As filed with the Securities And Exchange Commission on June 23, 1999
Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

AASTROM BIOSCIENCES, INC.
(Exact Name of Registrant as Specified in Its Charter)

Michigan	94-3096597
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification Number)

24 Frank Lloyd Wright Drive
P.O. Box 376
Ann Arbor, Michigan 48106
(734) 930-5555
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

R. Douglas Armstrong, Ph.D.
President and Chief Executive Officer
Aastrom Biosciences, Inc.
24 Frank Lloyd Wright Drive
P.O. Box 376
Ann Arbor, Michigan 48106
(734) 930-5555
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Douglas J. Rein, Esq.
Gray Cary Ware & Freidenrich LLP
4365 Executive Drive, Suite 1600
San Diego, CA 92121
Telephone: (619) 677-1400
Facsimile: (619) 677-1477

Approximate date of commencement of proposed sale to the public:
From time to time as described in the Prospectus.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.[_]

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.[X]

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

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

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

CALCULATION OF REGISTRATION FEE

Title Of Shares To Be Registered	Amount To Be Registered	Proposed Maximum Aggregate Price Per Unit (2)	Proposed Maximum Aggregate Offering Price (2)	Amount Of Registration Fee (2)

Common Stock, ($0 par value)	3,794,874(1)	$1.3594	$5,158,752	$1,435.00

(1) Includes shares of Common Stock which may be offered pursuant to this Registration Statement consisting of an estimated 3,494,874 shares issuable upon conversion of 3,000 Series III Shares (as defined below) and 300,000 shares issuable upon exercise of warrants. For purposes of estimating the number of shares of Common Stock to be included in this Registration Statement, the Company calculated 150% of the number of shares of Common Stock issuable in connection with the conversion of the Series III Shares (based on a conversion price of $1.2876, which is the average of the closing bid prices of the Common Stock reported on the Nasdaq National Market for the lowest five consecutive trading days during the twenty trading days preceding June 21, 1999, multiplied by 100% pursuant to the terms of the Series III Shares). In accordance with Rule 416, this Registration Statement also covers such indeterminate number of additional shares as may become issuable upon conversion of or in respect of Series III Shares or upon exercise of the Warrants as a result of any future stock splits, stock dividends or similar transactions.

(2) Estimated, pursuant to Rule 457(c), solely for the purpose of calculating the registration fee based on the average of the high and low prices for the Common Stock on June 18, 1999, as reported on the Nasdaq National Market.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING HOLDER MAY NOT SELL THESE SECURITIES UNDER THIS PROSPECTUS UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL NOR DOES IT SEEK AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER AND SALE WOULD NOT BE PERMITTED.

SUBJECT TO COMPLETION, DATED JUNE 23, 1999

PROSPECTUS

3,794,874 SHARES OF COMMON STOCK

AASTROM BIOSCIENCES, INC.

This Prospectus relates to the offer and sale of up to 3,794,874 shares of common stock. The shares are issuable upon conversion of shares of our 1999 Series III Convertible Preferred Stock and upon exercise of warrants issued in connection with the sale of those shares of preferred stock. The shares of common stock may be offered for sale from time to time after such conversion or exercise by or on behalf of the holders of those shares.

Aastrom will not receive any proceeds from sales of the shares by the selling shareholders or from any conversions of the Series III Preferred Stock.

Aastrom will bear all reasonable expenses incurred in connection with the registration of the shares for resale excluding any brokerage commissions, underwriting discounts or commissions and other expenses incurred by the selling shareholder in the offer and sale of the shares.

Our common stock is quoted on the Nasdaq National Market under the symbol "ASTM." On June 21, 1999, the last sale price of the our common stock was $1.375.

YOU SHOULD CONSIDER CAREFULLY THE RISK FACTORS BEGINNING ON PAGE 3 OF THIS PROSPECTUS BEFORE MAKING A DECISION TO PURCHASE OUR STOCK.

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE

CONTRARY IS A CRIMINAL OFFENSE.

_____

THE DATE OF THIS PROSPECTUS IS _____, 1999.

You should rely only on the information provided or incorporated by reference in this prospectus. We have not authorized anyone to provide you with additional or different information. This document may only be used where it is legal to sell these securities. You should not assume that any information in this prospectus is accurate as of any date other than the date of this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms located at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, at The Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661, and at Seven World Trade Center, Suite 1300, New York, New York 10048. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our filings with the SEC are also available to the public on the SEC's Internet web site at http://www.sec.gov.

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file with the SEC later will automatically update and supersede the information in this Prospectus or incorporated by reference. The following documents filed by us and any future filings made by us with the SEC under Sections 13(a), 13(c) 14 or 15(d) of the Securities Exchange Act of 1934, until the selling Shareholder sells all of the common stock offered hereby, are incorporated by reference in this Prospectus:

(i) the Company's Annual Report on Form 10-K for the year ended June 30, 1998;

(ii) the Company's Quarterly Reports on Form 10-Q for the quarters ended September 30, 1998, December 31, 1998 and March 31, 1999;

(iii) the Company's Registration Statement on Form 8-A;

(iv) the Company's Current Report on Form 8-K dated June 4, 1999.

YOU MAY REQUEST A COPY OF THESE FILINGS, AT NO COST, BY WRITING OR TELEPHONING US AT AASTROM BIOSCIENCES, INC., 24 FRANK LLOYD WRIGHT DRIVE, P.O. BOX 376, ANN ARBOR, MICHIGAN 48106, TELEPHONE NUMBER (734) 930-5555, ATTENTION: MR. TODD SIMPSON, CHIEF FINANCIAL OFFICER.

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RISK FACTORS

You should carefully consider the following risk factors before purchasing our common stock. The risks and uncertainties described below are not the only ones we face. There may be additional risks and uncertainties that are not known to us or that we do not consider to be material. If the events described in these risks occur, our business, financial condition and results of operations would likely suffer. This prospectus contains forward-looking statements which involve risks and uncertainties. Aastrom's actual results may differ significantly from the results discussed in the forward-looking statements. This section discusses some of the factors that might cause those differences.

