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AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON OCTOBER 15, 2003
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)

A. M. WRIGHT
SENIOR VICE PRESIDENT
ADMINISTRATIVE AND FINANCIAL OPERATIONS, CFO
AASTROM BIOSCIENCES, INC.
24 FRANK LLOYD WRIGHT DRIVE
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COPIES TO:

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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 reimbursement plans, please check the following box. [_]

If any of the securities being registered on this Form to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. [_]

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 (1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)	AMOUNT OF REGISTRATION FEE
Common Stock ($0 par value)	13,940,700	$1.48	$20,632,236	$1,669.15

(1) 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, as reported on the Nasdaq SmallCap Market on October 13, 2003.

Pursuant to Rule 429 under the Securities Act, this registration statement contains a combined prospectus that also relates to 338,812 shares of common stock previously registered pursuant to our Registration Statement on Form S-2 (Registration No. 333-101560) and not issued as of the date hereof. The filing fee associated with those shares was previously paid with that earlier registration statement.

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.

SUBJECT TO COMPLETION, DATED OCTOBER 15, 2003

The information in this prospectus is not complete and may be changed. We 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.

PROSPECTUS

AASTROM BIOSCIENCES, INC.
14,279,512 SHARES OF COMMON STOCK

This prospectus relates to the sale of up to 14,279,512 shares of our common stock by Fusion Capital Fund II, LLC. Fusion Capital is sometimes referred to in this prospectus as the selling shareholder. The prices at which Fusion Capital may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of our shares by Fusion Capital.

Our common stock is traded on the Nasdaq SmallCap Market under the symbol “ASTM.” On October 13, 2003, the last reported sale price for our common stock was $1.46 per share.

Investing in our common stock involves a high degree of risk. You should consider carefully the risk factors beginning on page 5 of this prospectus before making a decision to purchase our stock.

The selling shareholder is an “underwriter” within the meaning of the Securities Act of 1933, as amended.

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 October , 2003.

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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.

FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements include statements regarding, among other things, (a) our expectations about product development activities, (b) our growth strategies, (c) anticipated trends in our industry, (d) our future financing plans, and (e) our anticipated needs for working capital. Forward-looking statements, which involve assumptions and describe our future plans, strategies, and expectations, are generally identifiable by use of the words “may,” “will,” “should,” “expect,” “anticipate,” “estimate,” “believe,” “intend,” or “project” or the negative of these words or other variations on these words or comparable terminology. This information may involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from the future results, performance, or achievements expressed or implied by any forward-looking statements. These statements may be found under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” in the Form 10-K and in the other reports that are incorporated by reference into this prospectus, as well as in this prospectus generally. Actual events or results may differ materially from those discussed in forward-looking statements as a result of various factors, including, without limitation, the risks outlined under “Risk Factors” and matters described in this prospectus generally. In light of these risks and uncertainties, the events anticipated in the forward-looking statements may not occur.

SUMMARY

The following summary highlights selected information from this prospectus and the information incorporated by reference. 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 in this prospectus and other documents which are incorporated by reference in this prospectus.

Our Business

We are a late-stage development company focused on human cell-based therapies. We have identified multiple paths to revenue based on our proprietary *ex vivo* cell production technology, including the near-term Cell Production Products business, and an active Prescription Cell Product pipeline for stem cell tissue repair and cancer and infectious disease treatments.

Our core technology is based on our proprietary AastromReplicell™ System, an integrated system of instrumentation and single-use consumable kits that implements our patented single-pass perfusion process in a fully automated closed-loop culturing system to optimize cell growth and viability. This system provides nutrients to cells by mimicking the natural cell-growth environment, and enabling cells to grow effectively while retaining high biological function, without various cloning approaches. In addition, this system provides GMP-compliant manufacturing and automated process control for the commercial-scale production of human cells. We do not believe that any other comparable system currently exists.

Our Cell Production Products operation markets the AastromReplicell™ System and cell production kits to researchers and companies for their production of cells for clinical trials. The initial kits are used for the production of dendritic cells used for developing cancer vaccines. We are leveraging our *ex vivo* cell production technology for a growing Prescription Cell Product pipeline focused on two areas: Tissue Repair Cells (TRCs) for stem cell-derived tissue repair and regeneration, and Therapeutic Cells (TCs) for immune system-directed attacks on certain cancers and other infectious diseases.

Using the AastromReplicell™ System, TRCs are grown from a small sample of a patient's bone marrow and, once administered back to the patient, are intended to generate normal tissue. The primary TRC product being evaluated is our OCG-I cells for bone grafting (fusions, fractures or dental defects). We are currently preparing for OCG-I clinical trials in both the United States and Europe. We also have in development OC-I cells for osteoporosis, and SC-I cells for autologous bone marrow transplants in lymphoma patients. The SC-I product has been CE marked and is currently being used by a limited number of centers in Europe to evaluate its use. In the United States, the SC-I therapy reached Phase III trials, although we halted these trials due to a shift in medical practice that reduced patient need and availability. The OC-I therapy is currently in a Phase I/II clinical trial. We also believe that the stem cell components of our TRCs may be useful for other medical indications, including the regeneration of cardiac and vascular tissues.

