limited amount. Normally this amount may be sufficient for one transplant, but a donor might provide multiple organs for transplant into multiple recipients. Aastrom believes that the ability to expand the available bone marrow ex vivo will enhance the use of stem cell therapy for such transplant procedures and may pursue development of its products for application in such therapy in the future.

AASTROM PRODUCT CANDIDATES FOR EX VIVO GENE THERAPY

A novel form of cell therapy is ex vivo gene therapy. For this type of cell therapy, cells procured from the patient or a donor are genetically modified prior to their infusion into the patient. Analogous to other cell therapies, the ability to produce a therapeutic dose of these gene-modified cells is a major limitation to the commercialization of these cell therapies. This limitation is further exacerbated by the additional requirement that the cells be genetically modified under conditions that are sterile and comply with GMP.

Gene therapy is a therapeutic modality that holds the potential to significantly impact the delivery of healthcare and the delivery of therapeutically useful protein-based drugs within the body. Gene therapies are generally targeted at the introduction of a missing normal gene into otherwise defective human tissue, or the introduction of novel biologic capability into the body via the introduction of a gene not ordinarily present (for example, genes providing for the enhanced recognition and destruction or inhibition of the HIV-1 virus). The major developmental focus of the ex vivo gene therapy industry has been to identify the therapeutic gene of interest, insert it into a suitable vector that can be used to transport and integrate the gene into the DNA of the target cell, and then cause the gene to become expressed. The Company believes that for ex vivo gene therapy to progress to clinical applications, a process to produce a sufficient quantity of therapeutic cells is required as is an efficient means to insert the gene vector into target cells. Gene therapy is still in an early stage of development by third parties. The Company's business opportunity is dependent upon the successful development and regulatory approval of individual gene therapy applications. No assurance can be given that such applications will be developed or approved or that the Company's processes or product candidates will find successful

applications in such therapies. Successful development of the Company's processes and product candidates for application in ex vivo gene therapy will require substantial additional research and development, including clinical testing, and will be subject to the Company's ability to finance such activities on acceptable terms, if at all. See "Risk Factors--Future Capital Needs; Uncertainty of Additional Funding."

THE AASTROM CPS FOR GENE THERAPY (GT-CPS)

The Aastrom CPS has been designed to produce cells for therapy and the Company believes that the Aastrom CPS may be useful in many potential ex vivo gene therapy applications. Further, the Company anticipates that its proprietary stem cell production process technology implemented by the Aastrom CPS may provide the conditions for clinical scale stem cell division, and enable or enhance the introduction of therapeutic genes into stem cell DNA. The Company believes that its technology may also enable expansion of more mature progeny of these stem cells to create a gene therapy cell product with potential short and long term therapeutic effect.

The Company has two principal objectives for the development of Aastrom GT-CPS: (i) the enablement of stem cell gene therapies for a variety of hematologic and other disorders, based on the GT-CPS's ability to enable large scale stem cell division ex vivo; and (ii) the enablement of gene transfer and therapeutic cell production by local and regional primary patient care facilities and ancillary service laboratories.

THE AASTROM GENE LOADER

The Aastrom Gene Loader product technology, which is under development, is being designed to enhance the efficiency and reliability of the transfer of new therapeutic genes, which are carried by vectors, into the target cell. This process, which is typically inefficient in many human cells inhibits many ex vivo gene therapies from moving forward in the clinic. The Aastrom Gene Loader is being designed to incorporate the Company's proprietary directed motion gene transfer technology. Complete product development is expected to require additional funding sources or collaborations with others, or both.

The Company believes that these issues represent a general bottleneck for other companies pursuing ex vivo gene therapy clinical applications. The Company's technology under development may favorably influence these gene therapy applications, the development of which are impeded due to low transduction efficiencies and the resultant need for use of extreme quantities of gene vectors and/or target "delivery" tissues.

STRATEGIC RELATIONSHIPS

On October 22, 1993, the Company entered into a Distribution Agreement (the "Distribution Agreement") with Cobe for Cobe to be the Company's exclusive, worldwide marketing, distribution and service provider for the Aastrom CPS for stem cell therapy applications (the "Stem Cell Therapy Applications"). Under the terms of the Company's Distribution Agreement with Cobe, other than with respect to sales to affiliates, the Company is precluded from selling the Aastrom CPS to customers for stem cell therapy applications. The Company has, however, reserved the right to sell the Aastrom CPS for: (i) all diagnostic or other non-therapeutic clinical applications; (ii) all gene therapy or gene transfer applications, including those for stem cells; (iii) all non-human applications; (iv) certain permitted clinical research applications; and (v) all applications that are labeled not for human use. The Company has also reserved the unconditional right to sell other products under development, including but not limited to products based upon its gene loading technology. The initial term of the Distribution Agreement expires on October 22, 2003, and Cobe has the option to extend the term for an additional ten-year period. The Company is responsible for the expenses to obtain FDA and other regulatory approval in the United States, while Cobe is responsible for the expenses to obtain regulatory approval in foreign countries to allow for worldwide marketing of the Aastrom CPS for Stem Cell Therapy Applications. See "Risk Factors--Consequences of Cobe Relationship."

Under the terms of the Distribution Agreement, the Company will realize approximately 58% to 62% of the net sales price at which Cobe ultimately sells the Aastrom CPS for Stem Cell Therapy Applications, subject to certain negotiated discounts and volume-based adjustments and subject to the obligation of the Company to make aggregate royalty payments of up to 5% to certain licensors of its technology. The Company is also entitled to a premium on United States sales in any year in which worldwide sales exceed specified levels.

The Distribution Agreement may be terminated by Cobe upon twelve months prior notice to the Company in the event that any person or entity other than Cobe beneficially owns more than 50% of the Company's outstanding Common Stock or voting securities. The Distribution Agreement may also be terminated by Cobe at any time after December 31, 1997 if Cobe determines that commercialization of the Aastrom CPS for stem cell therapy on or prior to December 31, 1998 is unlikely.

In conjunction with the Distribution Agreement, the Company also entered into a Stock Purchase Agreement with Cobe (the "Cobe Stock Agreement"), whereby Cobe acquired certain option, registration, preemptive and other rights pertaining to shares of the Company's stock. Pursuant to such preemptive rights, Cobe elected to purchase 714,200 shares of Common Stock in the Company's initial public offering in February 1997. See "Description of Capital Stock--Rights of Cobe" and "Certain Transactions."

The Company has entered into a Strategic Planning Consulting Services and Collaboration Agreement (the "Consulting Agreement") with Burrill, pursuant to which Burrill will advise the Company on potential strategic alliances and seek to identify potential collaborations. Pursuant to the Consulting Agreement, Burrill will be paid a monthly retainer of $10,000 and will be reimbursed for expenses incurred pursuant to an approved budget. Aastrom has issued Burrill an immediately exercisable warrant to purchase 100,000 shares of Common Stock at an exercise price of $7.24 per share and a second warrant, which vests over a one-year period, to purchase 100,000 shares at an exercise price of $7.24 per share. The Consulting Agreement is terminable by either party following periods of up to 30 days following notice.

The Consulting Agreement also provides for payments to Burrill that are based on the timing and amount of proceeds Aastrom may receive from any future strategic alliances. In the event that the Company enters into strategic alliances (which exclude minor technology license agreements and customary manufacturing or supply agreements that do not involve equity investments in Aastrom, as well as performance pursuant to any of Cobe's existing agreements with Aastrom), the Company will pay Burrill a success fee ranging from 4% to 7.5% of the proceeds in connection with the strategic alliance. In addition to the success fee, Aastrom will issue to Burrill additional warrants to purchase up to 500,000 shares of Common Stock, depending upon the achievement of certain milestones.

MANUFACTURING

The Company has no current intention of internally manufacturing its product candidates and, accordingly, is developing relationships with third party manufacturers which are FDA registered as suppliers for the manufacture of medical products.

In May 1994, the Company entered into a Collaborative Product Development Agreement with SeaMED Corporation, ("SeaMED"). Pursuant to this agreement, the Company and SeaMED will collaborate on the further design of certain instrument components in the Aastrom CPS, and enable SeaMED to manufacture pre-production units of the instrument components for laboratory and clinical evaluation. The Company is paying SeaMED for its design and pre-production work on a "time and materials" basis, utilizing SeaMED's customary hourly billing rates and actual costs for materials. Subject to certain conditions, the Company has committed to enter into a manufacturing agreement with SeaMED for commercial manufacture of the instrument components for three years after shipment by SeaMED of the first commercial unit pursuant to a pricing formula set forth in the agreement. The Company retains all proprietary rights to its intellectual property which is utilized by SeaMED pursuant to this agreement.

In November 1994, the Company entered into a Collaborative Product Development Agreement with Ethox Corporation ("Ethox"). Pursuant to this agreement, the Company and Ethox collaborated on the design of certain bioreactor assembly and custom tubing kit components of the Aastrom CPS. The Company is paying Ethox for its design and production work on a "time and materials" basis, utilizing Ethox's customary hourly billing rates and actual costs for materials. The Company retains all proprietary rights to its intellectual property which are utilized by Ethox pursuant to this agreement.

In March 1996, the Company entered into a five-year License and Supply Agreement with Immunex to purchase and resell certain cytokines and ancillary materials for use in conjunction with the Aastrom CPS. The agreement required the Company to pay Immunex an initial up-front fee of $1,500,000 to be followed by subsequent annual renewal payments equal to $1,000,000 per year during the term of the agreement in addition to payment for supplies purchased by the Company. In August 1997, the Company and Immunex amended the agreement to expand the Company's territorial rights to use and sell such materials to a worldwide basis. Unless earlier terminated or renewed by the Company for an additional five-year term, the agreement will expire in April 2001. The agreement may be terminated by either party effective immediately upon written notice of termination to the other party in the event that such party materially breaches the agreement and such breach continues unremedied after notice and expiration of a specified cure period or in the event that a bankruptcy proceeding is commenced against a party and is not dismissed or stayed within a 45-day period. In addition, Immunex has the right to cease the supply to the Company of cytokines and ancillary materials if the Company fails to purchase a minimum amount of its forecasted annual needs from Immunex after notice to the Company and expiration of a specified cure period. The Company also has the right to terminate the agreement at any time subject to the payment to Immunex of a specified amount for liquidated damages. In the event that Immunex elects to cease to supply to the Company cytokines and ancillary materials or is prevented from supplying such materials to the Company by reason of force majeure, limited manufacturing rights will be transferred to the Company under certain circumstances. There is, however, no assurance that the Company could successfully manufacture the compounds itself or identify others that could manufacture these compounds to acceptable quality standards and costs, if at all.

In December 1996, the Company entered into a Collaborative Supply Agreement with Anchor Advanced Products, Inc., Mid-State Plastics Division ("MSP"). Under this agreement, MSP will conduct both pre-production manufacturing development and commercial manufacturing and assembly of the Cell Cassette component of the Aastrom CPS for the Company. During the initial phase of the seven-year agreement, the Company will pay MSP for its development activities on a time and materials basis. Upon reaching certain commercial manufacturing volumes, MSP will be paid by the Company on a per unit basis for Cell Cassettes delivered to the Company under a pricing formula specified in the agreement. Throughout the term of this agreement, the Company has agreed to treat MSP as its preferred supplier of Cell Cassettes, using MSP as its supplier of at least 60% of its requirements for Cell Cassettes.

There can be no assurance that the Company will be able to continue its present arrangements with its suppliers, supplement existing relationships or establish new relationships or that the Company will be able to identify and obtain the ancillary materials that are necessary to develop its product candidates in the future. The Company's dependence upon third parties for the supply and manufacture of such items could adversely affect the Company's ability to develop and deliver commercially feasible products on a timely and competitive basis. See "Risk Factors--Manufacturing and Supply Uncertainties; Dependence on Third Parties."

PATENTS AND PROPRIETARY RIGHTS

The Company's success depends in part on its ability, and the ability of its licensors, to obtain patent protection for its products and processes. The Company has exclusive rights to 13 issued U.S. patents and one patent application with respect to which the Company has received a notice of allowance from the U.S. Patent and Trademark Office that present claims to (i) certain methods for ex vivo stem cell division as well as ex vivo human hematopoietic stem cell stable genetic transformation and expanding and harvesting a human hematopoietic stem cell pool; (ii) certain apparatus for cell culturing, including a bioreactor suitable for culturing

human stem cells or human hematopoietic cells; (iii) certain methods of infecting or transfecting target cells with vectors; and (iv) a cell composition containing human stem cells or progenitor cells, or genetically modified stem cells, when such cells are produced in an ex vivo medium exchange culture. Patents equivalent to two of these U.S. patents have also been issued in other jurisdictions: one in Australia and another in Canada and under the European Patent Convention. These 13 issued patents, in addition to the one patent application with respect to which the Company has received a notice of allowance, are due to expire beginning in 2006, through 2015. In addition, the Company and its exclusive licensors have filed applications for patents in the United States and equivalent applications in certain other countries claiming other aspects of the Company's products and processes, including a number of U.S. patent applications and corresponding applications in other countries related to various components of the Aastrom CPS.

The validity and breadth of claims in medical technology patents involve complex legal and factual questions and, therefore, may be highly uncertain. No assurance can be given that any patents based on pending patent applications or any future patent applications of the Company or its licensors will be issued, that the scope of any patent protection will exclude competitors or provide competitive advantages to the Company, that any of the patents that have been or may be issued to the Company or its licensors will be held valid if subsequently challenged or that others will not claim rights in or ownership of the patents and other proprietary rights held or licensed by the Company. Furthermore, there can be no assurance that others have not developed or will not develop similar products, duplicate any of the Company's products or design around any patents that have been or may be issued to the Company or its licensors. Since patent applications in the United States are maintained in secrecy until patents issue, the Company also cannot be certain that others did not first file applications for inventions covered by the Company's and its licensors' pending patent applications, nor can the Company be certain that it will not infringe any patents that may issue to others on such applications.

The Company relies on certain licenses granted by the University of Michigan and Dr. Cremonese for the majority of its patent rights. If the Company breaches such agreements or otherwise fails to comply with such agreements, or if such agreements expire or are otherwise terminated, the Company may lose its rights under the patents held by the University of Michigan and Dr. Cremonese, which would have a material adverse effect on the Company's business, financial condition and results of operations. See "--Research and License Agreements."

The Company also relies on trade secrets and unpatentable know-how which it seeks to protect, in part, by confidentiality agreements. It is the Company's policy to require its employees, consultants, contractors, manufacturers, outside scientific collaborators and sponsored researchers, and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with the Company. These agreements provide that all confidential information developed or made known to the individual during the course of the individual's relationship with the Company is to be kept confidential and not disclosed to third parties except in specific limited circumstances. The Company also requires signed confidentiality or material transfer agreements from any company that is to receive its confidential data. In the case of employees, consultants and contractors, the agreements generally provide that all inventions conceived by the individual while rendering services to the Company shall be assigned to the Company as the exclusive property of the Company. There can be no assurance, however, that these agreements will not be breached, that the Company would have adequate remedies for any breach, or that the Company's trade secrets or unpatentable know-how will not otherwise become known or be independently developed by competitors.

The Company's success will also depend in part on its ability to develop commercially viable products without infringing the proprietary rights of others. The Company has not conducted freedom of use patent searches and no assurance can be given that patents do not exist or could not be filed which would have an adverse effect on the Company's ability to market its products or maintain its competitive position with respect to its products. If the Company's technology components, devices, designs, products, processes or other subject matter are claimed under other existing United States or foreign patents or are otherwise protected by third party proprietary rights, the Company may be subject to infringement actions. In such event, the Company may challenge the validity of such patents or other proprietary rights or be required to obtain licenses from such companies in order to develop, manufacture or market its products. There can be no assurances that the Company

would be able to obtain such licenses or that such licenses, if available, could be obtained on commercially reasonable terms. Furthermore, the failure to either develop a commercially viable alternative or obtain such licenses could result in delays in marketing the Company's proposed products or the inability to proceed with the development, manufacture or sale of products requiring such licenses, which could have a material adverse effect on the Company's business, financial condition and results of operations. If the Company is required to defend itself against charges of patent infringement or to protect its own proprietary rights against third parties, substantial costs will be incurred regardless of whether the Company is successful. Such proceedings are typically protracted with no certainty of success. An adverse outcome could subject the Company to significant liabilities to third parties and force the Company to curtail or cease its development and sale of its products and processes.