If Aastrom Cannot Complete Its Product Development Activities Successfully, Our Business Will Suffer

Commercialization of our lead product candidate, the AastromReplicell Cell Production System in the United States, will require additional research and development by Aastrom as well as substantial clinical trials. While we have commenced initial marketing on a limited basis of the Aastrom Replicell System in Europe, we believe that the United States will be the principal market for our products. Aastrom may not be able to successfully complete development of the AastromReplicell System or its other product candidates, or successfully market its technologies or product candidates. Aastrom or its potential collaborators may encounter problems and delays relating to research and development, regulatory approval and intellectual property rights of Aastrom's technologies and product candidates. Aastrom's research and development programs may not be successful, and its cell culture technologies and product candidates may not facilitate the ex vivo production of cells with the expected biological activities in humans. Our technologies and product candidates may not prove to be safe and efficacious in clinical trials, and we may not obtain the necessary regulatory approvals for our technologies or product candidates and the cells produced in such products.

If the Clinical Trials for Our Product Candidates Are Not Successful, We Would Not Receive the Regulatory Approvals We Would Need to Sell Our Products Commercially.

We must obtain the approval of the U.S. Food and Drug Administration (the "FDA") before any commercial sales of Aastrom's product candidates may commence in the United States. While we have commenced initial marketing on a limited basis of the AastromReplicell System in Europe, we may be required to obtain additional approvals from foreign regulatory authorities to continue or increase our sales activities. Prior to obtaining necessary regulatory approvals in the U.S., Aastrom will be required to demonstrate, through extensive preclinical studies and clinical trials, the safety and efficacy of its processes and product candidates, together with the cells produced by such processes and in such products, for application in the treatment of humans. Aastrom is currently conducting a pivotal clinical trial to demonstrate the safety and biological activity of patient-derived cells produced in the AastromReplicell System. We intend to commence two other pivotal clinical trials to demonstrate the safety and biological activity of umbilical cord blood cells produced in the AastromReplicell System. The results of these pivotal trials may differ from the results of preclinical studies and previous clinical trials. Further, our pivotal clinical trials may not demonstrate the safety, reliability and efficacy of our product candidates, or of the cells produced in such products, to the extent necessary to obtain required regulatory approvals or market acceptance.

Our ability to complete our clinical trials in a timely manner depends on many factors, including the rate of patient enrollment. Patient enrollment can vary with the size of the patient population, the proximity of suitable patients to clinical sites and the eligibility criteria for the study. We have experienced delays in patient accrual in our previous clinical trials. If we experience future delays in patient accrual, we could experience increased costs associated with clinical trials or delays in receiving regulatory approvals and commercialization.

Aastrom's current trials are designed to demonstrate specific biological safety and activity of cells produced in the AastromReplicell System, and to demonstrate engraftment of those cells to provide for recovery of the patient's blood and immune systems following aggressive therapies. The patients enrolled in these trials will have undergone extensive treatment prior to the infusion of cells produced in the AastromReplicell System. These treatments will have substantially weakened these patients and may have irreparably damaged their

hematopoietic systems. As a result, it is possible that patients may die or suffer severe complications during the course of either the current trials or future trials. For example, in our clinical trials to date, patients who were in the transplant recovery process have died from complications related to the patient's clinical condition that, according to the physicians involved, were unrelated to the AastromReplicell System procedure. Further, patients receiving cells produced with Aastrom's technologies and product candidates may not demonstrate long-term engraftment in a manner comparable to cells obtained from current stem cell therapy procedures. If we cannot demonstrate the safety or efficacy of our technologies and product candidates, including long-term sustained engraftment, or one or more patients die or suffer severe complications, the FDA or other regulatory authorities could delay or withhold regulatory approval of our product candidates. Furthermore, the FDA monitors the progress of clinical trials and it may suspend or terminate clinical trials at any time due to patient safety or other considerations.

Even If We Obtain Regulatory Approvals to Sell Our Products, We Cannot Be Certain of Commercial Acceptance

Aastrom's product development efforts are primarily directed toward obtaining regulatory approval to market the AastromReplicell System as an alternative to, or as an improvement for, the bone marrow harvest and peripheral blood progenitor cell stem cell collection methods. These stem cell collection methods have been widely practiced for a number of years, and Aastrom's technologies or product candidates may not be accepted by the marketplace as readily as these or other competing processes and methodologies.

We Depend on Third Parties for Manufacturing and Limited Source Supplies

Aastrom does not operate and has no current plans to operate manufacturing facilities for the production of its product candidates. Aastrom currently arranges for the manufacture of its product candidates and their components with third parties, and expects to continue to do so in the foreseeable future. Aastrom has entered into collaborative product development and supply agreements with SeaMED Corporation, Ethox Corporation and Moll Industries, Mid-State Division, for the collaborative development and manufacture of certain components of the AastromReplicell System and is dependent upon those suppliers to manufacture our products. Aastrom is also dependent upon Immunex Corporation, Life Technologies, Inc. and Biowhittaker for the supply of certain cytokines, serum and media to be used in the AastromReplicell System. Immunex is currently Aastrom's sole supplier of certain cytokines and few alternative supply sources exist. Apart from SeaMED, Ethox, Anchor and Immunex, Aastrom currently does not have contractual commitments from any of these manufacturers or suppliers. Aastrom's supply of such key cytokines, components and other materials may become limited, be interrupted or become restricted to certain geographic regions. Additionally, Aastrom may require additional cytokines, components and other materials to manufacture, use or market its product candidates, and necessary key components may not be available for use on a sustained basis, if at all, by Aastrom in the markets in which it intends to sell its products. Aastrom may also be unable to obtain alternative components and materials from other manufacturers of acceptable quality, or on terms or in quantities acceptable to Aastrom. If any of our key manufacturers or suppliers fail to perform their respective obligations or our supply of such cytokines, components or other materials becomes limited or interrupted, we would not be able to conduct clinical trials or market our product candidates on a timely and cost-competitive basis.