We are developing TC products using human cells to cause the patient's immune system to attack certain cancers and other infectious diseases. Blood-derived dendritic cells, which are the body's crucial mobilizers of the immune T-Cells response, are cultured in the AastromReplicell™ System to produce our proprietary Dendricell™. After being exposed to a particular biological signal, or antigen, the Dendricell™ may act to trigger a cell-mediated immune response in a patient against the cancer cells or viri. The first Dendricell™ clinical trials are planned at Stanford University for a multiple myeloma cancer vaccine and at Duke University for a colorectal cancer vaccine. In addition, we have been in the pre-clinical stage for a T-cell therapeutic targeting the Epstein-Barr Virus.

The recent commercialization of our automated cell production instruments and cell-specific production kits should generate revenues in the near term, although we are not yet able to project the market size and potential growth for those products. While we have initiated marketing activities in Europe for the CE Marked SC-I, DC-I and the DCV-I products, we do not expect to generate positive cash flows from our consolidated operations for at least the next two to three years and then only if more significant product sales commence. Until that time, we expect that our revenue sources will consist of sales from our Cell Production Product operation to academic and commercial research centers, grant revenue and research funding, milestone payments and licensing fees from

existing and potential future corporate collaborators. To date, we have financed our operations through public and private sales of our equity securities. As a development-stage company, we have never been profitable and do not anticipate having net income unless and until significant product sales commence. Through March 31, 2003, we have accumulated losses of approximately $100 million. We cannot provide any assurance that we will be able to achieve profitability on a sustained basis, if at all, obtain the required funding, or complete a corporate partnering or acquisition transaction.

Our principal executive offices are located at 24 Frank Lloyd Wright Drive, P. O. Box 376, Ann Arbor, MI 48106. Our telephone number is (734) 930-5555.

The Offering

On October 30, 2002 we entered into a common stock purchase agreement with Fusion Capital Fund II, LLC, pursuant to which Fusion Capital has agreed to purchase, on each trading day, $25,000 of our common stock up to an aggregate, under certain conditions, of $12,000,000. The purchase price of the shares of common stock will be equal to a price based upon the future market price of the common stock without any fixed discount to the market price. We also have the right to increase the daily purchase amount as the market price of our common stock increases. Specifically, for every $0.25 increase in threshold price above $0.50, we have the right to increase the daily purchase amount by up to an additional $5,000. Fusion Capital does not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.125. On October 1, 2003, we exercised our existing option under the common stock purchase agreement to increase the total purchase amount to $24,000,000. Through the date hereof we have sold 12,000,000 shares to Fusion Capital for an aggregate purchase price of $7,809,956. Thus, as of the date hereof we have the right to sell to Fusion Capital an additional $16,190,044 worth of our common stock. The additional $16,190,044 of common stock is to be purchased through October 2006 subject to earlier termination at our discretion. Fusion Capital, the selling shareholder under this prospectus, is offering for sale up to 14,279,512 shares of our common stock that would be issued pursuant to the common stock purchase agreement. As of September 30, 2003, there were 71,244,315 shares outstanding, excluding the additional 14,279,512 shares offered by Fusion Capital pursuant to this prospectus. The number of shares offered by this prospectus represents approximately 20% of the total common stock outstanding as of September 30, 2003. The number of shares ultimately offered for sale by Fusion Capital is dependent upon the number of shares purchased by Fusion Capital under the common stock purchase agreement.

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 at this time. 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 that involve risks and uncertainties. Our actual results may differ significantly from the results discussed in the forward-looking statements. This section discusses the risk factors that might cause those differences. You should also consider the additional information set forth in our SEC reports on Forms 10-K, 10-Q and 8-K and in the other documents considered a part of this prospectus. See "Where You Can Find More Information."

Our past losses and expected future losses cast doubt on our ability to operate profitably.

We were incorporated in 1989 and have experienced substantial operating losses since inception. As of June 30, 2003, we have incurred net losses totaling approximately $102.4 million. These losses have resulted principally from costs incurred in the research and development of our cell culture technologies and the AastromReplicell™ System, general and administrative expenses, and the prosecution of patent applications. We expect to incur significant operating losses until product sales increase, primarily owing to our research and development programs, including pre-clinical studies and clinical trials, and the establishment of marketing and distribution capabilities necessary to support commercialization efforts for our products. We cannot predict with any certainty the amount of future losses. Our ability to achieve profitability will depend, among other things, on successfully completing the development of our product candidates, obtaining regulatory approvals, establishing manufacturing, sales and marketing arrangements with third parties, and raising sufficient funds to finance our activities. We may not be able to achieve or sustain profitability.

Our inability to complete our product development activities successfully would severely limit our ability to operate or finance operations.

Commercialization in the United States of our cell product candidates will require substantial clinical trials. While we have commenced initial marketing on a limited basis of the AastromReplicell™ System in Europe, we believe that the United States will be the largest market for our products. We may not be able to successfully complete development of our product candidates, or successfully market our technologies or product candidates. We, and any of our potential collaborators, may encounter problems and delays relating to research and development, regulatory approval and intellectual property rights of our technologies and product candidates. Our research and development programs may not be successful, and our cell culture technologies and product candidates may not facilitate the production of cells outside the human body with the expected result. Our technologies and product candidates may not prove to be safe and efficacious in clinical trials, and we may not obtain the requisite regulatory approvals for our technologies or product candidates and the cells produced in such products. If any of these events occur, we may not have adequate resources to continue operations for the period required to resolve the issue delaying commercialization and we may not be able to raise capital to finance our continued operation during the period required for resolution of that issue.