Certain of the Company's and its licensors' research has been or is being funded in part by the Department of Commerce and by a Small Business Innovation Research Grant obtained from the Department of Health and Human Services. As a result of such funding, the U.S. Government has certain rights in the technology developed with the funding. These rights include a non-exclusive, paid-up, worldwide license under such inventions for any governmental purpose. In addition, the government has the right to require the Company to grant an exclusive license under any of such inventions to a third party if the government determines that (i) adequate steps have not been taken to commercialize such inventions, (ii) such action is necessary to meet public health or safety needs or (iii) such action is necessary to meet requirements for public use under federal regulations. Additionally, under the federal Bayh Dole Act, a party which acquires an exclusive license for an invention that was partially funded by a federal research grant is subject to the following government rights: (i) products using the invention which are sold in the United States are to be manufactured substantially in the United States, unless a waiver is obtained; (ii) if the licensee does not pursue reasonable commercialization of a needed product using the invention, the government may force the granting of a license to a third party who will make and sell the needed product; and (iii) the U.S. Government may use the invention for its own needs.

RESEARCH AND LICENSE AGREEMENTS

In August 1989, the Company entered into a Research Agreement (the "Research Agreement") with the University, pursuant to which the Company funded a research project at the University under the direction of Stephen G. Emerson, M.D., Ph.D., as the principal inventor, together with Michael F. Clarke, M.D., and Bernhard O. Palsson, Ph.D., as co-inventors. Pursuant to the Research Agreement, the Company was granted the right to acquire an exclusive, worldwide license to utilize all inventions, know-how and technology derived from the research project. By Extension Agreements, the Company and the University extended the scope and term of the Research Agreement through December 1994.

In March 1992, the Company and the University entered into the License Agreement, as contemplated by the Research Agreement. There have been clarifying amendments to the License Agreement, in March 1992, October 1993 and June 1995. Pursuant to this License Agreement, (i) the Company acquired exclusive worldwide license rights to the patents and know-how for the production of blood cells and bone marrow cells as described in the University's research project or which resulted from certain further research conducted through December 1994, and (ii) the Company is obligated to pay to the University a royalty equal to 2% of the net sales of products which are covered by the University's patents. Unless it is terminated earlier at the Company's option or due to a material breach by the Company, the License Agreement will continue in effect until the latest expiration date of the patents to which the License Agreement applies.

In July 1992, the Company entered into a License Agreement with Joseph G. Cremonese pursuant to which the Company obtained exclusive worldwide license rights for all fields of use, to utilize U.S. Patent No. 4,839,292, entitled "Cell Culture Flask Utilizing a Membrane Barrier," which patent was issued to Dr. Cremonese on June 13, 1989, and to utilize any other related patents that might be issued to Dr. Cremonese. Pursuant to the License Agreement, the Company has reimbursed Dr. Cremonese for $25,000 of his patent costs. Under the terms of the License Agreement, the Company is to pay to Dr. Cremonese a royalty of 3% of net sales of the products which are covered by said patent, subject to specified minimum royalty payments ranging

from $20,000 to $50,000 per year, commencing in calendar year 1997. Unless earlier terminated, the License Agreement will continue in effect until the latest expiration date of the patents to which the License Agreement applies, which latest expiration date is currently August 2009. The License Agreement may be terminated by either party upon default by the other party of any of its obligations under the agreement without cure after expiration of a 30-day notice period. The Company also has the right to terminate the License Agreement at any time without cause upon 30 days prior written notice to Dr. Cremonese.

GOVERNMENT REGULATION

The Company's research and development activities and the manufacturing and marketing of the Company's products are subject to the laws and regulations of governmental authorities in the United States and other countries in which its products will be marketed. Specifically, in the United States, the FDA, among other activities, regulates new product approvals to establish safety and efficacy of these products. Governments in other countries have similar requirements for testing and marketing. In the United States, in addition to meeting FDA regulations, the Company is also subject to other federal laws, such as the Occupational Safety and Health Act and the Environmental Protection Act, as well as certain state laws.

REGULATORY PROCESS IN THE UNITED STATES

To the Company's knowledge, it is the first to develop a cell culture system for ex vivo human cell production to be sold for therapeutic applications. Therefore, to a certain degree, the manner in which the FDA will regulate the Company's products is uncertain.

The Company's products are potentially subject to regulation as medical devices under the Federal Food, Drug, and Cosmetic Act, and as biological products under the Public Health Service Act, or both. Different regulatory requirements may apply to the Company's products depending on how they are categorized by the FDA under these laws. To date, the FDA has indicated that it intends to regulate the Aastrom CPS product for stem cell therapy as a Class III medical device through the Center for Biologics Evaluation and Research. However, there can be no assurance that FDA will ultimately regulate the Aastrom CPS as a medical device.

Further, it is unclear whether the FDA will separately regulate the cell therapies derived from the Aastrom CPS. The FDA is still in the process of developing its requirements with respect to somatic cell therapy and gene cell therapy products and has recently issued draft documents concerning the regulation of umbilical cord blood stem cell products, as well as cellular and tissue-based products. If the FDA adopts the regulatory approach set forth in the draft document, the FDA may require separate regulatory approval for such cells in some cases. The FDA also recently proposed a new type of license, called a biologic license application ("BLA"), for autologous cells manipulated ex vivo and intended for structural repair or reconstruction. This proposal may indicate that the FDA will extend a similar approval requirement to other types of autologous cellular therapies, such as autologous cells for stem cell therapy. Any such additional regulatory or approval requirements could significantly delay the introduction of the Company's product candidates to the market, and have a material adverse impact on the Company.

Approval of new medical devices and biological products is a lengthy procedure leading from development of a new product through preclinical and clinical testing. This process takes a number of years and the expenditure of significant resources. There can be no assurance that the Company's product candidates will ultimately receive regulatory approval.

Regardless of how the Company's product candidates are regulated, the Federal Food, Drug, and Cosmetic Act and other Federal statutes and regulations govern or influence the research, testing, manufacture, safety, labeling, storage, recordkeeping, approval, distribution, use, reporting, advertising and promotion of such products. Noncompliance with applicable requirements can result in civil penalties, recall, injunction or seizure of products, refusal of the government to approve or clear product approval applications or to allow the Company to enter into government supply contracts, withdrawal of previously approved applications and criminal prosecution.

DEVICES

In order to obtain FDA approval of a new medical device sponsors must generally submit proof of safety and efficacy. In some cases, such proof entails extensive clinical and preclinical laboratory tests. The testing, preparation of necessary applications and processing of those applications by the FDA is expensive and may take several years to complete. There can be no assurance that the FDA will act favorably or in a timely manner in reviewing submitted applications, and the Company may encounter significant difficulties or costs in its efforts to obtain FDA approvals which could delay or preclude the Company from marketing any products it may develop. The FDA may also require postmarketing testing and surveillance of approved products, or place other conditions on the approvals. These requirements could cause it to be more difficult or expensive to sell the products, and could therefore restrict the commercial applications of such products. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. For patented technologies, delays imposed by the governmental approval process may materially reduce the period during which the Company will have the exclusive right to exploit such technologies.

If human clinical trials of a proposed device are required and the device presents significant risk, the manufacturer or distributor of the device will have to file an IDE submission with the FDA prior to commencing human clinical trials. The IDE submission must be supported by data, typically including the results of pre-clinical and laboratory testing. If the IDE submission is granted, human clinical trials may commence at a specified number of investigational sites with the number of patients approved by the FDA.

The FDA categorizes devices into three regulatory classifications subject to varying degrees of regulatory control. In general, Class I devices require compliance with labeling and recordkeeping regulations, GMPs, 510(k) pre-market notification, and are subject to other general controls. Class II devices may be subject to additional regulatory controls, including performance standards and other special controls, such as postmarket surveillance. Class III devices, which are either invasive or life-sustaining products, or new products never before marketed (for example, non-"substantially equivalent" devices), require clinical testing to demonstrate safety and effectiveness and FDA approval prior to marketing and distribution. The FDA also has the authority to require clinical testing of Class I and Class II devices.

If a manufacturer or distributor of medical devices cannot establish that a proposed device is substantially equivalent, the manufacturer or distributor must submit a PMA application to the FDA. A PMA application must be supported by extensive data, including preclinical and human clinical trial data, to prove the safety and efficacy of the device. Upon receipt, the FDA conducts a preliminary review of the PMA application. If sufficiently complete, the submission is declared filed by the FDA. By regulation, the FDA has 180 days to review a PMA application once it is filed, although PMA application reviews more often occur over a significantly protracted time period, and may take approximately one year or more from the date of filing to complete.

Some of the Company's products may be classified as Class II or Class III medical devices. The Company has submitted several IDEs for the Aastrom CPS, and is currently conducting pre-pivotal clinical studies under these IDEs. The Company believes that the Aastrom CPS product will be regulated by the FDA as a Class III device, although there can be no assurance that the FDA will not choose to regulate this product in a different manner.

The Company and any contract manufacturer are required to be registered as a medical device manufacturer with the FDA. As such, they will be inspected on a routine basis by the FDA for compliance with the FDA's GMP regulations. These regulations will require that the Company and any contract manufacturer manufacture products and maintain documents in a prescribed manner with respect to manufacturing, testing, distribution, storage, design control and service activities, and that adequate design and service controls are implemented.

The Medical Device Reporting regulation requires that the Company provide information to the FDA on deaths or serious injuries alleged to be associated with the use of its devices, as well as product malfunctions that are likely to cause or contribute to death or serious injury if the malfunction were to recur. In addition, the FDA prohibits a company from promoting an approved device for unapproved applications and reviews company labeling for accuracy.

BIOLOGICAL PRODUCTS

For certain of the Company's new products which may be regulated as biologics, the FDA requires (i) preclinical laboratory and animal testing, (ii) submission to the FDA of an investigational new drug ("IND") application which must be effective prior to the initiation of human clinical studies, (iii) adequate and well-controlled clinical trials to establish the safety and efficacy of the product for its intended use, (iv) submission to the FDA of a product license application ("PLA") and establishment license application ("ELA") and (v) review and approval of the PLA and ELA as well as inspections of the manufacturing facility by the FDA prior to commercial marketing of the product.

Preclinical testing covers laboratory evaluation of product chemistry and formulation as well as animal studies to assess the safety and efficacy of the product. The results of these tests are submitted to the FDA as part of the IND. Following the submission of an IND, the FDA has 30 days to review the application and raise safety and other clinical trial issues. If the Company is not notified of objections within that period, clinical trials may be initiated. Clinical trials are typically conducted in three sequential phases. Phase I represents the initial administration of the drug or biologic to a small group of humans, either healthy volunteers or patients, to test for safety and other relevant factors. Phase II involves studies in a small number of patients to assess the efficacy of the product, to ascertain dose tolerance and the optimal dose range and to gather additional data relating to safety and potential adverse effects. Once an investigational drug is found to have some efficacy and an acceptable safety profile in the targeted patient population, multi-center Phase III studies are initiated to establish safety and efficacy in an expanded patient population and multiple clinical study sites. The FDA reviews both the clinical plans and the results of the trials and may request the Company to discontinue the trials at any time if there are significant safety issues.

The results of the preclinical tests and clinical trials are submitted to the FDA in the form of a PLA for marketing approval. The testing and approval process is likely to require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. Additional animal studies or clinical trials may be requested during the FDA review period that may delay marketing approval. After FDA approval for the initial indications, further clinical trials may be necessary to gain approval for the use of the product for additional indications. The FDA requires that adverse effects be reported to the FDA and may also require post-marketing testing to monitor for adverse effects, which can involve significant expense.

Under current requirements, facilities manufacturing biological products must be licensed. To accomplish this, an ELA must be filed with the FDA. The ELA describes the facilities, equipment and personnel involved in the manufacturing process. An establishment license is granted on the basis of inspections of the applicant's facilities in which the primary focus is on compliance with cGMP and the ability to consistently manufacture the product in the facility in accordance with the PLA. If the FDA finds the inspection unsatisfactory, it may decline to approve the ELA, resulting in a delay in production of products. Although reviewed separately, approval of both the PLA and ELA must be received prior to commercial marketing of a cellular biologic.

As part of the approval process for human biological products, each manufacturing facility must be registered and inspected by FDA prior to marketing approval. In addition, state agency inspections and approvals may also be required for a biological product to be shipped out of state.

REGULATORY PROCESS IN EUROPE

The Company believes that the Aastrom CPS will be regulated in Europe as a Class IIb medical device, under the authority of the new Medical Device Directives ("MDD") being implemented by European Union ("EU") member countries. This classification applies to medical laboratory equipment and supplies including, among other products, many devices that are used for the collection and processing of blood for patient therapy. Certain ancillary products (e.g., biological reagents) used with the Aastrom CPS may be considered Class III medical devices.

The MDD regulations vest the authority to permit affixing of the "CE Mark" with various "Notified Bodies." These are private and state organizations which operate under license from the EU to certify that appropriate quality assurance standards and compliance procedures are followed by developers and manufacturers of medical device products or, alternatively, that a manufactured medical product meets a more limited set of requirements. Notified Bodies are also charged with responsibility for determination of the appropriate standards to apply to a medical product. Receipt of permission to affix the CE Mark enables a company to sell a medical device in all EU member countries. Other registration requirements may also need to be satisfied in certain countries, although there is a general trend among EU member countries not to impose additional requirements beyond those specified for CE Mark certification.

COMPETITION

The biotechnology and medical device industries are characterized by rapidly evolving technology and intense competition. The Company's competitors include major pharmaceutical, medical device, medical products, chemical and specialized biotechnology companies, many of which have financial, technical and marketing resources significantly greater than those of the Company. In addition, many biotechnology companies have formed collaborations with large, established companies to support research, development and commercialization of products that may be competitive with those of the Company. Academic institutions, governmental agencies and other public and private research organizations are also conducting research activities and seeking patent protection and may commercialize products on their own or through joint ventures. The Company's product development efforts are primarily directed toward obtaining regulatory approval to market the Aastrom CPS for stem cell therapy. That market is currently dominated by the bone marrow harvest and PBPC collection methods. The Company's clinical data, although early, suggests that cells expanded in the Aastrom CPS using its current process will enable hematopoietic recovery within the time frames currently achieved by bone marrow harvest, however, neutrophil and platelet recovery times may be slower than with PBPC collection methods. The Company is evaluating techniques and methods to optimize the cells produced in the Aastrom CPS to reduce the recovery time of neutrophils and platelets in patients. There can be no assurance that if such procedure optimization does not lead to recovery times equal to or faster than those of PBPC collection methods, such outcome would not have a material adverse effect on the Company's business, financial condition and results of operations. In addition, the bone marrow harvest and PBPC collection methods have been widely practiced for a number of years and, recently, the patient costs associated with these procedures have begun to decline. There can be no assurance that the Aastrom CPS method, if approved for marketing, will prove to be competitive with these established collection methods on the basis of hematopoietic recovery time, cost or otherwise. The Company is aware of certain other products manufactured or under development by competitors that are used for the prevention or treatment of certain diseases and health conditions which the Company has targeted for product development. In particular, the Company is aware that competitors such as Amgen, Inc., CellPro, Incorporated, Novartis, A.G., Baxter Healthcare Corp. and RPR are in advanced stages of development of technologies and products for use in stem cell therapy and other market applications currently being pursued by the Company. In addition, Cobe, a significant shareholder of the Company, is a market leader in the blood cell processing products industry and, accordingly, a potential competitor of the Company. There can be no assurance that developments by others will not render the Company's product candidates or technologies obsolete or noncompetitive, that the Company will be able to keep pace with new technological developments or that the Company's product candidates will be able to supplant established products and

methodologies in the therapeutic areas that are targeted by the Company. The foregoing factors could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company's products under development are expected to address a broad range of existing and new markets. The Company believes that its stem cell therapy products will, in large part, face competition by existing procedures rather than novel new products. The Company's competition will be determined in part by the potential indications for which the Company's products are developed and ultimately approved by regulatory authorities. In addition, the first product to reach the market in a therapeutic or preventive area is often at a significant competitive advantage relative to later entrants to the market. Accordingly, the relative speed with which the Company or its corporate partners can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market are expected to be important competitive factors. The Company's competitive position will also depend on its ability to attract and retain qualified scientific and other personnel, develop effective proprietary products, develop and implement production and marketing plans, obtain and maintain patent protection and secure adequate capital resources. The Company expects its products, if approved for sale, to compete primarily on the basis of product efficacy, safety, patient convenience, reliability, value and patent position.

FACILITIES

The Company leases approximately 20,000 square feet of office and research and development space in Ann Arbor, Michigan under a lease agreement expiring in May 1998. The lease is renewable at the option of the Company for up to an additional five-year term. The Company believes that its facilities will be adequate for its currently anticipated needs. Contract manufacturing or additional facilities will be required in the future to support expansion of research and development and to manufacture products.