Certain of the compounds used by Aastrom in its current stem cell expansion processes involve the use of animal-derived products. Suppliers or regulatory authorities may limit or restrict the availability of these compounds for clinical and commercial use. Any restrictions would impose a potential competitive disadvantage for Aastrom's products compared to competing products and procedures. If Aastrom was not able to develop or obtain alternative compounds, its product development and commercialization efforts would be harmed.

All of Aastrom's product component suppliers 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 Aastrom to complete clinical trials and to market its products on a timely and profitable basis.

Aastrom may not be able to continue its present arrangements with its suppliers, supplement existing relationships or establish new relationships or be able to identify and obtain the ancillary materials that are necessary to develop its product candidates in the future. Aastrom's dependence upon third parities for the supply and manufacture of such items could adversely affect Aastrom's ability to develop and deliver commercially feasible products on a timely and competitive basis.

We Have a History of Losses and Expect Future Losses

Aastrom is a development stage company and its product applications for cell therapy may not be successful. Aastrom 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 March 31, 1999, Aastrom has incurred net operating losses totaling approximately $67.5 million. These losses have resulted principally from costs incurred in the research and development of Aastrom's cell culture technologies and the AastromReplicell System, general and administrative expenses, and the prosecution of patent applications. Aastrom expects to incur significant operating losses until product sales commence, primarily owing to its research and development programs, including preclinical studies and clinical trials, and the establishment of marketing and distribution capabilities necessary to support commercialization efforts for its products. Aastrom cannot predict with any certainty the amount of future losses and when, if ever, Aastrom will achieve profitability. Aastrom'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. Aastrom may not be able to achieve or sustain profitability.

We Have Limited Sales and Marketing Capabilities and Must Develop Collaborative Relationships

While we have commenced initial marketing on a limited basis of the AastromReplicell System in Europe, we have only limited internal sales, marketing and distribution capabilities. Aastrom intends to market its products through collaborative relationships with companies that have established sales, marketing and distribution capabilities. Aastrom and Cobe BCT recently terminated their strategic alliance for the worldwide distribution of the AastromReplicell System for stem cell therapy and related uses.

We are seeking to enter into other agreements relating to the development and marketing of our product candidates. If we enter into any such agreements, we may rely upon corporate partners to conduct clinical trials, seek regulatory approvals for, and manufacture and market our potential products. We may not be able to establish collaborative relationships for the development or marketing of our product candidates on acceptable terms, if at all. If we do establish these relationships, they may not be successful or sustained on a long-term basis. If we cannot establish and maintain these collaborative relationships, we may be required to curtail our development or marketing activities for our potential products.

We Will Need Additional Funds, Which May Not Be Available

Aastrom has funded its operations primarily through the sale of equity securities, corporate collaborations and research grants. Aastrom anticipates that the net proceeds received from the sale of the Series III Shares, together with Aastrom's available cash and expected interest income, will be sufficient to finance the development and manufacture of the AastromReplicell System for use in clinical trials, expanded clinical trials, other research and development and working capital and other corporate requirements into early 2000. 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 our business, and to introduce our product candidates into the marketplace, Aastrom will need to raise additional funds. We will also need additional funds or a collaborative partner to finance the research and development activities of Aastrom's product candidates for the expansion of additional cell types.

Aastrom's future capital requirements will depend upon many factors, including

- 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 Aastrom to establish additional collaborative relationships, and
- effective commercialization activities and facilities expansions if and as required.

Because of Aastrom'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. This additional funding may not be available to Aastrom on reasonable terms, or at all. If adequate funds are not available, Aastrom may be required to delay or terminate research and development programs, curtail capital expenditures, and reduce business development and other operating activities. Aastrom intends to seek additional collaborative partners to assist in the development of its products. If Aastrom is not successful in finding, entering into and maintaining arrangements with collaborators, its development efforts could be delayed. Furthermore, Aastrom may not 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 Aastrom's business, financial condition and results of operations.

We are Subject to Extensive Government Regulation Which Could Prevent, Limit or Delay Our Ability to Market or Develop Our Products

The FDA and other regulatory authorities in the United States impose significant regulatory requirements on Aastrom's research and development activities, preclinical studies, clinical trials, and the manufacturing and anticipated marketing of our product candidates. These activities are also regulated in other countries where we intend to test and market our product candidates. We must obtain the approval of the FDA before we can begin any commercial selling efforts of Aastrom's product candidates in the United States. Additionally, Aastrom may be required to obtain additional approvals from foreign regulatory authorities to continue and expand international marketing activities in Europe.

Different regulatory requirements may apply to Aastrom's products depending on how they are categorized by the FDA. To date, the FDA has indicated that it intends to regulate the AastromReplicell System for stem cell therapy as a Class III medical device through the Center for Biologics Evaluation and Research. However, the FDA may ultimately choose to regulate the AastromReplicell System for stem cell therapy under another category. A change in the regulatory classification would affect our ability to obtain FDA approval.

Further, the FDA may separately regulate the cell therapies derived from the AastromReplicell System. 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 our product candidates to the market. Until the FDA issues definitive regulations covering our product candidates, the regulatory guidelines or requirements for approval of such product candidates will continue to be uncertain.

Before marketing the AastromReplicell System or other product candidates in the United States, Aastrom 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, we may encounter delays or rejections based upon changes in FDA policy for medical product approvals during the period of product development, changes in FDA classification of Aastrom's products, and FDA regulatory review of applications submitted by Aastrom for product approval. We may encounter similar delays in foreign countries. Even after the expenditures of substantial time and financial resources, we may not obtain regulatory approval for our products in all of the markets we would like to enter. Moreover, even if we obtain regulatory approval of a product, that approval may be subject to limitations on the indicated uses for which it may be marketed. Further, even after obtaining regulatory approval, the FDA and other regulatory agencies continue to review and inspect marketed products, manufacturers and manufacturing facilities. Later discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including a withdrawal of the product from the market. Further, governmental regulatory agencies may establish additional regulations which could prevent or delay regulatory approval of our products.