We may not be able to raise the required capital to conduct our operations and develop our products.

We will require substantial capital resources in order to conduct our operations and develop our products. In October 1999, we were forced to reduce operations based on our declining level of capital resources and our limited financing alternatives available at that time. The previous reduction in our operating activities has delayed our product development programs. We expect that our available cash and financing will be sufficient to fund currently planned activities through our 2004 fiscal year (ending June 30, 2004). However, in order to grow and expand our business, and to introduce our new product candidates into the marketplace, we will need to raise additional funds. We will also need additional funds or a collaborative partner, or both, to finance the research and development activities of our product candidates for the expansion of additional cell types. Accordingly, we are continuing to pursue additional sources of financing.

Our future capital requirements will depend upon many factors, including:

- continued scientific progress in our research and development programs;
- costs and timing of conducting clinical trials and seeking regulatory approvals;
- competing technological and market developments;
- our ability to establish additional collaborative relationships; and
- the effect of commercialization activities and facility expansions if and as required.

Because of our long-term funding requirements, we are likely to access the public or private equity markets if and whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time. Further, we may enter into financing transactions at rates, which are at a substantial discount to market. This additional funding may not be available to us on reasonable terms, or at all. If adequate funds are not available in the future, we may be required to further delay or terminate research and development programs, curtail capital expenditures, and reduce business development and other operating activities.

We only have the right to receive $25,000 per trading day under the agreement with Fusion Capital unless our stock price equals or exceeds $0.75, in which case the daily amount may be increased under certain conditions as the price of our common stock increases. Fusion Capital does not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.125. Based on the 12,000,000 shares to be sold to Fusion Capital and covered by this prospectus, the selling price of our common stock to Fusion Capital will have to average approximately $1.35 per share for us to receive the maximum total remaining proceeds of $16,190,044 without registering additional shares of common stock.

In order to be in compliance with Nasdaq SmallCap Market rules, we cannot be required to sell shares of our common stock to Fusion Capital at a price below $0.25, which represents the greater of the book value per share of our common stock as of September 30, 2002 or the closing sale price per share of our common stock on October 29, 2002. If we elect to sell our shares of Fusion Capital at a price per share below $0.25, we first would be required to obtain shareholder approval in order to be in compliance with the Nasdaq SmallCap Market rules.

The extent we rely on Fusion Capital as a source of funding will depend on a number of factors, including the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources. If obtaining sufficient financing from Fusion Capital were to prove prohibitively expensive and if we are unable to generate significant revenues from product sales, we will need to secure another source of funding in order to satisfy our working capital needs. Even if we are able to access the remaining $16,190,044 under the common stock purchase agreement with Fusion Capital, we may still need additional capital to fully implement our business, operating and development plans. If the financing we require to sustain our working capital needs is unavailable or prohibitively expensive when we require it, our business, operating results, financial condition and prospects would suffer.

The sale of our common stock to Fusion Capital may cause dilution and the sale of the shares of common stock acquired by Fusion Capital could cause the price of our common stock to decline.

The purchase price for the common stock to be issued to Fusion Capital pursuant to the common stock purchase agreement will fluctuate based on the market price of our common stock. Sales to Fusion will dilute the ownership interests of existing shareholders and pursuant to previously approved shareholder resolutions, the Board of Directors has the authority to increase the maximum number of authorized shares from 100 million to 150 million. All shares in this offering are freely tradable. Fusion Capital may sell none, some or all of the shares of common stock purchased from us at any time. We expect that the shares offered by this prospectus will be sold over a period of up to 36 months from the date of this prospectus. Depending upon market conditions at the time, a sale of shares under this offering could cause the trading price of our common stock to decline. The sale of a substantial number of

shares of our common stock under this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

The issuance of additional common stock for funding has the potential for substantial dilution.

As noted above, we will need additional equity funding to provide us with the capital to reach our objectives. At current market prices, such an equity issuance would cause a substantially larger number of shares to be outstanding and would dilute the ownership interest of existing stockholders.

Our stock price has been volatile and future sales of substantial numbers of our shares could have an adverse affect on the market price of our shares.

The market price of shares of our common stock has been volatile, ranging in closing price between $0.23 and $1.45 during the fiscal year ended June 30, 2003. 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;
- entering into or terminating strategic relationships;
- 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;
- reports by securities analysts; and
- status of the investment markets.

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 experienced 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 stock, regardless of our operating performance or prospects.

We must successfully complete our clinical trials to be able to market certain of our products.

To be able to market cell products in the United States, we must demonstrate, through extensive preclinical studies and clinical trials, the safety and efficacy of our processes and product candidates, for application in the treatment of humans. If our clinical trials are not successful, our products may not be marketable.

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, perceptions of the utility of cell therapy for the treatment of certain diseases and the eligibility criteria for the study. We have experienced delays in patient accrual in our previous and current clinical trials. If we experience future delays in patient accrual, we could experience increased costs and delays associated with clinical trials, which would impair our product development programs and our ability to market our products. 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.