EMPLOYEES

As of September 30, 1997, the Company employed approximately 70 individuals full-time. A significant number of the Company's management and professional employees have had prior experience with pharmaceutical, biotechnology or medical product companies. None of the Company's employees are covered by collective bargaining agreements, and management considers relations with its employees to be good.

LEGAL PROCEEDINGS

The Company is not party to any material legal proceedings, although from time to time it may become involved in disputes in connection with the operation of its business.

EXECUTIVE OFFICERS AND DIRECTORS

The executive officers and directors of the Company, and their respective ages as of October 31, 1997, are as follows:

NAME	AGE	POSITION
Robert J. Kunze (1)	62	Chairman of the Board and Director
R. Douglas Armstrong, Ph.D. (1)	44	President, Chief Executive Officer and Director
James Maluta	50	Vice President, Product Development
Todd E. Simpson	36	Vice President, Finance & Administration, Chief Financial Officer, Secretary and Treasurer
Walter C. Ogier (2)	40	Vice President, Marketing
Thomas E. Muller, Ph.D. (3)	62	Vice President, Regulatory Affairs
Alan K. Smith, Ph.D.	42	Vice President, Research
Bruce W. Husel (4)	39	Vice President, Quality Systems
Stephen G. Emerson, M.D., Ph.D.	44	Director and Scientific Advisor
G. Bradford Jones (1)(5)	42	Director
Horst R. Witzel, Dr.-Ing	70	Director
Edward C. Wood, Jr. (1)(5)	52	Director

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(1) Member of Executive Committee.
(2) Mr. Ogier resigned from the Company in November 1997.
(3) Dr. Muller notified the Company in November 1997 of his intent to resign from the Company.
(4) Mr. Husel's employment with the Company commenced in November 1997.
(5) Member of Audit Committee.

All directors hold office until the next election of the class for which such directors have been chosen and until their successors have been duly elected and qualified. The Company's Bylaws provide that the Board of Directors will consist of between five and nine members, and the number of directors is currently set at six members. The Bylaws also provide that the Board of Directors will serve staggered three-year terms, or until their successors are elected and qualified. The terms of office of the Company's current directors expire as follows: Mr. Jones and Mr. Wood, 1999; Mr. Kunze and Dr. Emerson, 1998; and Dr. Armstrong and Dr. Witzel, 1997. Pursuant to the Stock Purchase Equity Commitment with Cobe, dated October 29, 1996, the Company agreed to use reasonable and good faith efforts to cause a nominee of Cobe, who most be deemed by the Board of Directors to be qualified, to be elected to the Board of Directors for so long as Cobe owns at least 15% of the outstanding shares of Common Stock. There are no family relationships among the directors or officers of the Company. Officers of the Company are elected by and serve at the discretion of the Board of Directors.

Robert J. Kunze, a director of the Company since its inception in 1989, is a founder of the Company and served as its President and Chief Executive Officer through May 1991. Mr. Kunze is a general partner of McFarland and Dewey, an investment bank. From 1987 through early 1997, he was a General Partner of H&Q Life Science Venture Partners, a venture capital fund specializing in medical products and biotechnology investments. Previous to that, Mr. Kunze was Managing Partner of Hambrecht & Quist Venture Partners. Prior to that he served as a senior executive with W.R. Grace & Co. and General Electric. Mr. Kunze also serves on the Board of Directors of Escalon Medical Corporation.

R. Douglas Armstrong, Ph.D. joined the Company in June 1991 as a director and as its President and Chief Executive Officer. From 1987 to 1991, Dr. Armstrong served in different capacities, including as Executive Vice President and a Trustee of the La Jolla Cancer Research Foundation ("LJCRF"), a 250-employee scientific research institute located in San Diego, California that is now known as The Burnham Institute. Dr. Armstrong received his doctorate in Pharmacology and Toxicology from the Medical College of Virginia, and has held faculty and staff positions at Yale University, University of California, San Francisco, LJCRF and University of Michigan. Dr. Armstrong also serves on the Board of Directors of Nephros Therapeutics, Inc.

James Maluta joined the Company in August 1992 as Vice President, Product Development. Mr. Maluta has a broad background in the development and manufacturing of medical devices, with over 25 years of experience in the industry, principally with OHMEDA and with Cobe BCT, Inc. While with Cobe BCT, Inc., Mr. Maluta was Program Manager for the Cobe Spectra Apheresis System, a device for blood cell processing and apheresis. Mr. Maluta held other engineering management positions and also was director of Quality Assurance for Cobe BCT. Mr. Maluta received his degree in electrical engineering from the University of Wisconsin, Madison.

Todd E. Simpson joined the Company in January 1996 as Vice President, Finance and Administration and Chief Financial Officer and is also the Company's Secretary and Treasurer. Prior to that, Mr. Simpson was Treasurer of Integra LifeSciences Corporation ("Integra"), a biotechnology company, which acquired Telios Pharmaceuticals, Inc. ("Telios") in August 1995 in connection with the reorganization of Telios under Chapter 11 of the U.S. Bankruptcy Code. Mr. Simpson served as Vice President of Finance and Chief Financial Officer of Telios up until its acquisition by Integra and held various other financial positions at Telios after joining that company in February 1992. Telios was a publicly-held company engaged in the development of pharmaceutical products for the treatment of dermal and ophthalmic wounds, fibrotic disease, vascular disease, and osteoporosis. From August 1983 through February 1992, Mr. Simpson practiced public accounting with the firm of Ernst & Young, LLP. Mr. Simpson is a Certified Public Accountant and received his B.S. degree in Accounting and Computer Science from Oregon State University.

Walter C. Ogier joined the Company in March 1994 as Director of Marketing and was promoted to Vice President, Marketing during 1995. Prior to that, Mr. Ogier was at Baxter Healthcare Corporation's Immunotherapy Division, where he served as Director, Business Development from 1992 to 1994 and as Manager, Marketing and Business Development in charge of the company's cell therapy product lines from 1990 to 1992. Mr. Ogier previously held positions with Ibbottson Associates and with the Business Intelligence Center at SRI International (formerly Stanford Research Institute). Mr. Ogier received his B.A. degree in Chemistry from Williams College in 1979 and his Masters of Management degree from the Yale School of Management in 1987.

Thomas E. Muller, Ph.D. joined the Company in May 1994 as Vice President, Regulatory Affairs. Prior to that, Dr. Muller was Director, Biomedical Systems with W.R. Grace & Company in Lexington, Massachusetts. Prior to this, Dr. Muller was Vice President, Engineering and Director of Research and Development with the Renal Division of Baxter Healthcare in Deerfield, Illinois. Dr. Muller has also served as Adjunct Professor at Columbia University and as Visiting Professor at the University of Gent, Belgium. Dr. Muller graduated from the Technical University in Budapest, Hungary, in 1956 with a B.S. in Chemical Engineering. Dr. Muller received his M.S. degree in 1959 and was awarded a Ph.D. in 1964, both in Polymer Chemistry, from McGill University.

Alan K. Smith, Ph.D. joined the Company in November 1995 as Vice President, Research. Previously, Dr. Smith was Vice President of Research and Development at Geneic Sciences, Inc., a developmental stage bone marrow transplantation company. Prior to that, Dr. Smith held the position of Director, Cell Separations Research and Development of the Immunotherapy Division of Baxter Healthcare Corporation. In this capacity, he was responsible for the research and development activities for a stem cell concentration system approved for clinical use in Europe and currently in pivotal clinical trials in the United States. Dr. Smith has also held positions as Research and Development Manager at BioSpecific Technologies, as Director of Biochemistry at HyClone Laboratories and as a member of the Board of Directors of Dallas Biomedical. Dr. Smith received his B.S. degree in Chemistry from Southern Utah State College in 1976 and a Ph.D. in Biochemistry from Utah State University in 1983.

Bruce W. Husel joined the Company in November 1997 as Vice President, Quality Systems. From May 1994 to September 1997, Mr. Husel served as Director of Quality Assurance for Sanofi Diagnostics Pasteur, where he led efforts to achieve EN 46001 registration and prepare for CE Marking. From June 1992 to May 1994, Mr. Husel was Director of Quality and Regulatory Affairs for Baxter Anesthesia Division (formerly known

as Bard MedSystems). Prior to that, he served as Quality Manager for McGaw, Inc. Mr. Husel received his B.S. degree in Electrical Engineering from Rice University in 1980, an M.S. degree in Engineering Management from Southern Methodist University in 1986 and an M.B.A. degree in Accounting from the University of Texas at Dallas in 1987.

Stephen G. Emerson, M.D., Ph.D., a director since the inception of the Company in 1989, is a scientific founder of the Company and has been an active advisor of the Company since that time. Dr. Emerson has been a Professor of Medicine at the University of Pennsylvania since 1994 where he serves as head of Hematology and Oncology. From 1991 to 1994, Dr. Emerson was an Associate Professor of Medicine at the University of Michigan. Dr. Emerson received his doctorate degrees in Medicine and Cell Biology/Immunology from Yale University. He completed his internship and residency at Massachusetts General Hospital and his clinical and research fellowship in hematology at the Brigham and Women's Hospital, the Dana-Farber Cancer Institute and Children's Hospital Medical Center.

G. Bradford Jones, a director since April 1992, is a general partner of Brentwood V Ventures, L.P., the general partner of Brentwood Associates V, L.P. Brentwood Associates V, L.P. is a partnership organized by the firm Brentwood Venture Capital, which Mr. Jones joined in 1981. Mr. Jones was elected to the Board of Directors of the Company pursuant to the terms of the Series B Preferred Stock Purchase Agreement dated April 7, 1992 with the Company, of which Brentwood Associates V, L.P. is a party. Mr. Jones received a B.A. degree in Chemistry and an M.A. degree in Physics from Harvard University and M.B.A. and J.D. degrees from Stanford University. Mr. Jones also serves on the Board of Directors of Interpore International, ISOCOR, Onyx Acceptance Corporation, Plasma & Materials Technologies, and several privately-held companies.

Horst R. Witzel, Dr.-Ing., a director since June 1994, served as Chairman of the Board of Executive Directors of Schering AG in Berlin, Germany from 1986 until his retirement in 1989, whereupon he became a member of the Supervisory Board of Schering AG until 1994. Prior to that, Dr. Witzel held various leadership positions in research and development with Schering AG where he was responsible for worldwide production and technical services. Dr. Witzel received his doctorate in chemistry from the Technical University of West Berlin. Dr. Witzel also serves on the Board of Directors of The Liposome Company, Inc. and Cephalon, Inc. and is a member of the Supervisory Board of Brau and Brunnen AG.

Edward C. Wood, Jr., a director since August 1994, has served as president of Cobe BCT, Inc., a division of Cobe Laboratories, Inc., since 1991. Cobe is a subsidiary of Gambro AB, a Swedish company, and is a leading provider of blood cell processing products. Prior to that, Mr. Wood held various positions in manufacturing, research and development, and marketing with Cobe. Mr. Wood received degrees in chemistry from Harvey Mudd College and in management from the University of Colorado.

LIMITATION OF LIABILITY AND INDEMNIFICATION MATTERS

The Company has adopted provisions in its Restated Articles of Incorporation that limit the liability of its directors for monetary damages arising from a breach of their fiduciary duty as directors, except under certain circumstances which include breach of the director's duty of loyalty to the Company or its shareholders, acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of the law.

The Company's Bylaws provide that the Company shall indemnify its directors to the fullest extent authorized or permitted by the Michigan Business Corporation Act. Additionally, the Company has entered into an Indemnification Agreement, originally dated as of December 14, 1993 (the "Indemnification Agreement"), with certain of its directors, officers and other key personnel, which may, in certain cases, be broader than the specific indemnification provisions contained under applicable law. The Indemnification Agreement may require the Company, among other things, to indemnify such officers, directors and key personnel against certain liabilities that may arise by reason of their status or service as directors, officers or employees of the Company, to advance the expenses incurred by such parties as a result of any threatened claims or proceedings brought against them as to which they could be indemnified, and to cover such officers, directors and key employees under the Company's directors' and officers' liability insurance policies to the maximum extent that insurance coverage is maintained.

At present, there is no pending litigation or proceeding involving a director, officer, employee or agent of the Company where indemnification by the Company will be required or permitted. The Company is not aware of any threatened litigation or proceeding which may result in a claim for such indemnification.

EXECUTIVE COMPENSATION

The following table sets forth information concerning the compensation of the Chief Executive Officer of the Company and each of the Company's five other most highly compensated executive officers (the "Named Executive Officers") for services rendered in all capacities to the Company, during the fiscal years ended June 30, 1996 and 1997.

SUMMARY COMPENSATION TABLE

NAME AND PRINCIPAL POSITION	YEAR	ANNUAL COMPENSATION SALARY	ANNUAL COMPENSATION BONUS	LONG TERM COMPENSATION AWARDS SHARES UNDERLYING OPTIONS	ALL OTHER COMPENSATION
R. Douglas Armstrong, Ph.D.	1997	$ 183,583	--	333,333	$ 7,108(1)
President and Chief Executive Officer	1996	156,962	$ 55,000	--	8,885(1)
James Maluta	1997	130,354	--	120,000	--
Vice President, Product Development	1996	118,942	10,000	--	--
Walter C. Ogier (2)	1997	120,265	--	80,000	--
Vice President, Marketing	1996	106,250	7,500	6,667	--
Todd E. Simpson	1997	125,593	12,500	75,000	--
Vice President, Finance and Administration and Chief Financial Officer	1996	60,779(3)	--	40,000	48,061(4)
Alan K. Smith, Ph.D.	1997	128,685	--	75,000	60(4)
Vice President, Research	1996	77,740(5)	--	40,000	76,000(4)
Thomas E. Muller, Ph.D.(6)	1997	119,517	--	20,000	--
Vice President, Regulatory Affairs	1996	118,560	--	6,667	--

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(1) Consists of vacation pay.
(2) Mr. Ogier resigned from the Company in November 1997.
(3) Mr. Simpson began his employment with the Company in January 1996.
(4) Consists of relocation expenses.
(5) Dr. Smith began his employment with the Company in October 1995.
(6) Dr. Muller notified the Company in November 1997 of his intent to resign from the Company.

The following table provides information with respect to stock option grants to the Named Executive Officers during the year ended June 30, 1997.

OPTION GRANTS IN LAST FISCAL YEAR

NAME	INDIVIDUAL GRANTS: NUMBER OF SHARES UNDERLYING OPTIONS GRANTED(2)	INDIVIDUAL GRANTS: % OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	INDIVIDUAL GRANTS: EXERCISE OR PRICE PER SHARE(2)	INDIVIDUAL GRANTS: EXPIRATION DATE	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(1): 5%	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(1): 10%
R. Douglas Armstrong, Ph.D.	333,333	42.5%	$7.00	2/3/07	$3,800,750	$6,052,060
James Maluta	120,000	15.3	7.00	2/3/07	1,368,271	2,178,744
Walter C. Ogier	80,000	10.2	7.00	2/3/07	912,181	1,452,496
Todd E. Simpson	75,000	9.6	7.00	2/3/07	855,170	1,361,715
Alan K. Smith, Ph.D.	75,000	9.6	7.00	2/3/07	855,170	1,361,715
Thomas E. Muller, Ph.D.	20,000	2.6	7.00	2/3/07	228,045	363,124

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(1) The 5% and 10% assumed annual rates of compounded stock price appreciation are mandated by the rules of the Securities and Exchange Commission and do not represent the Company's estimate or projection of the future price of the Common Stock.
(2) Each of these options was granted under the Company's Amended and Restated 1992 Incentive and Non-Qualified Stock Option Plan (the "1992 Plan") at an exercise price equal to the fair market value of the Common Stock on the date of grant. With the exception of the option grant to Dr. Armstrong, which is immediately exercisable, all such options vest over a four-year period, subject to continued employment with the Company.

The following table provides information with respect to exercises of stock options during the year ended June 30, 1997, and unexercised options held as of June 30, 1997, by the Named Executive Officers.