We have received approval to affix the CE Mark to the AastromReplicell System instrumentation platform and the various components of the SC-I Therapy Kit for the production of bone marrow derived cells and the CB-I Therapy Kit used for expansion of umbilical cord blood cells, which permits marketing in the European Union. However, Aastrom and its suppliers must continue to meet the minimum requirements necessary to maintain such approval. If we cannot comply with ongoing European regulatory requirements for manufacturing of the AastromReplicell System or commercialization, we would not be able to sell those products in Europe. If the regulatory classification for those products is changed, we could be forced to obtain additional regulatory approvals and could be subject to additional regulatory requirements and uncertainty, which would have a material adverse effect on our business.

If We Do Not Keep Pace With Our Competitors and With Technological Changes, Our Products May Become Obsolete and Our Business May Suffer

Aastrom is engaged in the development of medical products and processes which will face competition in a marketplace characterized by rapid technological change. Many of Aastrom's competitors have significantly greater resources than Aastrom, and have developed and may develop product candidates and processes that directly compete with Aastrom's products. Moreover, competitors that achieve patent protection, obtain regulatory approvals and commence commercial sales of their products before Aastrom may enjoy a significant competitive advantage. Aastrom's product development efforts are primarily directed toward obtaining regulatory approval to market the AastromReplicell System for stem cell therapy. That market is currently dominated by the bone marrow harvest and PBPC collection methods. Aastrom's clinical data, although early, suggests that cells expanded in the AastromReplicell System 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. To address this, Aastrom's initial pivotal clinical trial evaluates the organization of PBPC collected in a single apheresis procedure by cells produced in the AastromReplicell(TM) System to reduce the overall cell collection burden to the patient. Aastrom is evaluating techniques and methods to optimize the cells produced in the AastromReplicell System to reduce the recovery time of neutrophils and platelets in patients. If we cannot improve our cell production procedure to lead to recovery times equal to or faster than those of PBPC collection methods, we may suffer competitive disadvantages. 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. Even after obtaining regulatory approval to market the AastromReplicell System method, it may not be competitive with these established collection methods on the basis of hematopoietic recovery time, cost or otherwise. Aastrom also is aware of certain other products manufactured or under development by competitors that are used for the prevention or treatment of diseases and health conditions which Aastrom has targeted for product development. Aastrom is also aware of new scientific approaches that may provide different methods of addressing the health conditions which Aastrom has targeted for product development. Developments by others may render Aastrom's product candidates or technologies obsolete or noncompetitive. Aastrom may not be able to keep pace with new technological developments and Aastrom's product candidates may not be able to supplant established products and methodologies in the therapeutic areas that are targeted by Aastrom.

If Our Patents and Proprietary Rights Do Not Provide Substantial Protection, Our Business and Competitive Position Will Suffer

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. Our pending patent applications or any future patent applications of Aastrom or its licensors may not result in issued patents. The scope of our patent protection may not exclude competitors or provide competitive advantages to Aastrom. The patents that have been or may be issued to Aastrom or its licensors may not be held valid if subsequently challenged and others may claim rights in or ownership of the patents and other proprietary rights held or licensed by Aastrom. Furthermore, others may develop similar products, duplicate our products or design around our patent protection. Since patent applications in the United States are maintained in secrecy until patents are issued, we also cannot be certain that others did not first file applications for inventions covered by Aastrom's and its licensors' pending patent applications, and we cannot be certain that we will not infringe any patents that may issue to others on such applications. Aastrom relies on certain licenses granted by the University of Michigan for certain of its patent rights. If Aastrom breaches such agreements or otherwise fails to comply with such agreements, or if such agreements expire or are otherwise terminated, Aastrom may lose its rights under the patents held by the University of Michigan. Aastrom 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. These agreements may be breached, and Aastrom might not have adequate remedies for any breach.

Aastrom's success will also depend in part on its ability to develop commercially viable products without infringing the proprietary rights of others. Aastrom has not conducted freedom of use patent searches and other patents could exist or could be filed which would have an adverse effect on our ability to market our products or maintain our competitive position. If Aastrom's technology components, devices, designs, products, processes or other subject matter are claimed under the existing United States or foreign patents or are otherwise protected by third party proprietary rights, Aastrom may be subject to infringement actions. In such event, Aastrom 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. Aastrom may not be able to obtain such licenses, especially on commercially reasonable terms. Any such failure could result in delays in marketing Aastrom's current and any future products. If Aastrom is required to defend itself against charges of patent infringement or to protect its own proprietary rights against third parties, we will incur substantial costs regardless of whether we are successful. An adverse outcome could subject Aastrom to significant liabilities to third parties, and force Aastrom to curtail or cease its development and sale of its products and processes.

Without Third Party Reimbursement For Our Products, Our Revenues Will Be Limited

Aastrom's ability to successfully commercialize its product candidates will depend in part on the extent to which government healthcare programs, such as Medicare and Medicaid, as well as private health insurers, health maintenance organizations and other third party payors will pay for our products and related treatments. 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 each payor independently decides on reimbursement, seeking such approvals is a time-consuming and costly process which will require Aastrom to provide to each payor scientific and clinical support of the use of each of Aastrom's products. If we do not obtain approvals for adequate third-party payments, we may not be able to establish or maintain price levels sufficient to realize an appropriate return on our investment in product development.

Reimbursement in the United States or foreign countries may not be available or maintained for any of Aastrom's product candidates. Any limits on reimbursement available from third-party payors may reduce the demand for, or negatively affect the price of, our products. Finally, we cannot 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 our business.

Our Use of Hazardous Materials Subjects Us to Potential Liabilities

Our research and development activities involve the controlled use of hazardous materials, chemicals and various radioactive compounds. We are 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, Aastrom could be held liable for any damages that result and any such liability could exceed the resources of Aastrom. Furthermore, if we fail to comply with current or future regulations we could be subject to substantial fines, suspension of production, alteration of our manufacturing processes or cessation of operations. Aastrom may be required to incur significant costs to comply with any such laws and regulations in the future. If we fail 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, we could be subject to significant liabilities.