Failure to obtain and maintain required regulatory approvals would severely limit our ability to sell our products.

We must obtain the approval of the FDA before commercial sales of our cell product candidates may commence in the United States, which we believe will be the largest market for our products. We may also be required to obtain additional approvals from foreign regulatory authorities to continue or increase our sales activities in those jurisdictions. If we cannot demonstrate the safety, reliability and efficacy of our product candidates, or of the cells produced in such products, we may not be able to obtain required regulatory approvals. Patients receiving cells produced with our technologies and product candidates may not demonstrate long-term engraftment in a manner comparable to cells obtained from current hematopoietic stem cell therapy procedures. If we cannot demonstrate the safety or efficacy of our technologies and product candidates, including long-term sustained engraftment, or if 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.

Finally, 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. Even after granting regulatory approval, the FDA, other regulatory agencies, and governments in other countries 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.

Even if we obtain regulatory approvals to sell our products, lack of commercial acceptance would impair our business.

We are seeking to obtain regulatory approval to market stem cell tissue repair and regeneration treatments, and cancer and infectious disease treatments. Even if we obtain all required regulatory approvals, we cannot be certain that our products and processes will be adopted at a level that would allow us to operate profitably. Our tissue repair products will face competition from existing, and/or potential other new treatments in the future which could limit revenue potential. It may be necessary to increase the yield and/or cell type purity, for certain of our Aastrom Replicell™ System cell processes to gain commercial acceptance. Our technologies or product candidates may not be employed in all potential applications being investigated, and any reduction in applications would limit the market acceptance of our technologies and product candidates and our potential revenues.

Failure of third parties to manufacture component parts or provide limited source supplies would impair our new product development and our sales activities.

We rely solely on third parties such as Astro, Moll, Cambrex and Amgen to manufacture our product candidates, component parts and growth factors and other materials used in the cell expansion process. We would not be able to obtain alternate sources of supply for many of these items on a short-term basis. If any of our key manufacturers or suppliers fail to perform their respective obligations or if our supply of growth factors, components or other materials is limited or interrupted, we would not be able to conduct clinical trials or market our product candidates on a timely and cost-competitive basis, if at all.

Furthermore, some of the compounds used by us in our current bone marrow or cord blood cell expansion processes involve the use of animal-derived products. Suppliers or regulatory authorities may limit or restrict the availability of such compounds for clinical and commercial use. Any restrictions on these compounds would impose a potential competitive disadvantage for our products. Our inability to develop or obtain alternative compounds would harm our product development and commercialization efforts.

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

Our stock may be delisted from Nasdaq, which could affect its market price and liquidity.

We are required to meet certain financial tests (including a minimum bid price for our common stock of $1.00) to maintain the listing of our common stock on the Nasdaq Stock Market. Our common stock may be recommended for delisting (subject to any appeal we would file) if we do not maintain compliance with the Nasdaq requirements within specified periods and subject to permitted extensions. If our common stock were delisted, it could be more difficult to buy or sell our common stock and to obtain accurate quotations, and the price of our stock could suffer a material decline.

Given our limited internal sales and marketing capabilities, we need to develop increased internal capability or collaborative relationships to sell, market and distribute our products.

While we have commenced initial marketing on a limited basis of the AastromReplicell™ System and SC-I, DC-I and DCV-I cell production kits in Europe and domestically for research use, we have only limited internal sales, marketing and distribution capabilities. We intend to get assistance to market our products through collaborative relationships with companies with established sales, marketing and distribution capabilities. While we have entered into such arrangements with respect to Switzerland, Turkey and Italy, we will need to establish additional relationships to be able to achieve the market coverage we desire. Our inability to develop and maintain those relationships would limit our ability to market, sell and distribute our products. Our inability to enter into successful, long-term relationships could require us to develop alternate arrangements at a time when we need sales, marketing or distribution capabilities to meet existing demand.

Any changes in the governmental regulatory classifications of our products could prevent, limit or delay our ability to market or develop our products.

The FDA establishes regulatory requirements based on the classification of a product. The AastromReplicell™ System may be regulated as a Class III medical device, or the FDA may ultimately choose to regulate the AastromReplicell™ System under another category. Because our product development programs are designed to satisfy the standards applicable to Class III medical devices and biological licensure for our cellular products, any change in the regulatory classification or designation would affect our ability to obtain FDA approval of our products. The AastromReplicell™ System is used to produce different cell mixtures, and each of these cell mixtures will, under current regulations be regulated as biologic products, which require a BLA. Other countries are adopting new strict policies and requirements for cell products. These new requirements may delay, restrict or prevent the sale or use of our products.

If we do not keep pace with our competitors and with technological and market changes, our products may become obsolete and our business may suffer.

The market for our products is very competitive, is subject to rapid technological changes and varies for different individual products. For each of our potential products, we believe that there are potentially many competitive approaches being pursued, including some by private companies for which information is difficult to obtain.