AGGREGATED OPTION EXERCISES AND FISCAL YEAR-END OPTION VALUES

NAME	SHARES ACQUIRED ON EXERCISE	VALUE REALIZED(1)	NUMBER OF SHARES UNDERLYING UNEXERCISED OPTIONS AT JUNE 30, 1997: EXERCISABLE	NUMBER OF SHARES UNDERLYING UNEXERCISED OPTIONS AT JUNE 30, 1997: UNEXERCISABLE	VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT JUNE 30, 1997(2): EXERCISABLE	VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT JUNE 30, 1997(2): UNEXERCISABLE
R. Douglas Armstrong, Ph.D.	--	--	333,333	--	$ 41,667	--
James Maluta	16,667	$99,169	--	120,000	--	$ 15,000
Walter C. Ogier	--	--	22,083	92,917	130,842	86,533
Todd E. Simpson	--	--	12,500	102,500	74,063	172,313
Alan K. Smith, Ph.D.	--	--	15,000	100,000	88,875	157,500
Thomas E. Muller, Ph.D.	--	--	22,083	31,251	130,842	69,162

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(1) "Value Realized" represents the fair market value of the underlying shares of Common Stock on the exercise date, minus the aggregate exercise price of such options.
(2) The value of "in-the-money" stock options represents the difference between the exercise price of such options and the fair market value of $7.125 per share of Common Stock as of June 30, 1997, the closing price of the Common Stock reported on the Nasdaq National Market on such date.

No compensation intended to serve as incentive for performance to occur over a period longer than one fiscal year was paid pursuant to a long-term incentive plan during the last fiscal year to any of the Named Executive Officers. The Company does not have any defined benefit or actuarial plan with any of the Named Executive Officers under which benefits are determined primarily by final compensation or average final compensation and years of service.

EMPLOYMENT AGREEMENTS

The Company has a policy of entering into employment agreements with all of its employees, and has entered into such agreements with all of its executive officers other than Dr. Armstrong. Such employment agreements generally establish salary levels (which are subject to periodic review) and provide for customary fringe benefits such as vacation leave, sick leave and health insurance. The agreements also generally provide for the protection of confidential information and the assignment to the Company of inventions conceived by the employee during his or her employment and permit the termination of the employment relationship by either party upon fourteen days prior written notice.

The Company entered into employment agreements with James Maluta, Walter C. Ogier, Thomas E. Muller, Ph.D., Alan K. Smith, Ph.D., Todd E. Simpson and Bruce W. Husel in June 1992, February 1994, April 1994, October 1995, December 1995 and October 1997, respectively. Pursuant to these agreements, the Company agreed to pay Messrs. Maluta, Ogier, Muller, Smith, Simpson and Husel annual base salaries of $90,000, $87,500, $110,000, $122,500, $122,500 and $110,000, respectively, certain of which base salaries have been increased by the Board of Directors and are subject to annual review and adjustment. Pursuant to the terms of the foregoing employment agreements, either party may generally terminate the employment relationship without cause at any time upon 14 days prior written notice to the other party or immediately with cause upon notice.

STOCK OPTION AND EMPLOYEE BENEFIT PLANS

1989 STOCK OPTION PLAN

In 1989, the Company established the 1989 Stock Option Plan. As of September 30, 1997, options to purchase an aggregate of 932,266 shares of Common Stock have been exercised at $0.15 per share. Options to purchase 13,127 shares of Common Stock were cancelled unexercised. No additional shares remain available for grant under the 1989 Stock Option Plan.

ANCILLARY PLAN

In 1991, the Company established an Ancillary Plan to grant options to individuals who were not eligible to receive options under the 1989 Stock Option Plan. Options to purchase an aggregate of 7,498 shares of the Company's Common Stock were granted under the Ancillary Plan, of which options to purchase 4,328 shares have been exercised at $0.15 per share and the remaining options to purchase 3,170 shares have been cancelled. No additional shares remain available for grant under the Ancillary Plan.

AMENDED AND RESTATED 1992 INCENTIVE AND NON-QUALIFIED STOCK OPTION PLAN

In 1992, the Company adopted the 1992 Plan, providing for the grant of options to purchase 666,667 shares of Common Stock. The Company allocated an additional 100,000 shares of Common Stock during 1992, an additional 333,333 shares of Common Stock in 1994 and an additional 800,000 shares of Common Stock in 1996 to the 1992 Plan, resulting in a total share reserve of 1,900,000 shares. The 1992 Plan was amended and restated to its current form in 1996. Options under the 1992 Plan for a total of 508,530 shares have been exercised as of September 30, 1997. As of September 30, 1997, options to purchase 1,076,448 shares of Common Stock were outstanding.

The 1992 Plan provides for grants to employees and officers of "incentive stock options" within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended, provided that such employee or

officer is an employee on the date of grant. The 1992 Plan also provides for grants to employees, officers, consultants or service providers of nonqualified stock options. The 1992 Plan previously has been administered by the Board of Directors, but is currently administered by the Compensation Committee of the Board of Directors (the "Committee"). Each option granted pursuant to the 1992 Plan is authorized by the Committee and evidenced by a notice in such form as the Committee may from time to time determine.

The exercise price of each incentive stock option granted under the 1992 Plan must be at least equal to the fair market value of a share of Common Stock on the date of grant, except for incentive stock options granted to individuals who, at the time of grant, own stock possessing more than 10% of the total combined voting power of the Company, which options must have an exercise price of at least 110% of the fair market value of a share of Common Stock on the date of grant and must expire five years from the date of grant. The exercise price of each nonqualified stock option granted under the 1992 Plan must be at least 85% of the fair market value of the shares on the date of grant. No option shall be treated as an incentive stock option to the extent that such option would cause the aggregate fair market value (determined as of the date of grant of such option) of the shares with respect to which incentive stock options are exercisable by such optionee for the first time during any calendar year to exceed $100,000. The terms of all incentive stock options and nonqualified stock options granted under the 1992 Plan may not exceed ten years. The exercise price may be paid in cash or, at the Committee's discretion, by delivery of previously owned shares of the Company's Common Stock, by a combination of cash and shares, or any other form of legal consideration acceptable to the Committee. Options under the 1992 Plan generally may not be granted after April 2006.

In the event of a transfer of control of the Company, as defined under the 1992 Option Plan, the Company must cause any successor corporation to assume the options or substitute similar options for outstanding options or continue such options in effect. In the event that any successor to the Company in a merger, consolidation or dissolution will not assume the options or substitute similar options, then the options become exercisable in full and such options will be terminated if not exercised prior to such merger, consolidation or dissolution. The vesting of certain options granted to executive officers of the Company accelerates if such officer is terminated following a change of control.

1996 OUTSIDE DIRECTORS STOCK OPTION PLAN

A total of 150,000 shares of Common Stock have been reserved for issuance under the Company's 1996 Outside Directors Stock Option Plan (the "Directors Plan"). As of September 30, 1997, options to purchase 30,000 shares of Common Stock have been granted under the Directors Plan. The Directors Plan provides for the automatic granting of non-qualified stock options to directors of the Company who are not employees of the Company ("Outside Directors"). Under the Directors Plan, each Outside Director will automatically be granted an option to purchase 5,000 shares of Common Stock on the date of his or her election or appointment. In addition, each serving Outside Director will thereafter automatically be granted an option to purchase 5,000 shares of Common Stock following each annual meeting of shareholders after their election, provided that the Outside Director continues to serve in such capacity and that the Outside Director has served continuously as a director for at least six months. The exercise price of the options in all cases will be equal to the fair market value of the Common Stock on the date of grant. Options granted under the Directors Plan generally vest over a one-year period in equal monthly installments and must be exercised within ten years from the date of grant.

1996 EMPLOYEE STOCK PURCHASE PLAN

A total of 250,000 shares of the Company's Common Stock have been reserved for issuance under the Company's 1996 Employee Stock Purchase Plan (the "Purchase Plan"). As of September 30, 1997, 6,961 shares of Common Stock have been issued under the Purchase Plan. The Purchase Plan permits eligible employees to purchase Common Stock at a discount through payroll deductions, during sequential 24-month offering periods. Each offering period is divided into four consecutive six-month purchase periods. Unless otherwise provided by the Board of Directors prior to the commencement of an offering period, the price at which stock is purchased under the Purchase Plan for such offering period is equal to 85% of the lesser of the fair market value of the Common Stock on the first day of such offering period or the last day of the purchase period of such offering period.

SECTION 401(K) PLAN

Effective January 1, 1994, the Company adopted the Aastrom Biosciences, Inc. 401(k) Plan (the "Plan"). The Plan is intended to be a qualified retirement plan under the Internal Revenue Code. Employees of the Company are eligible to participate in the Plan upon the completion of three consecutive months of employment. Participants may make salary deferral contributions to the Plan of up to 15% of compensation, subject to the limitations imposed under the Internal Revenue Code. The Company may, but is not required to, make matching contributions to the Plan based on the participants' salary-defined contributions. Employer contributions are subject to a graduated vesting schedule based upon an employee's years of service with the Company. It is not anticipated that the Company will make any contributions to the Plan for the 1998 Plan Year. All contributions to the Plan are held in a trust which is intended to be exempt from income tax under Section 501(a) of the Internal Revenue Code. The Plan's trustees are R. Douglas Armstrong and Todd E. Simpson. Participants may direct the investment of their contributions among specified Merrill Lynch investment funds. The Plan may be amended or terminated by the Company at any time, subject to certain restrictions imposed by the Internal Revenue Code and the Employee Retirement Income Security Act of 1974.

COMPENSATION OF DIRECTORS

Each Outside Director receives a cash payment of $1,000 for each meeting of the Board of Directors attended in person and a cash payment of $500 for each telephonic meeting of the Board of Directors attended telephonically. In lieu of such cash payments for attending meetings, Mr. Kunze receives $5,000 per month for his services as Chairman of the Board of Directors, which payments have been approved through the date of the Company's 1997 annual meeting of shareholders. Directors also receive reimbursement for expenses incurred in attending each meeting of the Board of Directors and its committees. In addition, Outside Directors receive annual grants of options to purchase shares of Common Stock in accordance with the Directors Plan. See "--Stock Option and Employee Benefit Plans--1996 Outside Directors Stock Option Plan."

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION IN COMPENSATION DECISIONS

During the fiscal year ended June 30, 1997, Robert J. Kunze, who served as President and Chief Executive Officer of the Company until 1991 and currently serves as its Chairman of the Board, and Albert B. Deisseroth, M.D., Ph.D., a former director of the Company, were initially the members of the Compensation Committee of the Board of Directors. Currently, all of the Company's directors comprise the Compensation Committee, including Mr. Kunze and R. Douglas Armstrong, Ph.D., the Company's President and Chief Executive Officer. During the last fiscal year, none of the executive officers who serve on the Board of Directors participated in deliberations regarding their own compensation. No member of the Board of Directors of the Company serves as a member of the board of directors or compensation committee of an entity that has one or more executive officers serving as members of the Company's Board of Directors.

CERTAIN TRANSACTIONS

In April 1995, the Company sold 775,001 shares of Series D Preferred Stock at a price per share of $4.00 to the following investors: (i) H&Q Life Science Technology Fund I purchased 167,001 shares for a purchase price of $668,004, (ii) H&Q London Ventures purchased 100,000 shares for a purchase price of $400,000, (iii) Brentwood Associates V, L.P. ("Brentwood") purchased 231,250 shares for a purchase price of $925,000, (iv) Windpoint Partners II, L.P. purchased 89,250 shares for a purchase price of $357,000, and (v) the State Treasurer of the State of Michigan ("Michigan") purchased 187,500 shares for a purchase price of $750,000. In May 1995, Cobe purchased 1,250,000 shares of Series D Preferred Stock for a purchase price of $5,000,000. Upon the closing of the Company's initial public offering in February 1997, each outstanding share of Series D Preferred Stock was converted into two-thirds of a share of Common Stock.

In April 1995, Dr. Armstrong and Dr. Emerson agreed to grant to Brentwood an option to purchase up to 28,000 shares and 14,667 shares of Common Stock, respectively, and, together with two other shareholders of the Company, an aggregate of up to 66,667 shares of Common Stock at a purchase price of $100,000. Brentwood exercised this option in April 1996, purchasing an aggregate of 66,667 shares of Common Stock at a purchase price of $100,000 from such shareholders.

In September 1995, the Company and RPR entered into a collaborative relationship for use of the Aastrom CPS as a component of its lymphoid cell therapy program. During September 1996, RPR notified the Company that it would not exercise its option to continue the collaboration. As a result, $3,500,000 of option payments previously paid to the Company by RPR were converted into 205,882 shares of the Company's Series E Preferred Stock. Upon the closing of the Company's initial public offering in February 1997, each outstanding share of Series E Preferred Stock was converted into two-thirds of a share of Common Stock.

In October 1995, the Company repurchased 62,500 shares of Series D Preferred Stock from Brentwood at the original purchase price of $250,000 and in December 1995 resold these shares to Northwest Ohio Venture Fund, a shareholder of the Company, for a total purchase price of $250,000.

In January 1996, the Company sold 1,411,765 shares of Series E Preferred Stock at a price per share of $4.25 to the following investors: (i) Michigan purchased 470,588 shares for a total purchase price of $1,999,999, and (ii) SBIC Partners, L.P. purchased 941,177 shares for a total purchase price of $4,000,002.

In November 1993, in connection with the purchase of Common Stock upon exercise of stock options granted under the 1989 Stock Option Plan to R. Douglas Armstrong, the Company's President and Chief Executive Officer, the Company loaned to Dr. Armstrong $120,000 at an interest rate of 4% per annum pursuant to a full recourse promissory note. During September 1997, Dr. Armstrong repaid the outstanding principal under the note plus $18,467 in accrued interest by surrendering 15,711 shares of Common Stock to the Company, which shares were canceled.

In October 1993, in connection with the purchase of Common Stock upon exercise of stock options granted under the 1989 Stock Option Plan and the 1992 Plan to Stephen G. Emerson, a director of the Company, the Company loaned to Dr. Emerson $47,303 at an interest rate of 6% per annum pursuant to a full recourse promissory note. Interest on the note is payable on an annual basis, and all principal and accrued but unpaid interest is due on June 30, 1998. The loan is secured by the shares of Common Stock held by Dr. Emerson. During May 1997, the Company and Dr. Emerson entered into an agreement, pursuant to which Dr. Emerson was able to repay the outstanding balance under the note by surrendering shares of Common Stock to the Company, and, during October 1997, Dr. Emerson repaid outstanding principal and accrued interest under the note by surrendering 6,789 shares of Common Stock to the Company, which shares were canceled. In November 1997, Dr. Emerson notified the Company of his intention to repay additional outstanding principal and accrued interest by surrendering an additional 2,000 shares of Common Stock to the Company.

In October 1996, the Company executed a financing commitment with Cobe to provide the Company with up to $5,000,000 (the "Equity Commitment") and up to $5,000,000 in funding from Michigan under a convertible loan commitment agreement ("Convertible Loan Commitment"). Both the Equity Commitment and

the Convertible Loan Commitment terminated in February 1997 upon the closing of the Company's initial public offering. The Company issued warrants to Michigan to purchase 69,444 shares of Common Stock as consideration for securing the Convertible Loan Commitment. The warrants expire on October 15, 2000 if not exercised, and may be exercised, in whole or in part, at a price equal to the lesser of (a) $9.00 per share, which price increases by $3.00 per share on each of February 7, 1998, 1999 and 2000; and (b) 85% of the fair market value of the Company's Common Stock at the time of exercise.

Cobe Laboratories, Inc. purchased 714,200 shares of Common Stock in the Company's initial public offering at the initial public offering price of $7.00 per share. See "Description of Capital Stock--Rights of Cobe."

The Company has entered into employment agreements with certain of its executive officers. See "Management--Employment Agreements." The Company has also entered into an Indemnification Agreement with certain of its directors, officers and other key personnel. See "Management--Limitation of Liability and Indemnification Matters."

The Company believes that all of the foregoing transactions were on terms no less favorable to the Company than would be obtained from unrelated third parties. Any future transactions between the Company and its executive officers, directors and affiliates will be on terms no less favorable to the Company than can be obtained from unaffiliated third parties, and any material transactions with any such person will be approved by a majority of the members of the Company's Board of Directors and by a majority of the disinterested members of the Company's Board of Directors.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the beneficial ownership of the outstanding shares of the Company's Common Stock (assuming conversion of the 2,200,000 shares of Preferred Stock offered hereby into Common Stock) as of September 30, 1997, and as adjusted to give effect to the sale of 2,200,000 shares of Preferred Stock in this offering by (i) each person known by the Company to be the beneficial owner of 5% or more of the outstanding shares of Common Stock, (ii) each Named Executive Officer, (iii) each director of the Company, and (iv) all executive officers and directors of the Company as a group.