Our Potential Products Liability Exposure May Exceed Available Insurance Protection

Aastrom faces an inherent business risk of exposure to product liability claims in the event that the use of the AastromReplicell System during research and development efforts, including clinical trials, or after commercialization results in adverse effects. As a result, Aastrom may incur significant product liability exposure. Our existing insurance coverage may not be adequate and we may not be able to obtain adequate insurance coverage for future clinical trials or commercial activities at an acceptable cost.

If We Cannot Attract and Retain Key Personnel, Our Business Will Suffer

Our success depends in large part upon our ability to attract and retain highly qualified scientific and management personnel. We face competition for such personnel from other companies, research and academic institutions and other entities. We may not be successful in hiring or retaining key personnel.

The Series III Shares and Other Outstanding Shares of Preferred Stock Share Have the Potential for Substantial Dilution

The Series III shares and the other outstanding shares of preferred stock are each convertible into a number of shares of common stock that increases as the current market price of the common stock decreases. If the selling shareholder was able to and did convert all of its Series III shares and other outstanding shares of preferred stock as of June 21, 1999, the selling shareholder would have received approximately 5,820,000 shares of common stock. This number of shares could become significantly greater in the event of a decrease in the trading price of the common stock. Purchasers of common stock could therefore experience substantial dilution of their investment upon conversion of the Series III shares and the other outstanding shares of preferred stock. The Series III shares and other outstanding shares of preferred stock are not registered and may be sold only if registered under the Securities Act or sold in accordance with an applicable exemption from registration, such as Rule 144. The shares of common stock into which the Series III shares may be converted are being registered pursuant to this Registration Statement.

Our Stock Price Has Been Volatile and Future Sales of Substantial Numbers of Our Shares Could Have an Adverse Effect on the Market Price of Our Shares

The market price of shares of our common stock has been volatile. The price of our common stock may continue to fluctuate in response to a number of events and factors, such as:

- clinical trial results
- the amount of our cash resources and our ability to obtain additional funding
- announcements of research activities, business developments, technological innovations or new products by us or our competitors
- changes in government regulation
- disputes concerning patents or proprietary rights
- changes in our revenues or expense levels
- public concern regarding the safety, efficacy or other aspects of the products or methodologies we are developing
- changes in recommendations by securities analysts.

Any of these events may cause the price of our shares to fall, which may adversely affect our business and financing opportunities. In addition, the stock market in general and the market prices for biotechnology companies in particular have experience significant volatility that often has been unrelated to the operating performance or financial conditions of such companies. These broad market and industry fluctuations may adversely affect the trading price of our shares, regardless of our operating performance or prospects.

In addition, sales, or the possibility of sales, of substantial numbers of shares of common stock in the public market could adversely affect prevailing market prices of shares of common stock. Our employees hold a significant number of options to purchase shares, many of which are presently exercisable. Employees may exercise their options and sell shares shortly after such options become exercisable, particularly if they need to raise funds to pay for the exercise of such options or to satisfy tax liabilities that they may incur in connection with exercising their options. Additionally, beginning January 1, 2001, Cobe BCT will be able to sell all of its approximately 2.4 million shares of our common stock without restriction.

Our Corporate Documents and Michigan Law Contain Provisions That May Make It More Difficult For Us to Be Acquired

Our board of directors has the authority, without shareholder approval, to issue additional shares of preferred stock and to fix the rights, preferences, privileges and restrictions of these shares without any further vote or action by our shareholders. This authority, together with certain provisions of our charter documents, may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of our company. This effect could occur even if our shareholders consider the change in control to be in their best interest.

We May Be Required to Redeem a Portion of the Series III Shares, Which Would Significantly Reduce Our Limited Cash Resources

The holders of Series III shares may require us to redeem some or all of those shares. These redemption rights would be triggered if we fail to issue shares of common stock on conversion of the Series III Preferred, if we fail to maintain the effectiveness of a registration statement for the resale of those shares of common stock, if we are subject to bankruptcy or insolvency proceedings, if we fail to maintain our listing on the Nasdaq stock market, or if we fail to obtain shareholder approval of the issuance of the Series III shares and the conversion of those Series III shares would result in the issuance of more than 3,084,340 shares of common stock. Any redemption would reduce our available cash resources, which are already very limited.

Absence of Dividends

Aastrom has never paid cash dividends on its common stock and does not anticipate paying any cash dividends on its common stock in the foreseeable future.

Year 2000 Issues May Affect Our Computer Systems and Our Business

Many currently installed computer systems and software products cannot distinguish 20th century dates from 21st century dates. As a result, in less than one year, computer systems and/or software used by many companies in a wide variety of applications will experience operating difficulties unless they are modified or upgraded to adequately process information involving, related to, or dependent upon the century change. Industry experts and observers differ on the scope and magnitude of problems associated with the century change. In light of the potentially broad effects of the year 2000 on a wide range of business systems, we may be affected. We utilize and are dependent upon data processing computer hardware and software to conduct our business. We have completed an assessment of our own computer systems and based upon this assessment, we believe our computer systems are substantially "Year 2000 compliant;" that is, our computer systems are capable of adequately distinguishing 21st century dates from 20th century dates. However, we may not timely identify and fix all significant Year 2000 problems in our computer systems, and any remedial efforts may involve significant expense. We have not determined the extent, or completed activities to minimize the risk, that the computer systems of our suppliers and manufacturers are not Year 2000 compliant, or will not become compliant on a timely basis. We expect to make inquires with these suppliers through the end of 1999. Year 2000 problems could prevent any of our suppliers from timely delivery of products or services that we need. We currently believe that our costs to address the Year 2000 issue relating to our suppliers will not be material, and that these costs will be funded from our operating cash flows. To the extent practical, we intend to identify alternative suppliers and manufacturers in the event our preferred suppliers cannot deliver products or services that we need on a timely basis. Our expectations of Year 2000 costs relating to our suppliers and manufacturers are only estimates, which were derived from numerous assumptions of future events, including the continued availability of resources and third-party remediation plans with regard to year 2000 issues. These estimates may not be correct and actual results could differ materially from these estimates.