Many of our competitors have significantly greater resources, more product candidates and have developed product candidates and processes that directly compete with our products. Our competitors may have developed, or could in the future develop, new technologies that compete with our products or even render our products obsolete. As an example, in the past, published studies have suggested that hematopoietic stem cell therapy may have limited clinical benefit in the treatment of breast cancer, which was a significant portion of the overall hematopoietic stem cell transplant market. This resulted in a substantial decline in the market for the AastromReplicell™ System with our SC-I kit.

Our products are designed to improve and automate the processes for producing cells used in therapeutic procedures. Even if we are able to demonstrate improved or equivalent results, researchers and practitioners may not use our products and we will suffer a competitive disadvantage. As a result, we may be unable to recover the net

book value of our inventory. Finally, to the extent that others develop new technologies that address the targeted application for our products, our business will suffer.

If we cannot attract and retain key personnel, then 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. Further, in an effort to conserve financial resources, we have implemented reductions in our work force on two separate occasions. As a result of these and other factors, we may not be successful in hiring or retaining key personnel. The Company has a key man life insurance policy for R. Douglas Armstrong, the Chairman, Chief Executive Officer and President of Aastrom. Our inability to replace any other lost key employee could harm our operations.

If our patents and proprietary rights do not provide substantial protection, then our business and competitive position will suffer.

Our success depends in large part on our ability to develop or license and protect proprietary products and technologies. However, patents may not be granted on any of our pending or future patent applications. Also, the scope of any of our issued patents may not be sufficiently broad to offer meaningful protection. In addition, our issued patents or patents licensed to us could be successfully challenged, invalidated or circumvented so that our patent rights would not create an effective competitive barrier. Furthermore, we rely on three exclusive, world-wide licenses relating to the production of human cells granted to us by the University of Michigan for certain of our patent rights. If we materially breach such agreements or otherwise fail to materially comply with such agreements, or if such agreements expire or are otherwise terminated by us, we may lose our rights under the patents held by the University of Michigan. At the latest, these licenses will terminate when the patent underlying the license expires. The first of these underlying patents will expire on March 21, 2012. We also rely on trade secrets and unpatentable know-how that we seek to protect, in part, by confidentiality agreements with our employees, consultants, suppliers and licensees. These agreements may be breached, and we might not have adequate remedies for any breach. If this were to occur, our business and competitive position would suffer.

Intellectual property litigation could harm our business.

Our success will also depend in part on our ability to develop commercially viable products without infringing the proprietary rights of others. Although we have not been subject to any filed infringement claims, other patents could exist or could be filed which would prohibit or limit our ability to market our products or maintain our competitive position. In the event of an intellectual property dispute, we may be forced to litigate. Intellectual property litigation would divert management's attention from developing our products and would force us to incur substantial costs regardless of whether we are successful. An adverse outcome could subject us to significant liabilities to third parties, and force us to curtail or cease the development and sale of our products and processes.

The government maintains certain rights in technology that we develop using government grant money and we may lose the revenues from such technology if we do not commercialize and utilize the technology pursuant to established government guidelines.

Certain of our and our licensors' research have been or are being funded in part by government grants. As a result of such funding, the U.S. Government has certain rights in the technology developed with the grant. These rights include a non-exclusive, paid-up, world-wide license to use the technology for any governmental purpose. In addition, the government has the right to require us to grant an exclusive license to use the developed technology to a third party if the government determines that:

- we have not taken adequate steps to commercialize such technology;
- such action is necessary to meet public health or safety needs; or
- such action is necessary to meet requirements for public use under federal regulations.

In these instances, we would not receive revenues on the products we developed. Additionally, technology that was partially funded by a federal research grant is subject to the following government rights:

- products using the technology which are sold in the United States are to be manufactured substantially in the United States, unless a waiver is obtained;
- the government may force the granting of a license to a third party who will make and sell the needed product if we do not pursue reasonable commercialization of a needed product using the technology; and
- the U.S. Government may use the technology for its own needs.

If we fail to meet these guidelines, we would lose our exclusive rights to these products and we would lose potential revenue derived from the sale of these products.

The market for our products will be heavily dependent on third party reimbursement policies.

Our ability to successfully commercialize our product candidates will depend 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. 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. Reimbursement in the United States or foreign countries may not be available or maintained for any of our product candidates. If we do not obtain approvals for adequate third party reimbursements, we may not be able to establish or maintain price levels sufficient to realize an appropriate return on our investment in product development. Any limits on reimbursement available from third party payors may reduce the demand for, or negatively affect the price of, our products. For example, in the past, published studies have suggested that stem cell transplantation for breast cancer, that constituted a significant portion of the overall stem cell therapy market, at the time, may have limited clinical benefit. The lack of reimbursement for these procedures by insurance payors would negatively affect the marketability of our products.

Potential product liability claims could affect our earnings and financial condition.

We face 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 affects. As a result, we may incur significant product liability exposure, which could exceed existing insurance coverage. We may not be able to maintain adequate levels of insurance at reasonable cost and/or reasonable terms. Excessive insurance costs or uninsured claims would increase our operating loss and affect our financial condition.

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 affect 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 affect could occur even if our shareholders consider the change in control to be in their best interest.

Forward-looking statements

This prospectus and the information incorporated by reference in it 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:

- potential strategic collaborations with others;
- future capital needs;

- product development and marketing plan;
- clinical trial plans and anticipated results;
- anticipation of future losses;
- replacement of manufacturing sources;
- commercialization plans; and
- revenue expectations and operating results.