		PERCENTAGE BENEFICIALLY OWNED(1)	
BENEFICIAL OWNER	NUMBER OF SHARES OF COMMON STOCK BENEFICIALLY OWNED(1)	BEFORE THE OFFERING	AFTER THE OFFERING
Cobe Laboratories, Inc.(2) 1185 Oak Street Lakewood, CO 80215	3,214,199	24.2%	20.8%
State Treasurer of the State of Michigan(3) Custodian of Certain Retirement Systems c/o Venture Capital Division 430 West Allegan Lansing, MI 48992	1,408,168	10.6	9.1
H&Q London Ventures One Bush Street, 18th Floor San Francisco, CA 94104	816,666	6.2	5.3
R. Douglas Armstrong, Ph.D.(4)	807,177	5.9	5.1
Albert B. Deisseroth, M.D., Ph.D.(5)	28,333	*	*
Stephen G. Emerson, M.D., Ph.D.(6)	260,539	2.0	1.7
G. Bradford Jones(7)	381,637	2.9	2.5
Robert J. Kunze(8)	47,227	*	*
James Maluta(9)	83,332	*	*
Thomas E. Muller, Ph.D.(10)	24,584	*	*
Walter C. Ogier(11)	32,083	*	*
Todd E. Simpson(12)	17,500	*	*
Alan K. Smith, Ph.D.(13)	21,488	*	*
Horst R. Witzel, Dr.-Ing.(14)	15,311	*	*
Edward C. Wood, Jr.(15)	3,220,949	24.3	20.8
All officers and directors as a group (12 persons)(16)	4,940,160	36.0	31.0

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* Represents less than 1% of outstanding Common Stock or voting power.

(1) Shares beneficially owned and percentage of ownership are based on 13,272,674 shares of Common Stock outstanding as of September 30, 1997 and (assuming conversion of the 2,200,000 shares of Preferred Stock offered hereby into Common Stock) 15,472,674 shares of Common Stock to be outstanding after the closing of this offering. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or disposition power with respect to such shares.

(2) Cobe has an option to purchase from the Company an amount of Common Stock equal to 30% of the Company's fully diluted shares after the exercise of such option, at a purchase price equal to 120% of the public market trading price of the Company's Common Stock. The option expires on February 6, 2000. Cobe also has a "right of first negotiation" in the event the Company receives any proposal concerning, or otherwise decides to pursue, a merger, consolidation or other transaction in which all or a majority of the Company's equity securities or all or substantially all of the Company's assets, or any material portion of the assets of the Company used by the Company in performing its obligations under Cobe's distribution

agreement with the Company would be acquired by a third party outside of the ordinary course of business. Edward C. Wood, Jr., a director of the Company, is the President of Cobe BCT, Inc., an affiliate of Cobe. See footnote 15, below and "Description of Capital Stock--Rights of Cobe."

(3) Includes 69,444 shares issuable upon exercise of warrants held by the State Treasurer of the State of Michigan ("Michigan") that are exercisable until October 15, 2000.

(4) Includes 333,333 shares issuable upon exercise of options held by Dr. Armstrong that are exercisable within the 60-day period following September 30, 1997. Dr. Armstrong's address is 24 Frank Lloyd Wright Drive, Ann Arbor, MI 48106.

(5) Includes 3,333 shares issuable upon exercise of options held by Dr. Deisseroth that are exercisable within the 60-day period following September 30, 1997. Dr. Deisseroth resigned from his position as a director of the Company in October 1997. 6,250 of the shares held by Dr. Deisseroth are subject to vesting and a right of repurchase by the Company until December 15, 1997.

(6) Includes (a) 3,750 shares issuable upon exercise of options held by Dr. Emerson that are exercisable within the 60-day period following September 30, 1997, (b) 90,000 shares which Dr. Emerson transferred as a gift subsequent to September 30, 1997, (c) 6,789 shares that were surrendered to the Company and canceled in payment of the outstanding balance under a promissory note subsequent to September 30, 1997, and (d) 2,000 shares that, to the Company's knowledge, Dr. Emerson intends to surrender to the Company in payment of the outstanding balance under a promissory note.

(7) Includes 370,831 shares held by Brentwood Associates V, L.P. Mr. Jones, as a general partner of Brentwood Associates V Ventures, L.P., which is the general partner of Brentwood Associates V, L.P., may be deemed to beneficially own such shares, but Mr. Jones disclaims beneficial ownership of all such shares except to the extent of his pecuniary interest therein. Also includes 3,750 shares issuable upon exercise of options held by Mr. Jones that are exercisable within the 60-day period following September 30, 1997.

(8) Includes 3,750 shares issuable upon exercise of options held by Mr. Kunze that are exercisable within the 60-day period following September 30, 1997.

(9) Consists of shares held of record by James Maluta and Deborah Vincent, as Trustees, with shared voting and investment power, of the James Maluta and Deborah Vincent Living Trust dated October 26, 1993.

(10) Consists of shares issuable upon exercise of options held by Dr. Muller that are exercisable within the 60-day period following September 30, 1997.

(11) Includes 27,083 shares issuable upon exercise of options held by Mr. Ogier that are exercisable within the 60-day period following September 30, 1997.

(12) Consists of shares issuable upon exercise of options held by Mr. Simpson that are exercisable within the 60-day period following September 30, 1997.

(13) Includes 20,000 shares issuable upon exercise of options held by Dr. Smith that are exercisable within the 60-day period following September 30, 1997.

(14) Includes 9,311 shares issuable upon exercise of options held by Dr. Witzel that are exercisable within the 60-day period following September 30, 1997.

(15) Includes 3,214,199 shares held by Cobe. Mr. Wood, as the President of Cobe BCT, Inc., an affiliate of Cobe, may be deemed to beneficially own shares held by Cobe, but Mr. Wood disclaims beneficial ownership of all such shares. See footnote 2, above. Also includes 3,750 shares issuable upon exercise of options that are exercisable within the 60-day period following September 30, 1997. Mr. Wood's address is 1201 Oak Street, Lakewood, CO 80215.

(16) Includes 450,144 shares issuable upon exercise of options that are exercisable within the 60-day period following September 30, 1997. Also includes 370,831 shares held by Brentwood Associates V, L.P. and 3,214,199 shares held by Cobe.

DESCRIPTION OF CAPITAL STOCK

The authorized capital stock of the Company consists of 40,000,000 shares of Common Stock, no par value, and 5,000,000 shares of preferred stock, no par value.

The following summary of certain provisions of the Common Stock and the Company's preferred stock does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of the Company's Restated Articles of Incorporation and the Certificate of Designation of the Preferred Stock, which are included as exhibits to the Registration Statement of which this Prospectus forms a part, as well as by the provisions of applicable law.

COMMON STOCK

As of September 30, 1997, there were 13,272,674 shares of Common Stock outstanding held by approximately 125 shareholders of record. The holders of Common Stock are entitled to one vote per share on all matters to be voted upon by the Company's shareholders. Subject to preferences that may be applicable to outstanding shares of preferred stock, the holders of Common Stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available therefor. See "Dividend Policy." In the event of any liquidation, dissolution or winding up of the Company, the holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior liquidation rights of holders of preferred stock then outstanding. The Common Stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the Common Stock. All outstanding shares of Common Stock are fully paid and nonassessable. The rights, preferences and privileges of holders of Common Stock are set forth in the Company's Restated Articles of Incorporation, which Articles may only be amended by the holders of at least two-thirds of the outstanding shares of Common Stock. The rights of the holders of Common Stock are also subject to, and may be adversely affected by, the rights of the holders of any shares of the Preferred Stock and any preferred stock which the Company may designate and issue in the future.

PREFERRED STOCK

The Company is authorized to issue up to 5,000,000 shares of preferred stock, 2,200,000 of which are designated as 5 1/2% Convertible Preferred Stock and none of which were outstanding prior to this offering.

Dividends on the Preferred Stock are cumulative, accrue commencing on the date of issuance on a quarterly basis (on the last day of March, June, September and December of each year) at an annual rate of $.275 per share and are payable within 30 days of each accrual date. The payment of such dividends shall be senior in priority to dividends on the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company. At the Company's option, the Company may pay dividends in either cash or shares of Common Stock, valued on the basis of the then current market price of such shares. The Preferred Stock is convertible into Common Stock at the option of the holder, and each share of Preferred Stock will automatically convert into Common Stock following the second anniversary of the initial sale date of the Preferred Stock in the event that the closing bid price of the Common Stock exceeds $10.00 per share for twenty consecutive trading days. The Preferred Stock will also automatically convert into Common Stock in the event that, at any time following the original issuance of the Preferred Stock, less than 500,000 shares of Preferred Stock remain outstanding or upon a merger in which the Company or its shareholders receive consideration of at least $10.00 per share and either the Company is not the surviving entity or the holders of the Company's voting securities before the transaction own less than 50% of the voting securities of the combined entity. Each share of Preferred Stock is convertible into one share of Common Stock, subject to adjustment for stock splits, dividends, reclassifications and similar events. In addition, with certain exceptions relating to issuances of securities under stock option or employee stock purchase plans, pursuant to existing contractual obligations, in connection with acquisitions of other companies or in connection with strategic alliances, the conversion price of the Preferred

Stock is subject to adjustment, pursuant to a weighted average anti-dilution formula, in the event that the Company shall issue shares of Common Stock, or securities convertible into or exchangeable or exercisable for shares of Common Stock, or rights to acquire shares of Common Stock, for consideration of less than $5.00 per share of Common Stock. The holders of the Preferred Stock are entitled to a liquidation preference of $5.00 per share, plus accrued but unpaid dividends. The payment of such liquidation preference shall be senior in priority to any payment with respect to the Common Stock and shall be on at least a pari passu basis with any other series of preferred stock of the Company. There are no redemption or sinking fund provisions applicable to the Preferred Stock.

The Preferred Stock will be voted together with the Common Stock at any annual or special meeting of the shareholders of the Company, and each share of Preferred Stock shall have voting rights equal to the voting rights of that number of shares of Common Stock into which such share of Preferred Stock would then be convertible. Except as required by law or in connection with any amendment to the liquidation preference or other rights of the Preferred Stock, the shares of Preferred Stock shall not vote as a separate class on any matter submitted for shareholder approval.

The Board of Directors of the Company is authorized, without further shareholder approval, to issue up to an additional 2,800,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted or imposed upon any unissued shares of preferred stock and to fix the number of shares constituting any series and the designations of such series. The issuance of preferred stock may have the effect of delaying or preventing a change in control of the Company. The issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of Common Stock or could adversely affect the rights and powers, including voting rights, of the holders of the Common Stock. In certain circumstances, such issuance could have the effect of decreasing the market price of the Common Stock. The Company currently has no plans to issue any shares of preferred stock other than the Preferred Stock offered hereby.

MICHIGAN LAW AND CERTAIN CHARTER PROVISIONS

The Company is a Michigan corporation and is subject to certain anti-takeover provisions of the Michigan Business Corporation Act (the "MBCA") which could delay or make more difficult a merger or tender offer involving the Company. Chapter 7A of the MBCA prevents, in general, an "interested shareholder" (defined generally as a person owning 10% or more of a corporation's outstanding voting shares) from engaging in a "business combination" (as defined therein) with a Michigan corporation unless: (a) the Board of Directors issues an advisory statement, holders of 90% of the shares of each class of stock entitled to vote approve the transaction, and holders of two-thirds of the "disinterested" shares of each class of stock approve the transaction; or (b) the interested shareholder has been an interested shareholder for at least five years and has not acquired beneficial ownership of any additional shares of the corporation subsequent to the transaction which resulted in such shareholder being classified as an interested shareholder, and meets certain requirements, including, but not limited to, provisions relating to the fairness of the price and the form of consideration paid; or (c) the Board of Directors, by resolution, exempts a particular interested shareholder from these provisions prior to the interested shareholder becoming an interested shareholder. The MBCA also contains certain other provisions which could have anti-takeover effects, including, but not limited to, Section 368, which pertains to "greenmail." In addition, the MBCA requires class or series votes in certain circumstances with respect to proposed business combinations.

The Company's Bylaws provide that the Board of Directors is divided into three classes of directors, with each class serving a staggered three-year term. The classification system of electing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of the Company and may maintain the incumbency of the Board of Directors, as it generally makes it more difficult for shareholders to replace a majority of the directors. The Company's Restated Articles of Incorporation eliminate the right of shareholders to act without a meeting, do not provide for cumulative voting in the election of directors and provide that the holders of at least two-thirds of the outstanding shares of Common Stock must approve certain transactions resulting in a change of control of the Company. The amendment of any of these provisions would require approval by holders of at least two-thirds of the outstanding shares of Common Stock.

The foregoing and other statutory provisions and provisions of the Company's Restated Articles of Incorporation could have the effect of deterring certain takeovers or delaying or preventing certain changes in control or management of the Company, including transactions in which shareholders might otherwise receive a premium for their shares over then current market prices.

RIGHT OF FIRST REFUSAL

So long as any purchaser of at least 500,000 shares of Preferred Stock in this offering continues to hold at least 500,000 shares of Preferred Stock, in the event that the Company proposes to offer any shares of its capital stock, or securities convertible into or exercisable or exchangeable for shares of its capital stock, for the purpose of financing its business (other than pursuant to stock option or stock purchase plans, in connection with mergers or acquisitions of other companies, pursuant to existing contractual obligations, in underwritten public offerings or in connection with strategic alliances), such purchaser will have the right to purchase a pro rata amount of such shares equivalent to their then current percentage ownership of the outstanding shares of Common Stock (on an as-converted, fully-diluted basis).

REGISTRATION RIGHTS

Pursuant to the Amended and Restated Investors Rights Agreement, dated as of April 7, 1992, as amended (the "Investors Agreement"), the provisions of which are incorporated into the agreements relating to the purchase of the Company's Series D and Series E Preferred Stock, certain holders of outstanding shares of Common Stock are entitled to certain demand and incidental registration rights with respect to such shares, subject to certain customary limitations. Under the Investors Agreement, subject to certain exceptions, the holders of at least 50% of the Registrable Securities (as defined therein) may require the Company to use its diligent best efforts to register Registrable Securities for public resale on one occasion (so long as such registration includes at least 20% of the Registrable Securities or a lesser percentage if the anticipated aggregate offering price net of underwriting discounts and commissions would exceed $2 million). In addition, whenever the Company proposes to register any of its securities under the Act, holders of Registrable Securities are entitled, subject to certain restrictions (including customary underwriters "cut back" limitations), to include their Registrable Securities in such registration. Subject to certain limitations, the holders of Registrable Securities may also require the Company to register such shares on Form S-3 no more than once every twelve months, provided that the anticipated aggregate proceeds would exceed $500,000. The Company is required to bear all registration and selling expenses (other than underwriter's discounts and commissions and more than a single special counsel to the selling shareholders) in connection with the registration of Registrable Securities in one demand registration and two piggy-back registrations. The participating investors are required to bear all expenses in connection with the registration of Registrable Securities on Form S-3.

Registration rights may be transferred to an assignee or transferee provided that such assignee or transferee acquires at least 66,667 shares of the Registrable Securities held by the transferring holder (13,333 shares in the case of a transfer from the holder of certain stock options). These registration rights may be amended or waived (either generally or in a particular instance) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding.

The registration rights granted under the Investors Agreement shall not be exercisable by a holder during the period in which the holder may sell all of the holder's shares under Rule 144 or Rule 144A during a single 90-day period.

Pursuant to the Stock Purchase Agreement dated October 22, 1993 by and between Cobe and the Company (the "Cobe Stock Agreement"), the Company granted to Cobe certain stock registration rights for any and all of the Company's Common Stock which Cobe acquires by conversion or otherwise. Cobe's stock registration rights commence during August 2000, or earlier in the event of any termination of the Distribution Agreement. Pursuant to Cobe's registration rights, Cobe is entitled to two demand registration rights, and an unlimited number of piggyback registration rights. Cobe's stock registration rights are subject to customary underwriter's "cut back" requirements. The registration rights granted to Cobe shall not be exercisable during the period in which Cobe has the ability to sell all of its shares pursuant to Rule 144 during a single 90-day period. Subject to

certain conditions, these registration rights may be transferred with the transfer of stock to certain affiliates of the transferor or to a transferee who acquires the greater of 66,667 shares or 20% of the transferor's registrable stock.