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. These forward-looking statements include statements regarding:

- uncertainties related to product development and marketability;
- uncertainties related to clinical trials;
- manufacturing and supply uncertainties and dependence on third parties;
- anticipation of future losses;
- limited sales and marketing capabilities;
- future capital needs and uncertainty of additional funding;
- uncertainty of regulatory approval and extensive government regulation;
- 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 in this Risk Factors section, 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. Aastrom assumes no obligation to update any such forward-looking statement or reason why actual results might differ.

Because this is a summary, it does not contain all the information about us that may be important to you. You should read the more detailed information and the financial statements and related notes which are incorporated by reference in this Prospectus.

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 AastromReplicell(TM) System is our lead product under development, and consists of a clinical cell culture system that operates single-use therapy kits tailored for each patient therapy for use in the rapidly growing cell therapy market. Aastrom believes that the AastromReplicell(TM) System method will be a cost-effective, less invasive and less time consuming alternative to, or an improvement on, currently available stem cell collection methods for some patients and may enhance the clinical utility of umbilical cord blood ("UCB") transplants by expanding the number of cells available for transplant.

The AastromReplicell(TM) System is designed as a platform product which implements Aastrom's pioneering stem cell replication technology. Aastrom also believes that the AastromReplicell(TM) System can be modified to produce a wide variety of other cell types for selected emerging therapies being developed by other companies and institutions. Aastrom intends to develop strategic collaborations for the development of the AastromReplicell(TM) System in certain of these other cell therapy market segments. In ex vivo gene therapy, Aastrom 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. 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, can be 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 Aastrom believes may ultimately be addressed by the AastromReplicell(TM) System.

Aastrom believes that the AastromReplicell(TM) System may offer significant advantages over traditional stem cell collection methods. The AastromReplicell(TM) System is intended to be used to produce cells used for stem cell therapy from a small starting volume of bone marrow or UCB cells. The AastromReplicell(TM) System 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 AastromReplicell(TM) System process, the presence of breast cancer cells in each sample was either substantially reduced or was no longer detectable. Aastrom believes that the combination of passive depletion during culture with the lower starting volume of tumor cells may result in a procedure that offers a tumor-free or tumor-reduced cell product for transplant.

Aastrom is currently conducting a pivotal stem cell therapy clinical trial in patients with cancer at multiple sites in the U.S. and we intend to initiate additional pivotal clinical trials. We anticipate that the results of this pivotal trial will be used to support Aastrom's Pre-Market Approval ("PMA") submission to the FDA. Aastrom has also initiated two clinical sites in Europe. Aastrom may not market the AastromReplicell(TM) System in the United States for stem cell therapy unless and until it receives FDA and other necessary regulatory approvals. Aastrom has completed production-level versions of the AastromReplicell(TM) System, has obtained permission to affix the CE Mark to such versions and has initiated a limited product launch in Europe.

Aastrom's principal executive offices are located at 24 Frank Lloyd Wright Drive, P. O. Box 376, Ann Arbor, MI 48106.

SELLING SHAREHOLDER

This prospectus relates to the offering by RGC International Investors, LDC for resale of up to 3,794,874 shares of common stock. The selling shareholder will acquire the shares upon (i) conversion, from time to time, of the Series III shares that it acquired in May 1999, and (ii) exercise, from time to time, of the warrants that it holds. If the selling shareholder was able to and did convert all of its Series III shares as of June 21, 1999, RGC would have received 2,338,693 shares of common stock. The following table sets forth certain information with respect to the selling shareholder as of June 21, 1999: (i) the name and position or other relationship with Aastrom within the past three years, if any, of the selling shareholder; (ii) the number of Aastrom's outstanding shares of common stock beneficially owned by the selling shareholder (including shares obtainable under options exercisable within sixty (60) days of such date) prior to the offering hereby; (iii) the number of such shares being offered hereby; and (iv) the number and percentage of Aastrom's outstanding shares of common stock to be beneficially owned by the selling shareholder after completion of the sale of common stock being offered hereby. The number of shares reported as being beneficially owned after the offering represents shares of common stock issuable upon conversion of another outstanding series of preferred stock. These shares of common stock have been registered for sale and they may be sold before or after the shares that may be sold pursuant to this prospectus. There is no assurance that the selling shareholder will sell any or all of the shares offered hereby.

Selling Shareholder	Number of Shares Beneficially Owned Prior to the Offering	Number of Such Shares Being Offered	Number of Shares Beneficially Owned After the Offering
RGC International Investors, LDC	6,119,827	3,794,874	3,481,134

The number of shares set forth in the table represents an estimate of the number of shares of common stock to be offered by the selling shareholder. The actual number of shares of common stock issuable upon conversion of Series III shares and of the other outstanding series of preferred stock is indeterminate, is subject to adjustment and could be materially less or more than this estimate depending on factors which cannot be predicted by Aastrom at this time, including the future market price of the common stock. The actual number of shares of common stock offered hereby, and included in the Registration Statement of which this Prospectus is a part, includes such additional number of shares of common stock as may be issued or issuable upon conversion of the Series III shares by reason of any stock split, stock dividend or similar transaction involving the common stock, in order to prevent dilution, in accordance with Rule 416 under the Securities Act.