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. In some cases, you can identify these statements by use of forward-looking words such as “may,” “will,” “should,” “anticipate,” “expect,” “estimate,” “plan,” “believe,” “potential,” or “intend.” All forward-looking statements included in this registration statement are made as of the date hereof. We assume no obligation to update any such forward-looking statement or reason why actual results might differ.

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 450 Fifth Street, N.W., Washington, D.C. 20549. 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. We also provide information on our website: http//www.aastrom.com.

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 Section 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 until we sell all of the common stock offered hereby) are incorporated by reference in this prospectus:

1. Our Annual Report on Form 10-K for the year ended June 30, 2003;

2. Our Current Reports on Form 8-K furnished to the SEC on July 10, 2003 and September 2, 2003; and

3. The description of our common stock set forth in our Registration Statement on Form 8-A filed with the SEC on April 11, 1997 (Commission File No.: 000-22025).

In addition, we will deliver without charge a copy of any of the information incorporated by reference into this prospectus to each person (including a beneficial owner) receiving a copy of this prospectus. If you need a copy of these documents, you may request copies, at no cost, by writing or telephoning us at the following address:

Aastrom Biosciences, Inc,.
Attention: Chief Financial Officer
24 Frank Lloyd Wright Drive
Ann Arbor, MI 48105

Telephone Number: (734) 930-5555

THE FUSION TRANSACTION

General

On October 30, 2002 we entered into a common stock purchase agreement with Fusion Capital Fund II, LLC, pursuant to which Fusion Capital has agreed to purchase, on each trading day, $25,000 of our common stock up to an aggregate, under certain conditions, of $12,000,000. The purchase price of the shares of common stock will be equal to a price based upon the future market price of the common stock without any fixed discount to the market price. We also have the right to increase the daily purchase amount as the market price of our common stock increases. Specifically, for every $0.25 increase in threshold price above $0.50, we have the right to increase the daily purchase amount by up to an additional $5,000. Fusion Capital does not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.125. On October 1, 2003, we exercised our existing option under the common stock purchase agreement to increase the total purchase amount to $24,000,000. Through the date hereof we have sold 12,000,000 shares to Fusion Capital for an aggregate purchase price of $7,809,956. Thus as of the date hereof we have the right to sell to Fusion Capital an additional $16,190,044 worth of our common stock. The additional $16,190,044 of common stock is to be purchased through October 2006 subject to earlier termination at our discretion. Fusion Capital, the selling shareholder under this prospectus, is offering for sale up to 14,279,512 shares of our common stock that would be issued pursuant to the common stock purchase agreement. As of September 30, 2003, there were 71,244,315 shares outstanding, excluding the additional 14,279,512 shares offered by Fusion Capital pursuant to this prospectus. The number of shares offered by this prospectus represents approximately 20% of the total common stock outstanding as of September 30, 2003. The number of shares ultimately offered for sale by Fusion Capital is dependent upon the number of shares purchased by Fusion Capital under the common stock purchase agreement.

Purchase of Shares Under The Common Stock Purchase Agreement

Under the common stock purchase agreement, on each trading day Fusion Capital is obligated to purchase a specified dollar amount of our common stock. Subject to our right to suspend such purchases at any time, and our right to terminate the agreement with Fusion Capital at any time, each as described below, Fusion Capital shall purchase on each trading day during the term of the agreement $25,000 of our common stock. However, Fusion Capital does not have the right nor the obligation to purchase our common stock at a purchase price of less than $0.125 per share. This daily purchase amount may be decreased by us at any time. We also have the right to incrementally increase the daily purchase amount as the trading price of our common stock increases; provided, however, we may not increase the daily purchase amount above $25,000 unless our stock price is above $0.75 per share for five consecutive trading days. The purchase price per share is equal to the lesser of:

- the lowest sale price of our common stock on the purchase date; or
- the average of the three lowest closing sale prices of our common stock during the ten consecutive trading days prior to the date of a purchase by Fusion Capital.

The purchase price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the trading days in which the closing bid price is used to compute the purchase price. Fusion Capital may not purchase shares of our common stock under the common stock purchase agreement if Fusion Capital, together with its affiliates, would beneficially own more than 9.9% of our common stock outstanding at that time. However, even though Fusion Capital may not receive additional shares of our common stock in the event that the 9.9% limitation is ever reached, Fusion Capital is still obligated to pay to us $25,000 on each trading day, unless the common stock purchase agreement is suspended, an event of default occurs or the agreement is terminated. Under these circumstances, Fusion Capital would have the right to acquire additional shares in the future should its ownership subsequently drop below the 9.9% limit. Fusion Capital has the right at any time to sell any shares purchased under the common stock purchase agreement which would allow it to avoid the 9.9% limitation. Therefore, we do not believe that Fusion Capital will ever reach the 9.9% limitation.