The Company has agreed, at its expense and subject to certain restrictions and limitations, to undertake up to two registrations (and, in certain circumstances, a third registration) of shares of Common Stock issued as dividends on the Preferred Stock and to include such shares in registrations otherwise undertaken by the Company. In addition, in the event that legal counsel for the purchasers of the Preferred Stock in this offering reasonably determines that registration of the shares of Common Stock issuable upon conversion of the Preferred Stock is necessary for the resale of such shares, the Company will, at its expense and subject to certain restrictions and limitations, undertake up to two registrations of such shares on behalf of and at the request of the purchasers (or their eligible transferees). Upon such request, in the event that the Company shall fail to file a registration statement relating to such shares by the tenth day following the filing of the Company's next Annual Report on Form 10-K or Quarterly Report on Form 10-Q (or, if later, within twenty days of receipt of such request), the holders initiating such request shall be entitled to liquidated damages in the amount of $1,000 per day until the filing of the registration statement.

RIGHTS OF COBE

Pursuant to the Cobe Stock Agreement, Cobe purchased an aggregate of $10,000,000 of shares of the Company's Series C Preferred Stock. Such shares of Series C Preferred Stock automatically converted into 1,666,666 shares of Common Stock upon the closing of the Company's initial public offering in February 1997.

Pursuant to the Cobe Stock Agreement, Cobe also has certain preemptive rights to purchase a portion of any new stock issued by the Company, subject to certain exceptions, so as to enable Cobe to maintain its relative percentage ownership and voting power interests in the Company. Pursuant to such preemptive rights, Cobe elected to purchase 714,200 shares of Common Stock for approximately $5,000,000 in the Company's initial public offering in February 1997. Under the terms of the Cobe Stock Agreement, the Company also has the right to require Cobe to purchase stock issued by the Company in certain qualifying offerings, under certain circumstances (the "Put Option"). The Put Option may generally require Cobe to purchase up to 25% of the stock issued by the Company in a qualifying offering upon the same terms and conditions as the underwriters or other purchasers participating in the offering provided that Cobe shall not be required to purchase stock having an aggregate purchase price of more than $5,000,000. If the Company exercises the Put Option with respect to any such qualifying offering, Cobe has the option to purchase the greater of up to 40% of the number of shares to be offered in the qualifying offering or the number of shares necessary to maintain its percentage ownership interest in the Company. The Put Option was not exercised by the Company in connection with its initial public offering in February 1997. The Put Option does not apply to any public offerings, including this offering. The Company and Cobe are evaluating whether or not the Put Option remains in effect as to any future private offerings of the Company's equity securities.

Additionally, until February 2000, Cobe has an option to purchase from the Company a quantity of new shares of the Company's Common Stock at a price equal to 120% of the public market trading price for the Company's Common Stock. The quantity of Common Stock to be purchased if Cobe exercises this option shall be equal to 30% of the Company's fully diluted shares after the exercise of this option.

In the Cobe Stock Agreement, the Company also granted to Cobe a "right of first negotiation" in the event the Company receives any proposal concerning, or otherwise decides to pursue, a merger, consolidation or other transaction in which all or a majority of the Company's equity securities or all or substantially all of the Company's assets, or any material portion of the assets of the Company used by the Company in performing its obligations under the Distribution Agreement would be acquired by a third party outside of the ordinary course of business.

Pursuant to the Stock Purchase Commitment Agreement with Cobe, dated October 29, 1996, the Company agreed to use reasonable and good faith efforts to cause a nominee of Cobe, who must be deemed by the Board of Directors to be qualified, to be elected to the Board of Directors for as long as Cobe owns at least 15% of the outstanding shares of Common Stock.

TRANSFER AGENT AND REGISTRAR

The Transfer Agent and Registrar for the Common Stock is Continental Stock Transfer & Trust Company. Its telephone number in New York, New York is (212) 509-4000.

SHARES ELIGIBLE FOR FUTURE SALE

Sales of substantial amounts of Common Stock in the public market following this offering could adversely affect the prevailing market price of the Common Stock and the Company's ability to raise capital in the future. Upon completion of this offering, the Company will have 13,266,926 shares of Common Stock outstanding, based upon the number of shares outstanding as of October 31, 1997, all of which are eligible for resale in the public market, subject in some cases to certain volume restrictions and other conditions imposed by Rule 144 under the Securities Act. In addition, the 2,200,000 shares of Common Stock issuable upon conversion of the Preferred Stock will also be freely tradeable. However, 6,161,496 outstanding shares of Common Stock are subject to lock-up agreements expiring 90 days following the date of this Prospectus. Such agreements provide that Cowen & Company may, in its sole discretion and at any time without notice, release all or a portion of the shares subject to these lock-up agreements. Certain existing shareholders, as well as the purchasers of the Preferred Stock in this offering, have certain rights to include shares of Common Stock owned by them in future registrations by the Company for the sale of Common Stock or to request that the Company register their shares under the Securities Act. See "Plan of Distribution" and "Description of Capital Stock--Registration Rights."

PLAN OF DISTRIBUTION

The shares of Preferred Stock offered hereby are being offered, on an all or none basis, for sale by the Company principally to selected institutional investors. The Placement Agent has been retained to act as agent for the Company in connection with the arrangement of such offers and sales on a best efforts basis. The Placement Agent is not obligated and does not intend to itself take (or purchase) any of the shares offered hereby. It is anticipated that the Placement Agent will obtain indications of interest from potential investors for the number of shares offered hereby and that effectiveness of the Registration Statement of which this Prospectus forms a part will not be requested, and no investor funds will be accepted, until indications of interest have been received for all of the shares offered hereby. Confirmation and definitive prospectuses will be distributed to all investors at the time of pricing, informing investors of the closing date, which will be scheduled for three business days after pricing. No investor funds will be accepted prior to the effectiveness of the Registration Statement. Prior to the closing date, an escrow account with the Escrow Agent will be established for the benefit of the investors. Prior to the closing date, the Placement Agent from time to time will cause to be wired to or deposited with the Escrow Agent funds or checks of the investors delivered in payment for the shares offered hereby. The Placement Agent will promptly place all investor funds in the escrow account. Such investor funds will be wired to or deposited with the Escrow Agent not later than 12:00 noon on the date following the date on which it is received by the Placement Agent. Any checks delivered to the Escrow Agent shall be made payable to or endorsed to the order of the Escrow Agent. The Escrow Agent, upon receipt of such checks, will present such checks for payment to the drawee-bank under such checks. Any checks not honored by the drawee-bank after the first presentment for payment will be returned to the Company. Upon receipt of funds or checks from the Placement Agent, the Escrow Agent will credit such funds and the amount of such checks to the escrow account. The Escrow Agent will invest such funds in accordance with Rule 15c2-4 promulgated under the Securities Exchange Act of 1934, as amended. Prior to the closing date, the Escrow Agent will advise the Company that payment for the purchase of the shares offered hereby has been affirmed by the investors and that the investors have deposited the requisite funds in the escrow account with the Escrow Agent. Investor funds, together with interest thereon, if any, will be collected by the Company from the Escrow Agent on the scheduled closing date, and the Company will deliver the certificates representing the shares of Preferred Stock to the Placement Agent for delivery to the investors. This offering will not continue after the closing date, as extended by the parties. In the event that investor funds are not received in the full amount necessary to satisfy the requirements of this offering, all funds deposited in the escrow account will promptly be returned.

The Company has agreed to pay the Placement Agent, as the Placement Fee, an aggregate of 6% of the gross proceeds of the sale of the shares of Preferred Stock offered hereby and to indemnify the Placement Agent against certain liabilities, including liabilities under the Securities Act.

The Company and its directors and certain of its officers and other shareholders, have entered into agreements providing that, for a period of 90 days after the date of this Prospectus, they will not, without the prior written consent of Cowen & Company, offer, sell, contract to sell or otherwise dispose of any shares of Common Stock or any securities convertible into, or exchangeable for, or warrants to purchase, any shares of Common Stock, or grant any option to purchase or right to acquire, or acquire any option to dispose of any shares of Common Stock, except in certain limited circumstances. See "Shares Eligible for Future Sale."

LEGAL MATTERS

The validity of the Preferred Stock offered hereby will be passed upon for the Company by Pepper, Hamilton & Scheetz, Detroit, Michigan. Gray Cary Ware & Freidenrich, A Professional Corporation, San Diego, California, has acted as special counsel to the Company in connection with this offering. Certain legal matters in connection with this offering will be passed upon for the Placement Agent by Brobeck Phleger & Harrison LLP, New York, New York.

EXPERTS

The balance sheets of the Company as of June 30, 1996 and 1997, and the statements of operations, shareholders' equity, and cash flows for the years ended June 30, 1995, 1996 and 1997 and the cumulative period from March 24, 1989 (Inception) to June 30, 1997 included in this Prospectus have been so included in reliance on the report of Price Waterhouse LLP, independent accountants, given on the authority of said firm as experts in accounting and auditing.

The statements in this Prospectus concerning the patents and patent applications either owned or licensed by the Company under the captions "Risk Factors--Uncertainty Regarding Patents and Proprietary Rights" and "Business--Patents and Proprietary Rights" and the other references herein concerning the patents and patent applications either owned or licensed by the Company have been reviewed and approved by Oblon, Spivak, McClelland, Maier & Neustadt, P.C., Arlington, Virginia, patent counsel to the Company, as experts on such matters, and are included herein in reliance upon that review and approval.

ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission (the "Commission"), Washington, D.C., a Registration Statement on Form S-1 (the "Registration Statement") under the Securities Act with respect to the Preferred Stock offered hereby. The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith files reports and other information with the Securities and Exchange Commission. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and the Preferred Stock, reference is made to the Registration Statement and the exhibits and schedules filed as a part thereof. Statements contained in this Prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and, in each instance, if such contract or document is filed as an exhibit to the Registration Statement, reference is made to the copy of such contract or document filed as an exhibit, each such statement being qualified in all respects by such reference. The Registration Statement, including exhibits and schedules thereto, may be inspected without charge at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 and at the regional offices of the Commission located at 7 World Trade Center, Suite 1300, New York, New York 10048 and 500 West Madison Street, Suite 1400, Chicago, Illinois 10661. Copies of all or any part of such materials may be obtained from the Commission upon the payment of certain fees prescribed by the Commission. Such reports and other information may also be inspected without charge at the Commission's Web site, located at http://www.sec.gov.

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of
Aastrom Biosciences, Inc.

In our opinion, the accompanying balance sheets and the related statements of operations, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Aastrom Biosciences, Inc. (a development stage company) at June 30, 1996 and 1997, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 1997, and for the period from March 24, 1989 (Inception) to June 30, 1997, in conformity with generally accepted accounting principles. 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 of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

PRICE WATERHOUSE LLP

Detroit, Michigan
August 15, 1997

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

BALANCE SHEETS

	JUNE 30,		SEPTEMBER 30,
	1996	1997	1997
			(Unaudited)
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	$ 10,967,000	$ 1,943,000	$ 1,505,000
Short-term investments	--	15,064,000	12,126,000
Receivables	81,000	229,000	209,000
Prepaid expenses	437,000	126,000	93,000
Total current assets	11,485,000	17,362,000	13,933,000
PROPERTY, NET	1,188,000	1,048,000	941,000
Total assets	$ 12,673,000	$ 18,410,000	$ 14,874,000
LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Accounts payable and accrued expenses	$ 1,192,000	$ 1,508,000	$ 1,606,000
Accrued employee expenses	97,000	130,000	115,000
Current portion of capital lease obligations	223,000	124,000	99,000
Deferred revenue	122,000	--	--
Total current liabilities	1,634,000	1,762,000	1,820,000
CAPITAL LEASE OBLIGATIONS	189,000	65,000	48,000
COMMITMENTS (Note 7)			
SHAREHOLDERS' EQUITY:			
Preferred Stock, no par value; shares authorized--9,951,765, 5,000,000 and 5,000,000, respectively; shares issued and outstanding--9,451,766, 0 and 0, respectively	34,218,000	--	--
Common Stock, no par value; shares authorized--18,500,000, 40,000,000 and 40,000,000, respectively; shares issued and outstanding--1,886,479, 13,275,208 and 13,272,674, respectively	324,000	58,073,000	57,989,000
Deficit accumulated during the development stage	(27,025,000)	(41,313,000)	(44,938,000)
Shareholder notes receivable	(167,000)	(167,000)	(47,000)
Stock purchase rights	3,500,000	--	--
Unrealized gains (losses) on investments	--	(10,000)	2,000
Total shareholders' equity	10,850,000	16,583,000	13,006,000
Total liabilities and shareholders' equity	$ 12,673,000	$ 18,410,000	$ 14,874,000

The accompanying notes are an integral part of these financial statements.

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF OPERATIONS

	YEAR ENDED JUNE 30,			MARCH 24, 1989 (INCEPTION) TO JUNE 30,	THREE MONTHS ENDED SEPTEMBER 30,		MARCH 24, 1989 (INCEPTION) TO SEPTEMBER 30,
	1995	1996	1997	1997	1996	1997	1997
					(Unaudited)		(Unaudited)
REVENUES:							
Research and development agreements	$ 396,000	$ 1,342,000	$ 230,000	$ 2,017,000	$ 195,000	$ 3,000	$ 2,020,000
Grants	121,000	267,000	148,000	2,143,000	29,000	13,000	2,156,000
Total revenues	517,000	1,609,000	378,000	4,160,000	224,000	16,000	4,176,000
COSTS AND EXPENSES:							
Research and development	4,889,000	10,075,000	13,357,000	38,432,000	3,160,000	3,243,000	41,675,000
General and administrative	1,558,000	2,067,000	1,953,000	9,042,000	452,000	613,000	9,655,000
Total costs and expenses	6,447,000	12,142,000	15,310,000	47,474,000	3,612,000	3,856,000	51,330,000
LOSS FROM OPERATIONS	(5,930,000)	(10,533,000)	(14,932,000)	(43,314,000)	(3,388,000)	(3,840,000)	(47,154,000)
OTHER INCOME (EXPENSE):							
Interest income	279,000	678,000	676,000	2,252,000	126,000	220,000	2,472,000
Interest expense	(66,000)	(62,000)	(32,000)	(251,000)	(11,000)	(5,000)	(256,000)
Other income	213,000	616,000	644,000	2,001,000	115,000	215,000	2,216,000
NET LOSS	$(5,717,000)	$ (9,917,000)	$(14,288,000)	$(41,313,000)	$(3,273,000)	$(3,625,000)	$(44,938,000)
NET LOSS PER SHARE	$ (.66)	$ (.98)	$ (1.26)		$ (.32)	$ (.27)	
Weighted average number of common and common equivalent shares outstanding	8,644,000	10,103,000	11,315,000		10,107,000	13,279,000	

The accompanying notes are an integral part of these financial statements.