The number of shares of common stock set forth above as beneficially owned by the selling shareholder with respect to Series III shares and of the other outstanding series of preferred stock based on a conversion price of $1.2876. If circumstances were such that the selling shareholder was able to and did convert the Series III shares on June 21, 1999, the conversion price would have been $1.2876 (the average of the closing bid prices of the common stock for the lowest five consecutive trading days during the twenty trading days preceding such date, multiplied by 100% pursuant to the terms of the Series III shares). The Series III shares are convertible and the warrants are exercisable by any holder only to the extent that the number of shares of common stock owned by such holder and its affiliates (but not including shares of common stock underlying unconverted Series III shares) after such conversion or exercise would not exceed 4.9% of the then outstanding common stock as determined in accordance with Section 13(d) of the Securities Exchange Act. Accordingly, the number of shares of common stock set forth in the table for the selling shareholder exceeds the number of shares of common stock that the selling shareholder could own beneficially at any given time through its ownership of Series III shares. In that regard, beneficial ownership of the selling shareholder set forth in the table is not determined in accordance with Rule 13d-3 under the Exchange Act.

PLAN OF DISTRIBUTION

The shares of common stock being offered by the selling shareholder or its permitted donees, pledgees, transferees, or other successors in interest, will be sold in one or more transactions (which may involve block transactions) on the Nasdaq National Market or on such other market on which the common stock may from time to time be trading:

- in privately-negotiated transactions
- through the writing of options on the shares
- short sales or
- any combination of these transactions.

The sale price may be:

- the market price prevailing at the time of sale
- a price related to the prevailing market price or
- such other price as the selling shareholder determines from time to time. The shares may also be sold pursuant to Rule 144.

The selling shareholder may not accept any purchase offer or make any sale of shares if it considers the purchase price to be unsatisfactory at any particular time.

The selling shareholder or its permitted donees, pledgees, transferees, or other successors in interest, may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for themselves or their customers. Brokers acting as agents for the selling shareholder will receive usual and customary commissions for brokerage transactions, and market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. The selling shareholder may attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then current market price. There can be no assurance that all or any of the Shares offered hereby will be issued to, or sold by, the selling shareholder.

Alternatively, the selling shareholder may sell all or any part of the shares through an underwriter. The selling shareholder has not entered into any agreement with a prospective underwriter and may not do so. If the selling shareholder enters into such an agreement or agreements, Aastrom will supplement or revise this prospectus.

The selling shareholder and any other persons participating in a distribution of the shares will be subject to applicable provisions of the Securities Exchange Act and the rules and regulations thereunder, including Regulation M, which may restrict certain activities of, and limit the timing of purchases and sales of the shares by the selling shareholder and other persons participating in a distribution of the shares. Furthermore, under Regulation M, persons engaged in a distribution of the shares are prohibited from simultaneously engaging in market making and certain other activities with respect to the shares for a specified period of time prior to the commencement of such distributions subject to specified exceptions or exemptions. All of the foregoing may affect the marketability of the shares offered hereby.

Aastrom has agreed to indemnify the selling shareholder, or certain transferees or assignees, against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the selling shareholder, or certain transferees or assignees, may be required to make in respect thereof. The selling shareholder has agreed to indemnify Aastrom against certain liabilities, including liabilities under the Securities Act, or to contribute to payments Aastrom may be required to make in respect thereof.

The selling shareholder, RGC International Investors, LDC, is a party to an investment management agreement with Rose Glen Capital Management, L.P., a Delaware limited partnership. Pursuant to the investment management agreement, Rose Glen Capital Management has sole voting and dispositive power over the shares.

USE OF PROCEEDS

Aastrom will not receive any proceeds from sales of the shares or from any conversions of the Series III shares.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for Aastrom by Pepper Hamilton LLP, Detroit, Michigan. Gray Cary Ware & Freidenrich LLP, San Diego, California, has acted as special counsel to Aastrom in connection with this offering.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended June 30, 1998 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Other expenses in connection with the registration of the Common Stock hereunder will be substantially as follows (all expenses other than the SEC Registration Fee are estimates):

Item	Company Expense
SEC Registration Fee	$ 1,435
Printing and engraving expenses	$ 2,000
Legal fees and expenses	$10,000
Accounting fees and expenses	$ 5,000
Miscellaneous	$ 6,565
Total	$25,000

Item 15. Indemnification of Directors and Officers.

Sections 1561 through 1565 of the Michigan Business Corporation Act (the "MBCA") authorize a corporation to grant or a court to award indemnity to directors, officers, employees and agents in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933.

The Bylaws of the Registrant, provide that the Registrant shall, to the fullest extent authorized or permitted by the MBCA, or other applicable law, indemnify a director or officer who was or is a party or is threatened to be made a party to any proceeding by or in the right of the Registrant to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the Registrant, against expenses, including actual and reasonable attorneys' fees, and amounts paid in settlement incurred in connection with the action or suit, if the indemnitee acted in good faith and in a manner the person reasonably believed to be in, or not opposed to, the best interests of the Registrant or its shareholders. This section also authorizes the Registrant to advance expenses incurred by any agent of the Registrant in defending any proceeding prior to the final disposition of such proceeding upon receipt of an undertaking by or on behalf of the agent to repay such amount unless it shall be determined ultimately that the agent is entitled to be indemnified.

The Bylaws also authorize the Registrant to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Registrant against any liability asserted against or incurred by such person in such capacity or arising out of such person's status as such, regardless of whether the Registrant would have the power to indemnify such person against such liability under the provisions of the MBCA.

The Registrant has entered into an indemnification agreement with certain of its directors, officers and other key personnel, which contains provisions that may in some respects be broader than the specific indemnification provisions contained under applicable law. The indemnification agreement may require the Registrant, among other things, to indemnify such directors, officers and key personnel against certain liabilities that may arise by reason of their status or service as directors, officers or employees of the Registrant, 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 the maximum extent that insurance coverage of such directors, officers and key employees under the Registrant's directors' and officers' liability insurance policies is maintained.

Section 1209 of the MBCA permits a Michigan corporation to include in its Articles of Incorporation a provision eliminating or limiting a director's liability to a corporation or its shareholders for monetary damages for breaches of fiduciary duty. The enabling statute provides, however, that liability for breaches of the duty of loyalty, acts or omissions not in good faith or involving intentional misconduct or knowing violation of the law, or the receipt of improper personal benefits cannot be eliminated or limited in this manner. The Registrant's Restated Articles of Incorporation include a provision which eliminates, to the fullest extent permitted by the MBCA, director liability for monetary damages for breaches of fiduciary duty.