The following table sets forth the amount of proceeds we would receive from Fusion Capital from the sale of shares of our common stock offered by this prospectus at varying purchase prices:

Assumed Average Purchase Price	Number Of Shares To Be Issued If Full Purchase (2)	Percentage Outstanding After Giving Effect To The Issuance To Fusion Capital (1)	Proceeds From The Sale Of 12,000,000 Shares To Fusion Capital Under The Common Stock Purchase Agreement (2)
$0.50	12,000,000	14.4%	$ 6,000,000
$1.00	12,000,000	14.4%	$12,000,000
$1.46(3)	11,089,071	13.5%	$16,190,044
$1.50	10,793,362	13.2%	$16,190,044
$3.00	5,396,681	7.0%	$16,190,044
$5.00	3,238,009	4.3%	$16,190,044

(1) Based on 71,244,315 shares outstanding as of September 30, 2003.

(2) Excludes the total of $7,809,956 previously received from sale of 12.0 million shares of Common Stock.

(3) Closing sale price of our common stock on October 13, 2003.

We estimate that we will sell no more than 12.0 million additional shares to Fusion Capital under the common stock purchase agreement, excluding the shares issuable as a commitment fee, all of which are included in this offering. If more than 12.0 million additional shares are issuable to Fusion Capital under the common stock purchase agreement, we have the right to terminate the agreement without any payment or liability to Fusion Capital.

Minimum Purchase Price

We have the right to set a minimum purchase price (“floor price”) at any time; however, the floor price cannot be less than $0.125. Currently, the floor price is $0.25. We can increase or decrease the floor price at any time upon one trading day prior notice to Fusion Capital. Fusion Capital does not have the right or the obligation to purchase any shares of our common stock in the event that the purchase price is less than the applicable floor price at that time.

Compliance with Nasdaq Market Rules

In order to be in compliance with Nasdaq Market rules, we cannot be required to sell shares of our common stock to Fusion Capital at a price below $0.25, which represents the greater of the book value per share of our common stock as of September 30, 2002 or the closing price per share of our common stock on October 29, 2002. If we elect to sell our shares to Fusion Capital at a price per share below $0.25, we first would be required to obtain shareholder approval in order to be in compliance with the Nasdaq Market rules.

Our Right to Suspend Purchases

We have the unconditional right to suspend purchases at any time for any reason effective upon one trading day’s notice. Any suspension would remain in effect until our revocation of the suspension. To the extent we need to use the cash proceeds of the sales of common stock under the common stock purchase agreement for working capital or other business purposes, we do not intend to suspend purchases under the common stock purchase agreement.

Our Right to Increase and Decrease the Daily Purchase Amount

We have the unconditional right to decrease the daily amount to be purchased by Fusion Capital at any time for any reason effective upon one trading day’s notice. We also have the right to increase the daily purchase amount effective upon five trading days notice as the market price of our common stock increases. Specifically, for every $0.25 increase in threshold price above $0.50, we have the right to increase the daily purchase amount by up to an additional $5,000. For example, if the threshold price is $0.75 we would have the right to increase the daily purchase amount to up to an aggregate of $30,000. The “threshold price” is the lowest sale price of our common stock during the five trading days immediately preceding our notice to Fusion Capital to increase the daily purchase

amount. If at any time during any trading day the sale price of our common stock is below the threshold price, the applicable increase in the daily purchase amount will be void.

Our Termination Rights

We have the unconditional right at any time for any reason to give notice to Fusion Capital terminating the common stock purchase agreement. Such notice shall be effective one trading day after Fusion Capital receives the notice.

Effect of Performance of the Common Stock Purchase Agreement on our Shareholders

All shares registered in this offering will be freely tradable. We anticipate that shares registered in this offering will be sold through October 2006. The sale of a significant amount of shares registered in this offering at any given time could cause the trading price of our common stock to decline and to be highly volatile. Fusion Capital may ultimately purchase all of the shares of common stock issuable under the common stock purchase agreement, and it may sell some, none or all of the shares of common stock it acquires upon purchase. Therefore, the purchases under the common stock purchase agreement may result in substantial dilution to the interests of other holders of our common stock. However, we have the right at any time for any reason to: (1) reduce the daily purchase amount, (2) suspend purchases of the common stock by Fusion Capital and (3) terminate the common stock purchase agreement.

No Short-Selling or Hedging by Fusion Capital

Fusion Capital has agreed that neither it nor any of its affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the common stock purchase agreement.

Events of Default

Generally, Fusion Capital may terminate the common stock purchase agreement without any liability or payment to us upon the occurrence of any of the following events of default:

- the effectiveness of the registration statement of which this prospectus is a part of lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable to Fusion Capital for sale of our common stock offered hereby and such lapse or unavailability continues for a period of ten consecutive trading days or for more than an aggregate of thirty trading days in any 365-day period;
- suspension by our principal market of our common stock from trading for a period of three consecutive trading days;
- the transfer agent’s failure for five trading days to issue to Fusion Capital shares of our common stock which Fusion Capital is entitled to under the common stock purchase agreement;
- any material breach of the representations or warranties or covenants contained in the common stock purchase agreement or any related agreements which has or which could have a material adverse affect on us subject to a cure period of ten trading days;
- a default by us of any payment obligation in excess of $1.0 million; or
- any participation or threatened participation in insolvency or bankruptcy proceedings by or against us.