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF SHAREHOLDERS' EQUITY

	PREFERRED STOCK		COMMON STOCK		DEFICIT ACCUMULATED DURING THE DEVELOPMENT STAGE	SHAREHOLDER NOTES RECEIVABLE	STOCK PURCHASE RIGHTS	UNREALIZED GAINS (LOSSES) ON INVESTMENTS
	SHARES	AMOUNT	SHARES	AMOUNT				
BALANCE, MARCH 24, 1989 (Inception).....	--	$ --	--	$ --	$ --	$ --	$ --	$ --
Non-cash issuance of Common Stock...			454,545	--				
Issuance of Series A Preferred Stock at $1.00 per share in August 1989.....	1,500,000	1,500,000						
Issuance of Series A Preferred Stock in March 1991 at $1.00 per share, net of issuance costs of $5,000.....	1,000,000	995,000						
Issuance of Series B Preferred Stock in April 1992 at $2.00 per share, net of issuance costs of $46,000.....	3,030,000	6,014,000						
Issuance of Common Stock for services...			33,333	10,000				
Issuance of Series C Preferred Stock in October 1993 at $1,000 per share, net of issuance costs of $175,000....	10,000	9,825,000						
Exercise of stock options..			1,229,482	230,000		(198,000)		
Net loss.....					(11,391,000)			
BALANCE, JUNE 30, 1994.....	5,540,000	18,334,000	1,717,360	240,000	(11,391,000)	(198,000)	--	--
Issuance of Series D Preferred Stock in April and May 1995 at $4.00 per share, net of issuance costs of $81,000.....	2,500,001	9,919,000						
Exercise of stock options..			39,103	8,000				
Retirement of Common Shares outstanding....			(25,000)	(7,000)				
Unrealized loss on investments....								(2,000)
Net loss.....					(5,717,000)			
BALANCE, JUNE 30, 1995.....	8,040,001	28,253,000	1,731,463	241,000	(17,108,000)	(198,000)	--	(2,000)
Issuance of Series E Preferred Stock in January 1996 at $4.25 per share, net of issuance costs of $35,000.....	1,411,765	5,965,000						
Exercise of								

stock options..			130,016	53,000				
Issuance of Common Stock at $1.20 per share..........			25,000	30,000				
Issuance of Stock Purchase Rights for cash in September 1995 and March 1996...........							3,500,000	
Repurchase of Series D Preferred Stock at $4.00 per share..........	(62,500)	(250,000)						
Sale of Series D Preferred Stock at $4.00 per share..........	62,500	250,000						
Principal payment received under shareholder note receivable.....						31,000		
Unrealized gain on investments....								2,000
Net loss........					(9,917,000)			
BALANCE, JUNE 30, 1996............	9,451,766	34,218,000	1,886,479	324,000	(27,025,000)	(167,000)	3,500,000	--
Exercise of stock options..			40,307	26,000				
Issuance of Series E Preferred Stock at $17.00 per share..........	205,882	3,500,000					(3,500,000)	
Issuance of Common Stock at $7.00 per share, net of issuance costs of $2,865,000..			3,250,000	19,885,000				
Conversion of Preferred Stock..........	(9,657,648)	(37,718,000)	8,098,422	37,718,000				
Compensation expense related to stock options granted........				120,000				
Unrealized losses on investments....								(10,000)
Net loss........					(14,288,000)			
BALANCE, JUNE 30, 1997............	--	--	13,275,208	58,073,000	(41,313,000)	(167,000)	--	(10,000)
Unaudited:								
Exercise of stock options..			6,216	7,000				
Compensation expense related to stock options granted........				25,000				
Cancellation of Common Stock to repay shareholder note receivable and accrued interest.......			(15,711)	(138,000)		120,000		
Issuance of Common Stock...			6,961	22,000				
Unrealized gain on investments.								12,000
Net loss........					(3,625,000)			
BALANCE, SEPTEMBER 30, 1997 (Unaudited).....	--	$ --	13,272,674	$57,989,000	$(44,938,000)	$ (47,000)	$ --	$ 2,000

TOTAL SHAREHOLDERS' EQUITY

BALANCE, MARCH 24, 1989 (Inception).....	$ --
Non-cash issuance of Common Stock...	--
Issuance of Series A Preferred Stock at $1.00 per share in August 1989.....	1,500,000
Issuance of Series A Preferred Stock in March 1991 at $1.00 per share, net of issuance costs of $5,000.....	995,000
Issuance of Series B Preferred Stock in April 1992 at $2.00 per share, net of issuance costs of $46,000.....	6,014,000
Issuance of Common Stock for services...	10,000
Issuance of Series C Preferred Stock in October 1993 at $1,000 per share, net of issuance costs of $175,000....	9,825,000
Exercise of stock options..	32,000
Net loss.....	(11,391,000)
BALANCE, JUNE 30, 1994.....	6,985,000
Issuance of Series D Preferred Stock in April and May 1995 at $4.00 per share, net of issuance costs of $81,000.....	9,919,000
Exercise of stock options..	8,000
Retirement of Common Shares outstanding....	(7,000)
Unrealized loss on investments....	(2,000)
Net loss.....	(5,717,000)
BALANCE, JUNE 30, 1995.....	11,186,000
Issuance of Series E Preferred Stock in January 1996 at $4.25 per share, net of issuance costs of $35,000.....	5,965,000
Exercise of stock options..	53,000
Issuance of Common Stock at $1.20 per share.....	30,000
Issuance of Stock Purchase Rights for cash in September 1995 and March 1996.....	3,500,000
Repurchase of Series D Preferred Stock at $4.00 per share.....	(250,000)
Sale of Series D	

Preferred Stock at $4.00 per share.....	250,000
Principal payment received under shareholder note receivable.....	31,000
Unrealized gain on investments....	2,000
Net loss.....	(9,917,000)
BALANCE, JUNE 30, 1996.....	10,850,000
Exercise of stock options..	26,000
Issuance of Series E Preferred Stock at $17.00 per share.....	--
Issuance of Common Stock at $7.00 per share, net of issuance costs of $2,865,000..	19,885,000
Conversion of Preferred Stock.....	--
Compensation expense related to stock options granted.....	120,000
Unrealized losses on investments....	(10,000)
Net loss.....	(14,288,000)
BALANCE, JUNE 30, 1997.....	16,583,000
Unaudited:	
Exercise of stock options..	7,000
Compensation expense related to stock options granted.....	25,000
Cancellation of Common Stock to repay shareholder note receivable and accrued interest.....	(18,000)
Issuance of Common Stock...	22,000
Unrealized gain on investments.	12,000
Net loss.....	(3,625,000)
BALANCE, SEPTEMBER 30, 1997 (Unaudited).....	$ 13,006,000

The accompanying notes are an integral part of these financial statements.

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF CASH FLOWS

	YEAR ENDED JUNE 30,			MARCH 24, 1989 (INCEPTION) TO JUNE 30,	THREE MONTHS ENDED SEPTEMBER 30,		MARCH 24, 1989 (INCEPTION) TO SEPTEMBER 30,
	1995	1996	1997	1997	1996	1997	1997
					(Unaudited)		(Unaudited)
OPERATING ACTIVITIES:							
Net loss	$ (5,717,000)	$(9,917,000)	$(14,288,000)	$(41,313,000)	$(3,273,000)	$(3,625,000)	$(44,938,000)
Adjustments to reconcile net loss to net cash used for operating activities:							
Depreciation and amortization	329,000	536,000	564,000	1,831,000	136,000	151,000	1,982,000
Loss on property held for resale	--	--	--	110,000	--	--	110,000
Amortization of discounts and premiums on investments	(9,000)	(110,000)	(84,000)	(203,000)	--	(50,000)	(253,000)
Stock compensation expense	--	--	120,000	130,000	40,000	25,000	155,000
Changes in assets and liabilities:							
Receivables	132,000	18,000	(148,000)	(229,000)	(139,000)	2,000	(227,000)
Prepaid expenses	(59,000)	(332,000)	311,000	(126,000)	59,000	33,000	(93,000)
Accounts payable and accrued expenses	(40,000)	864,000	316,000	1,508,000	(351,000)	98,000	1,606,000
Accrued employee expenses	28,000	(33,000)	33,000	130,000	(17,000)	(15,000)	115,000
Deferred revenue	79,000	(103,000)	(122,000)	--	(69,000)	--	--
Net cash used for operating activities	(5,257,000)	(9,077,000)	(13,298,000)	(38,162,000)	(3,614,000)	(3,381,000)	(41,543,000)
INVESTING ACTIVITIES:							
Organizational costs	--	--	--	(73,000)	--	--	(73,000)
Purchase of short-term investments	(10,981,000)	--	(19,190,000)	(31,138,000)	(1,200,000)	(500,000)	(31,638,000)
Maturities of short-term investments	3,567,000	8,500,000	4,200,000	16,267,000	--	3,500,000	19,767,000
Capital purchases	(118,000)	(445,000)	(424,000)	(2,142,000)	(173,000)	(44,000)	(2,186,000)
Proceeds from sale of property held for resale	--	--	--	400,000	--	--	400,000
Net cash provided by (used for) investing activities	(7,532,000)	8,055,000	(15,414,000)	(16,686,000)	(1,373,000)	2,956,000	(13,730,000)
FINANCING ACTIVITIES:							
Issuance of Preferred Stock	9,919,000	5,965,000	--	34,218,000	--	--	34,218,000
Issuance of Common Stock	1,000	83,000	19,911,000	20,027,000	1,000	29,000	20,056,000
Payments received for stock purchase rights	--	3,500,000	--	3,500,000	--	--	3,500,000
Payments received under shareholder notes	--	31,000	--	31,000	--	--	31,000
Principal payments under capital lease obligations	(214,000)	(270,000)	(223,000)	(985,000)	(73,000)	(42,000)	(1,027,000)
Net cash provided by (used for) financing activities	9,706,000	9,309,000	19,688,000	56,791,000	(72,000)	(13,000)	56,778,000
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(3,083,000)	8,287,000	(9,024,000)	1,943,000	(5,059,000)	(438,000)	1,505,000
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	5,763,000	2,680,000	10,967,000	--	10,967,000	1,943,000	--
CASH AND CASH EQUIVALENTS AT END OF PERIOD	$ 2,680,000	$10,967,000	$ 1,943,000	$ 1,943,000	$ 5,908,000	$ 1,505,000	$ 1,505,000
SUPPLEMENTAL CASH FLOW							

INFORMATION:							
Interest paid.....	$ 66,000	$ 62,000	$ 32,000	$ 251,000	$ 11,000	$ 5,000	$ 256,000
Additions to capital lease obligations...	270,000	--	--	1,174,000	--	--	1,174,000

The accompanying notes are an integral part of these financial statements.

AASTROM BIOSCIENCES, INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO FINANCIAL STATEMENTS
(INFORMATION AS OF SEPTEMBER 30, 1997 AND FOR THE THREE-MONTH PERIODS ENDED SEPTEMBER 30, 1996 AND 1997, IS UNAUDITED)

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Aastrom Biosciences, Inc. (the Company) was incorporated in March 1989 (Inception) under the name Ann Arbor Stromal, Inc. The Company changed its name in 1991 concurrent with the commencement of employee-based operations. The Company is in the development stage with its principal business activities being research and product development, conducted principally on its own behalf but also in connection with various collaborative research and development agreements with other companies, involving the development of processes and instrumentation for the ex vivo production of human stem cells and their progeny, and hematopoetic and other tissues.

Successful future operations are subject to several technical and business risks, including satisfactory product development, obtaining regulatory approval and market acceptance for its products and the Company's continued ability to maintain adequate levels of funding.

SIGNIFICANT REVENUE RELATIONSHIPS--Two companies accounted for 49% and 28% of total revenues for the year ended June 30, 1995 and one company accounted for 83% and 52% of total revenues for the year ended June 30, 1996 and 1997, respectively. One company accounted for 43% of total revenues for the period from Inception to June 30, 1997. One company accounted for 87% and 43% of total revenues for the three months ended September 30, 1996 and the period from Inception to September 30, 1997, respectively. Grant revenues consist of grants sponsored by the U.S. government.

CASH AND CASH EQUIVALENTS--Cash and cash equivalents include cash and short-term investments with original maturities of three months or less.

SHORT-TERM INVESTMENTS--Short-term investments consist of U.S. government securities and commercial paper with original maturities of over three months but less than one year. Short-term investments are classified as available-for-sale, and are presented at market value, with unrealized gains and losses on investments reflected as a component of shareholders' equity.

DIVERSITY OF CREDIT RISK--The Company invests its excess cash in U.S. government securities and commercial paper, maintained in U.S. financial institutions, and has established guidelines relative to diversification and maturities in an effort to maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. The Company has not experienced any significant realized losses on its cash equivalents or short-term investments.

PROPERTY--Property is recorded at cost and depreciated or amortized using the straight-line method over the estimated useful life of the asset (primarily five years), or the remaining lease term, if shorter, with respect to leasehold improvements and certain capital lease assets.

REVENUE RECOGNITION--Revenue from grants and research agreements is recognized on a cost reimbursement basis consistent with the performance requirements of the related agreement. Funding received in advance of costs incurred is presented as deferred revenue in the accompanying financial statements.

RESEARCH AND DEVELOPMENT COSTS--Research and development costs are expensed as incurred. Such costs and expenses related to programs under collaborative agreements with other companies totaled $146,000, $1,294,000 and $154,000 for the years ended June 30, 1995, 1996 and 1997, respectively, $1,642,000 for the period from Inception to June 30, 1997, and $117,000, $3,000 and $1,645,000 for the three months ended September 30, 1996 and 1997, and for the period from Inception to September 30, 1997, respectively.

STOCK COMPENSATION--The Company adopted the disclosure provisions of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" (SFAS 123) as of July 1, 1996. As permitted by SFAS 123, the Company continues to apply Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," (APB 25) and related interpretations in accounting for its plans and does not recognize compensation expense for its employee stock-based compensation plans as prescribed in SFAS 123.

INCOME TAXES--The Company recognizes deferred tax assets and liabilities for the differences between the carrying amounts and the tax basis of assets and liabilities, as well as net operating loss and tax credit carryforwards. Additionally, the Company establishes a valuation allowance to reflect the likelihood of realization of deferred tax assets.

NET LOSS PER SHARE--Net loss per share is computed using the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares are not included in the per share calculation where the effect of their inclusion would be anti-dilutive. However, common and common equivalent shares issued during the twelve month period preceding the filing of the registration statement for the Company's initial public offering which was completed in February 1997, (the IPO) at a price below the expected offering price are considered to be cheap stock and are included in the calculation for periods prior to the IPO, as if they were outstanding for all periods using the treasury stock method, as applicable, even though their inclusion is anti-dilutive. Due to the automatic conversion of all outstanding shares of Preferred Stock into Common Stock upon the completion of the IPO, Preferred Stock is assumed to have been converted into Common Stock at the time of issuance, except for those shares considered to be cheap stock which are treated as outstanding for all periods presented.

During March 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 128, "Earnings Per Share" (SFAS 128) which amends the standards for computing earnings per share previously set forth in Accounting Principles Board Opinion No. 15 "Earnings per Share" (APB 15). SFAS 128, which will be adopted by the Company for the periods ending December 31, 1997, will not have a material effect on the computation of net loss per share for the periods presented in the accompanying financial statements.

USE OF ESTIMATES--The preparation of financial statements in accordance with generally accepted accounting principles requires management to make estimates that affect the amounts reported in the financial statements and disclosures made in the accompanying notes to financial statements. Actual results could differ from those estimates.

FINANCIAL INSTRUMENTS--The Company evaluates the fair value of those assets and liabilities identified as financial instruments and estimates that the fair value of such financial instruments generally approximates the carrying value in the accompanying financial statements. Fair values have been determined through information obtained from market sources and management estimates.

LONG-LIVED ASSETS--The Company adopted Statement of Financial Accounting Standards No. 121 (SFAS 121) as of July 1, 1996 and evaluates the impairment of long-lived assets and long-lived assets to be disposed of whenever events or changes in circumstances indicate that the carrying amount of those assets may not be recoverable. Adoption of this pronouncement has not significantly impacted the accompanying financial statements as no impairment losses have been identified by the Company.

NOTES TO FINANCIAL STATEMENTS--(CONTINUED)
(INFORMATION AS OF SEPTEMBER 30, 1997 AND FOR THE THREE-MONTH PERIODS ENDED SEPTEMBER 30, 1996 AND 1997, IS UNAUDITED)

UNAUDITED FINANCIAL INFORMATION--The financial information as of September 30, 1997, and for the three-month periods ended September 30, 1996 and 1997, and for the period from Inception to September 30, 1997, is unaudited. In the opinion of management, such information contains all adjustments, consisting only of normal recurring accruals, necessary for a fair statement of the results of operations for the interim periods. The results of operations for the three months ended September 30, 1997, are not necessarily indicative of the results to be expected for the full year or for any other period.

2. SHORT-TERM INVESTMENTS

All short-term investments are available-for-sale and have maturities of one year or less and are summarized as follows:

	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	MARKET VALUE
June 30, 1997:				
U.S. Government Securities	$13,574,000	$1,000	$(11,000)	$13,564,000
Commercial Paper	1,500,000	--	--	1,500,000
	$15,074,000	$1,000	$(11,000)	$15,064,000
September 30, 1997 (Unaudited):				
U.S. Government Securities	$11,624,000	$5,000	$ (3,000)	$11,626,000
Commercial Paper	500,000	--	--	500,000
	$12,124,000	$5,000	$ (3,000)	$12,126,000

3. PROPERTY

Property consists of the following:

	JUNE 30, 1996	JUNE 30, 1997	SEPTEMBER 30, 1997 (Unaudited)
Machinery and equipment	$ 1,337,000	$ 1,425,000	$ 1,439,000
Office equipment	482,000	733,000	763,000
Leasehold improvements	520,000	605,000	605,000
	2,339,000	2,763,000	2,807,000
Less accumulated depreciation and amortization	(1,151,000)	(1,715,000)	(1,866,000)
	$ 1,188,000	$ 1,048,000	$ 941,000

Equipment under capital leases totaled $1,131,000 at June 30, 1996 and 1997, and September 30, 1997, with related accumulated amortization of $622,000, $844,000 and $898,000, respectively (Note 7).

4. SHAREHOLDERS' EQUITY

INITIAL PUBLIC OFFERING--In February 1997, the Company completed an underwritten initial public offering of 3,000,000 shares of its Common Stock at an offering price of $7.00 per share. In March 1997, the underwriters

elected to purchase an additional 250,000 shares of Common Stock pursuant to the underwriters' over-allotment option at a price of $7.00 per share. Proceeds from the offering, net of underwriter's commissions and expenses, were $19,885,000.