Item 16. Exhibits.

Exhibit Number	Description of Document
3.1	Certificate of Designations, Preferences and Rights of Series III Shares
5.1	Consent and Opinion of Pepper Hamilton LLP
10.1	Securities Purchase Agreement for Series III shares
10.2	Registration Rights Agreement for Series III shares
10.3	Stock Purchase Warrants dated May 27, 1999
23.1	Consent of PricewaterhouseCoopers LLP, independent accountants
23.2	Consent of Gray Cary Ware & Freidenrich LLP
23.3	Consent of Pepper Hamilton LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on the signature page)

A. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933 (the "Securities Act");

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

B. The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. The undersigned Registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

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

E. The undersigned Registrant hereby undertakes that:

(1) For the purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of the registration statement as of the time it was declared effective.

(2) For the purposes of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Ann Arbor, State of Michigan, on June 22, 1999.

AASTROM BIOSCIENCES, INC.

By: /s/ R. Douglas Armstrong, Ph.D.
R. Douglas Armstrong, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints R. Douglas Armstrong and Todd E. Simpson, or either of them, as his or her attorney-in-fact, each with full power of substitution for him or her in any and all capacities, to sign any and all amendments to this registration statement, including, but not limited to, post-effective amendments and any and all new registration statements filed pursuant to Rule 462 under the Securities Act of 1933 in connection with or related to the offer contemplated by this registration statement, as amended, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorney to said registration statement and any and all amendment thereto.

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

Signature	Title	Date
/s/ R. Douglas Armstrong, Ph.D. R. Douglas Armstrong, Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	June 22, 1999
/s/ Todd E. Simpson Todd E. Simpson	Vice President, Finance and Administration, Chief Financial Officer, Secretary and Treasurer (Principal -Financial and Accounting Officer)	June 22, 1999
/s/ Robert J. Kunze Robert J. Kunze	Chairman of the Board and Director	June 22, 1999
/s/ Mary L. Campbell Mary L. Campbell	Director	June 22, 1999
/s/ Stephen G. Emerson, M.D., Ph.D. Stephen G. Emerson, M.D., Ph.D.	Director	June 22, 1999
/s/ Arthur F. Staubitz Arthur F. Staubitz	Director	June 22, 1999
/s/ Joseph Taylor Joseph Taylor	Director	June 22, 1999

INDEX TO EXHIBITS

Exhibit Number	Description of Document
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23.3	Consent of Pepper Hamilton LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on the signature page)

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* Incorporated by reference from Aastrom's Current Report on Form 8-K filed on June 4, 1999.

EXHIBIT 5.1

June 18, 1999

Securities and Exchange Commission
Judiciary Plaza
450 Fifth Street, N.W.
Washington, D.C. 20549

Re: Aastrom Biosciences, Inc. Registration
Statement on Form S-3
File No.: 333-_____

Gentlemen:

We have acted as special counsel to Aastrom Biosciences, Inc., a Michigan corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission (the "Commission") of a registration statement filed with the SEC on June 18, 1999, as amended (the "Registration Statement") of the Company on Form S-3 under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the proposed issuance by the Company of shares of the Company's Common Stock (the "Shares") covered by the Registration Statement.

In this connection, we have examined the Registration Statement, including the exhibits thereto, the originals or copies, certified or otherwise identified to our satisfaction, of the Articles of Incorporation and the By-Laws of the Company amended to date, resolutions of the Company's Board of Directors and such other documents and corporate records relating to the Company, and the issuance and sale of the Company's 1999 Series III Convertible Preferred Stock (the "1999 Series Shares") and warrants issued in connection with the sale of the 1999 Series Shares (the "Warrants") and the conversion of the 1999 Series Shares into the Shares issuance of the Shares upon exercise of the Warrants, as we have deemed appropriate. The opinion expressed herein is based exclusively on the applicable provisions of the Michigan Business Corporation Act as in effect on the date hereof.

On the basis of the foregoing, we are of the opinion that the Shares to be issued by the Company upon conversion of the Company's 1999 Series Shares and upon exercise of the Warrants will be, duly authorized, validly issued, fully paid, and non-assessable.

We hereby consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. Such consent does not constitute a consent under Section 7 of the Act, since we have not certified any part of such Registration Statement and do not otherwise come within the categories of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

PEPPER HAMILTON LLP

By: /s/ Michael B. Staebler

Michael B. Staebler Exhibit 23.1

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Prospectus constituting part of this Registration Statement on Form S-3 of our report dated August 7, 1998 appearing on page 9 of Aastrom Biosciences, Inc.'s Annual Report on Form 10-K for the year ended June 30, 1998. We also consent to the reference to us under the heading "Experts" in such Prospectus.

/s/ PRICEWATERHOUSECOOPERS LLP
- ------------------------------
PRICEWATERHOUSECOOPERS LLP

Minneapolis, Minnesota
June 18, 1998

EXHIBIT 23.2

[GRAY CARY WARE & FREIDENRICH LETTERHEAD]

June 21, 1999

Securities and Exchange Commission
Judiciary Plaza
450 Fifth Street, N.W.
Washington, D.C. 20549

Re: Aastrom Biosciences, Inc. Registration Statement on Form S-3

Ladies and Gentlemen:

As counsel to Aastrom Biosciences, Inc., a Michigan corporation (the Company"), in connection with the proposed offer and sale of those certain shares of the Company's Common Stock, $0 par value, as set forth in the Registration Statement on Form S-3 (the "Registration Statement"), we hereby consent to the use of our name under the caption "Legal Matters" in the Registration Statement, including the Prospectus constituting a part thereof, as originally filed or as subsequently amended.

Very truly yours,

/s/ GRAY CARY WARE & FREIDENRICH LLP