PREFERRED STOCK--The Company had the following classes of preferred stock outstanding as of June 30, 1996. As a result of the IPO, all 9,657,648 shares of previously outstanding preferred stock were automatically converted into 8,098,422 shares of Common Stock.

	SHARES AUTHORIZED	SHARES ISSUED AND OUTSTANDING	LIQUIDATION PREFERENCE
Series A	2,500,000	2,500,000	$ 2,500,000
Series B	3,030,000	3,030,000	6,060,000
Series C	10,000	10,000	10,000,000
Series D	3,000,000	2,500,001	10,000,000
Series E	1,411,765	1,411,765	6,000,000
Balance, June 30, 1996	9,951,765	9,451,766	$34,560,000

No dividends have ever been declared or paid.

COBE LABORATORIES, INC. STOCK PURCHASE RIGHTS--In connection with the purchase of the Series C Convertible Preferred Stock by Cobe Laboratories, Inc. (Cobe) in October 1993, Cobe received a preemptive right to purchase a pro-rata portion of any newly issued shares of stock by the Company in order to maintain its then current percentage ownership interest. Any such purchase of newly issued shares shall be at the net price to the Company after deducting underwriter's discounts and commissions, if any. The agreements establishing the Company's relationship with Cobe provide the Company with an option (the Put Option) to require Cobe to purchase the lesser of 20%, or $5,000,000, in an initial public offering or a private offering meeting certain minimum requirements. In the event that the Company exercises the Put Option, Cobe then has the option to purchase up to 40% of that offering. While the Put Option was not exercised by the Company in connection with the IPO, Cobe elected to purchase an additional $5,000,000 in Common Stock as part of the IPO. The Company and Cobe are evaluating whether or not the Put Option remains in effect as it relates to the Company's ability to exercise the option in a subsequent private offering of its equity securities.

Cobe has an option to purchase additional shares from the Company equal to 30% of the total number of shares outstanding assuming exercise of the option. Such option, which is exercisable until February 2000, must be exercised in full with the purchase price of the shares equal to 120% of the public market trading price as determined by the 30-day average market price preceding the date of exercise of the option.

The Company has granted Cobe a right of first negotiation in the event the Company receives any proposal concerning, or otherwise decides to pursue, a merger, consolidation or other transaction in which all or a majority of the Company's equity securities or substantially all of the Company's assets, or any material portion of the assets of the Company used by the Company in performing its obligation under the Distribution Agreement (Note 6), would be acquired by a third party outside of the ordinary course of business.

STOCK OPTION PLANS--The Company has various stock option plans which provide for the issuance of nonqualified and incentive stock options to acquire up to 2,986,594 shares of Common Stock. Such options may be granted by the Company's Board of Directors to certain of the Company's founders, employees, directors and

consultants. The exercise price of incentive stock options shall not be less than the fair market value of the shares on the date of grant. In the case of individuals who are also holders of 10% or more of the outstanding shares of Common Stock, the exercise price of incentive stock options shall not be less than 110% of the fair market value of the shares on the date of grant. The exercise price of non-qualified stock options shall not be less than 85% of the fair market value on the date of grant. Options granted under these plans expire no later than ten years from the date of grant and generally become exercisable ratably over a four-year period following the date of grant.

For certain options granted, the Company recognizes compensation expense for the difference between the deemed value for accounting purposes and the option exercise price on the date of grant. During the year ended June 30, 1997, compensation expense totaling approximately $120,000 has been charged with respect to these options. Additional future compensation expense with respect to the issuance of such options totals approximately $135,000 and will be recognized through December 2001.

As permitted by SFAS 123, the Company continues to apply APB 25 and related interpretations in accounting for its stock option plans and does not recognize compensation expense for its employee stock-based compensation plans as prescribed in SFAS 123. If the Company had elected to recognize compensation expense based upon the fair value at the grant dates for stock option awards granted in 1996 and 1997, in accordance with SFAS No. 123, the pro forma net loss and net loss per share would be as follows.

	JUNE 30,	
	1996	1997
Net Loss:		
As reported	$9,917,000	$14,288,000
Pro forma	9,942,000	14,793,000
Net Loss per common share:		
As reported	$ (.98)	$ (1.26)
Pro forma	(.98)	(1.31)

The fair value of options was estimated at the date of grant using the Black-Scholes option pricing model with the following assumptions; no dividend yields, 40% volatility, risk free interest rates ranging from 5.2% to 6.8% and expected option lives of three to five years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the use of highly subjective assumptions including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in subjective assumptions can materially affect the fair value estimates, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock based compensation plans.

The following table summarizes option activity under the Company's stock option plans:

	OPTIONS OUTSTANDING	OPTIONS AVAILABLE FOR GRANT	WEIGHTED AVERAGE EXERCISE PRICE PER SHARE	OPTIONS EXERCISABLE AT PERIOD END
March 24, 1989 (Inception)				
Options authorized....	--	1,703,261		
Options granted.....	1,727,111	(1,727,111)	$ .31	
Options exercised.....	(1,229,482)	--	$ .19	
Options canceled.....	(103,964)	103,964	$ .66	
Balance, June 30, 1994..	393,665	80,114	$ .61	77,682
Options authorized....	--	333,333		
Options granted.....	55,333	(55,333)	$1.20	
Options exercised.....	(39,103)	--	$ .21	
Options canceled.....	(60,230)	60,230	$ .34	
Balance, June 30, 1995..	349,665	418,344	$ .78	108,492
Options authorized....	--	800,000		
Options granted.....	155,337	(155,337)	$1.44	
Options exercised.....	(130,016)	--	$ .41	
Options canceled.....	(44,690)	44,690	$ .85	
Balance, June 30, 1996..	330,296	1,107,697	$1.20	101,021
Options authorized....	--	150,000		
Options granted.....	785,200	(785,200)	$6.78	
Options exercised.....	(40,307)	--	$ .65	
Options canceled.....	(16,818)	16,818	$1.83	
Balance, June 30, 1997..	1,058,371	489,315	$5.36	483,376
Unaudited:				
Options granted.....	96,250	(96,250)	$5.57	
Options exercised.....	(6,216)	--	$1.16	
Options canceled.....	(41,957)	41,957	$4.35	
Balance, September 30, 1997 (Unaudited).....	1,106,448	435,022	$5.44	504,585

OUTSIDE DIRECTORS' STOCK OPTION PLAN--The Company has an outside directors' stock option plan which provides for the issuance of options to purchase up to 150,000 shares of Common Stock to outside directors. Under this plan, non-qualified options to purchase 5,000 shares of Common Stock are granted to each outside director on the day of the Annual Shareholders' meeting. These options generally vest over a one-year period and expire ten years after the date of grant. As of June 30, 1997 and September 30, 1997, options to purchase 30,000 shares of Common Stock at $7.00 per share are outstanding under this plan, of which options to purchase 10,002 and 17,502 shares of Common Stock are exercisable at June 30, 1997 and September 30, 1997, respectively.

The following table summarizes information about stock-based compensation plans outstanding as of June 30, 1997:

RANGE OF EXERCISE PRICES	NUMBER OF OPTIONS OUTSTANDING	REMAINING CONTRACTUAL LIFE-YEARS	WEIGHTED AVERAGE EXERCISE PRICE	NUMBER EXERCISABLE	WEIGHTED AVERAGE EXERCISE PRICE OF EXERCISABLE OPTIONS
$ .30 - $1.20	260,170	7.7	$1.15	135,542	$1.11
$3.20 - $3.88	58,418	9.2	$3.24	4,501	$3.20
$7.00 - $7.13	739,783	9.6	$7.00	343,333	$7.00
	1,058,371			483,376	

The weighted average fair value of options granted during the year ended June 30, 1997 was $6.78 per share.

EMPLOYEE STOCK PURCHASE PLAN--The Company has an employee stock purchase plan under which eligible employees can purchase Common Stock, at a discount to the market price, through payroll deductions up to 10% of the employees base compensation, subject to certain limitations, during sequential 24-month offering periods. Each offering period is divided into four consecutive six-month purchase periods ending on March 1 and September 1 of each year. Unless otherwise provided by the Board of Directors prior to the commencement of an offering period, the price at which stock is purchased under the plan for such offering period is equal to 85% of the lesser of the fair market value of the Common Stock on the first day of such offering period or the last day of the purchase period of such offering period. As of September 30, 1997, 6,961 shares of Common Stock has been sold under this plan.

STOCK PURCHASE WARRANTS--The Company has issued warrants to purchase 69,444 shares of Common Stock which expire on October 15, 2000. These warrants may be exercised, in whole or in part, at a price equal to the lesser of (a) $9.00 per share, which price increases by $3.00 per share on February 7, 1998, 1999 and 2000; or (b) 85% of the fair market value of the Company's Common Stock at the time of exercise.

COMMON SHARES RESERVED--The Company has reserved shares of Common Stock for future issuance as follows:

	JUNE 30, 1997	SEPTEMBER 30, 1997 (unaudited)
Issuance under stock option plans:		
1992 Incentive and Non-Qualified Stock Option Plan....	1,397,686	1,391,470
1995 Outside Director Stock Option Plan.....	150,000	150,000
	1,547,686	1,541,470
Issuance under 1996 Employee Stock Purchase Plan.....	250,000	250,000
Exercise of Stock Purchase Warrants.....	69,444	69,444
	1,867,130	1,860,914

5. INCOME TAXES

Deferred tax assets consist of the following:

	JUNE 30,	
	1996	1997
Net operating loss carryforwards	$ 9,210,000	$ 14,150,000
Tax credits and other	440,000	1,162,000
Gross deferred tax assets	9,650,000	15,312,000
Deferred tax assets valuation allowance	(9,650,000)	(15,312,000)
	$ --	$ --

Due to the historical losses incurred by the Company, a full valuation allowance for deferred tax assets has been provided. If the Company achieves profitability, these deferred tax assets may be available to offset future income taxes.

At June 30, 1997, the Company's Federal tax net operating loss and tax credit carryfowards were $40,420,000 and $971,000, respectively, which will expire from 2004 through 2012, if not utilized. The Company underwent an ownership change in October 1993 which has resulted in a limitation under which the Company can utilize a portion of its federal net operating loss carryforward amounting to $1,153,000 per year. As of June 1997, the portion of the Company's net operating loss that remains subject to this limitation is $2,490,000 and therefore is not expected to ultimately effect the Company's ability to utilize the benefit. If certain changes in ownership should occur again in the future, the Company's ability to utilize its net operating loss and tax credit carryforwards may become subject to further annual limitation.

6. LICENSES, ROYALTIES AND COLLABORATIVE AGREEMENTS:

UNIVERSITY OF MICHIGAN--In August 1989, the Company entered into a research agreement with the University of Michigan (the University). Under the terms of this research agreement, as amended, the Company agreed to reimburse the University for certain research costs through the date of its expiration in December 1994. Payments made to the University under the aforementioned agreements totaled $121,000 and $2,521,000 for the years ended June 30, 1995 and for the period from Inception to June 30, 1997, respectively, which amounts are included in research and development expense in the accompanying Statements of Operations. As part of this relationship, the Company issued to the University 454,545 shares of Common Stock in August 1989. No value has been assigned to these shares in the accompanying financial statements. In March 1992, and as provided for under the research agreement, the Company entered into a license agreement for the technology developed under the research agreement. The license agreement, as amended, provides for a royalty to be paid to the University equal to 2% of net sales of products containing the licensed technology sold by the Company.

COBE BCT, INC.--In connection with the issuance of the Series C Preferred Stock to Cobe in October 1993, the Company and Cobe BCT, Inc. (Cobe BCT), an affiliate of Cobe, entered into an agreement which grants to Cobe BCT exclusive worldwide distribution and marketing rights to the Company's Cell Production System (CPS) for stem cell therapy applications (Distribution Agreement). The term of the Distribution Agreement is ten years, with an option, exercisable by Cobe BCT, to extend the term for an additional ten years. Cobe has the right to terminate its Distribution Agreement with the Company with twelve months' notice upon a change of control of the Company, other than to Cobe, or at any time after December 31, 1997, if Cobe determines that

commercialization of the Aastrom CPS for stem cell therapy on or prior to December 31, 1998 is unlikely. Pursuant to the Distribution Agreement, Cobe BCT will perform worldwide marketing and distribution activities of the CPS for use in stem cell therapy and will receive a share of the resulting net sales, as defined, ranging from 38% to 42%, subject to certain negotiated discounts and volume-based adjustments.

The agreements establishing this collaboration provided for payments totaling $5,000,000 to be made by Cobe BCT upon the Company meeting certain development milestones. In May 1995, the Company accepted, as part of the sale of the Series D Preferred Stock, an equity investment of $5,000,000 from Cobe in lieu of those future milestone payments.

LICENSE AND ROYALTY AGREEMENTS--In July 1992, the Company licensed certain cell culture technology under which it obtained an exclusive worldwide license to the technology in exchange for a royalty payable of up to 3% of net sales on products containing the licensed technology.

In March 1996, the Company executed a license agreement which provides for the use of licensed products in the CPS. Pursuant to this license agreement, the Company recorded a charge to research and development expense of $1,500,000 representing the license fee payable upon execution of the agreement. The license agreement provides for annual renewal fees of $1,000,000 over the five year license term, if renewed by the Company, and can be extended at the Company's option for an additional five years.

RHONE-POULENC RORER, INC.--In September 1995, the Company entered into a research and development collaboration with Rhone-Poulenc Rorer, Inc. (RPR), granting RPR a right to license the Company's CPS for Lymphoid cell applications. Pursuant to the agreements establishing this collaboration, RPR was obligated to fund certain research costs associated with the development of the CPS for Lymphoid cell applications and was entitled to make equity purchases of up to $12,500,000 subject to the Company's satisfaction of certain milestones and RPR's decision to exercise certain options. In September 1996, RPR notified the Company of its intent to not exercise its additional options under the collaboration. This notification was made after RPR had determined that for strategic reasons it would not pursue Lymphoid cell therapy applications, including those being pursued under the collaboration the Company. The Company received $3,500,000 in equity payments and recognized $1,538,000 in research revenue under this collaboration. As a result of this termination, no further equity payments or research funding is due from RPR and RPR's license rights to the Company's CPS for Lymphoid cell applications have been terminated.

7. COMMITMENTS

The Company leases certain machinery and equipment and office equipment under capital leases. Obligations under these leasing arrangements bear interest at rates ranging from 9.7% to 12.1% and mature through May 1999. Additionally, the Company leases its facility under an operating lease which expires in May 1998, at which time the Company has the option to renew the lease for an additional period of up to five years.

Future minimum payments under capital leases and non-cancelable operating leases are as follows:

	CAPITAL LEASES	OPERATING LEASES
Year Ending June 30,		
1998	$138,000	$435,000
1999	69,000	--
Total minimum lease payments	207,000	$435,000
Less amount representing interest	(18,000)	
Obligations under capital lease	$189,000	

Certain of the Company's capital lease agreements contain restrictive provisions which require that the Company's total assets exceed its total liabilities by at least $1,000,000. Should the Company fall out of compliance with this provision, and a waiver cannot be obtained from the lessor, remaining amounts due under the lease agreements become immediately due and payable.

Rent expense for the years ended June 30, 1995, 1996 and 1997, was $241,000, $338,000 and $456,000, respectively, and $1,278,000 for the period from Inception to June 30, 1997. Rent expense for the three months ended September 30, 1996 and 1997, was $107,000 and $120,000, respectively, and $1,398,000 for the period from Inception to September 30, 1997.

8. EMPLOYEE SAVINGS PLAN

The Company has a 401(k) plan that became effective in January 1994. The plan allows participating employees to contribute up to 15% of their salary, subject to annual limits and minimum qualifications. The Board may, at its sole discretion, approve Company contributions. Through June 30, 1997, the Company has made no contributions to the plan.

No dealer, salesperson or other person has been authorized to give any information or to make any representations other than those contained in this Prospectus, and, if given or made, such information or representation must not be relied upon as having been authorized by the Company, the Placement Agent or any other person. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any security other than the shares of Common Stock offered hereby, nor does it constitute an offer to sell or a solicitation of an offer to buy any of the securities offered hereby to any person in any jurisdiction in which it is unlawful to make such offer or solicitation to such person. Neither the delivery of this Prospectus nor any sale made hereunder shall under any circumstances create an implication that the information contained herein is correct as of any date subsequent to the date hereof.

TABLE OF CONTENTS

[LOGO OF AASTROM BIOSCIENCES INC]

2,200,000 Shares of
5 1/2% Convertible Preferred Stock

PROSPECTUS

COWEN & COMPANY

November 26, 1997