Commitment Shares Issued to Fusion Capital

Under the terms of the common stock purchase agreement Fusion Capital has received 1,601,888 shares of our common stock as a commitment fee. Fusion Capital will receive an additional 970,350 shares of our common stock on the date we receive an aggregate of $12,000,000 in proceeds from the sale of our shares to Fusion Capital under the common stock purchase agreement. As of the date hereof we have received $7,809,956 in proceeds from the sale of our shares to Fusion Capital under the common stock purchase agreement. In connection with each purchase of our common stock by Fusion Capital, we will also issue to Fusion Capital a portion of an additional 1,309,162 shares of our common stock. The 1,309,162 additional shares are issuable to Fusion Capital pro rata based upon our receipt of the $16,190,044 remaining aggregate amount under the common stock purchase agreement. Unless an event of default occurs or the Common Stock Purchase Agreement is terminated, 1,940,700 of these shares must be held by Fusion Capital until the earlier to occur of (1) the date we receive an aggregate of $12,000,000 in proceeds from the sale of our shares to Fusion Capital under the common stock purchase agreement or (2) October 30, 2004. Unless an event of default occurs or the Common Stock Purchase Agreement is terminated, the remaining 1,940,700 commitment shares must be held by Fusion Capital until the earlier to occur of (1) the date we receive an aggregate of $24,000,000 in proceeds from the sale of our shares to Fusion Capital under the common stock purchase agreement or (2) October 30, 2006.

No Variable Priced Financings

Until the termination of the common stock purchase agreement, we have agreed not to issue, or enter into any agreement with respect to the issuance of, any variable priced equity or variable priced equity-like securities unless we have obtained Fusion Capital's prior written consent.

SELLING SHAREHOLDER

The following table presents information regarding the selling shareholder. Neither the selling shareholder nor any of its affiliates has held a position or office, or had any other material relationship (other than for previous purchases under the common stock purchase agreement), with us.

Selling Shareholder	Shares Beneficially Owned Before Offering	Percentage of Outstanding Shares Beneficially Owned Before Offering (1)	Shares to be Sold in the Offering	Percentage of Outstanding Shares Beneficially Owned After Offering
Fusion Capital Fund II, LLC (1)(2)	1,601,888	2.2%	14,279,512	0%

(1) As of the date hereof, 1,601,888 shares have been acquired by Fusion Capital under the common stock purchase agreement as a commitment fee. Fusion Capital may acquire up to an additional 12,279,512 shares under the common stock purchase agreement. Percentage of outstanding shares is based on 71,244,315 shares of common stock outstanding as of September 30, 2003. Fusion Capital may not purchase shares of our common stock under the common stock purchase agreement if Fusion Capital, together with its affiliates, would beneficially own more than 9.9% of our common stock outstanding at the time of the purchase by Fusion Capital. However, even though Fusion Capital may not receive additional shares of our common stock in the event that the 9.9% limitation is ever reached, Fusion Capital is still obligated to pay to us $25,000 on each trading day, unless the common stock purchase agreement is suspended, an event of default occurs or the agreement is terminated. Under these circumstances, Fusion Capital would have the right to acquire additional shares in the future should its ownership subsequently drop below the 9.9% limit. Fusion Capital has the right at any time to sell any shares purchased under the common stock purchase agreement which would allow it to avoid the 9.9% limitation. Therefore, we do not believe that Fusion Capital will ever reach the 9.9% limitation.

(2) Steven G. Martin and Joshua B. Scheinfeld, the principals of Fusion Capital, are deemed to be beneficial owners of all of the shares of common stock owned by Fusion Capital. Messrs. Martin and Scheinfeld have shared voting and disposition power over the shares being offered under this prospectus.

PLAN OF DISTRIBUTION

The common stock offered by this prospectus is being offered by Fusion Capital Fund II, LLC, the selling shareholder. The common stock may be sold or distributed from time to time by the selling shareholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the common stock offered by this prospectus may be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents
- "at the market" into an existing market for the common stock;
- in other ways not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

Brokers, dealers, underwriters, or agents participating in the distribution of the shares as agents may receive compensation in the form of commissions, discounts, or concessions from the selling shareholder and/or purchasers of the common stock for whom the broker-dealers may act as agent. The compensation paid to a particular broker-dealer may be less than or in excess of customary commissions.

Fusion Capital is an "underwriter" within the meaning of the Securities Act.

Neither we nor Fusion Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Fusion Capital, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any compensation from the selling shareholder and any other required information.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to the public other than commissions or discounts of underwriters, broker-dealers, or agents. We have also agreed to indemnify Fusion Capital and related persons against specified liabilities, including liabilities under the Securities Act.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Fusion Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the common stock purchase agreement.

We have advised Fusion Capital that while it is engaged in a distribution of the shares included in this prospectus it is required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a

security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this Prospectus.

This offering will terminate on the date that all shares offered by this Prospectus have been sold by Fusion Capital.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by Fusion Capital. We will receive no proceeds from the sale of shares of common stock in this offering. However, after taking into account the approximately $7,809,956 in proceeds we have already received from sales of common stock to Fusion Capital, we may receive up to an additional $16,190,044 in proceeds from the sale of our common stock to Fusion Capital under the common stock purchase agreement. Any further proceeds from Fusion Capital we receive under the common stock purchase agreement will be used for operating costs, capital expenditures, working capital and other general corporate purposes.

We have not specifically identified the precise amounts we will spend on each of these areas or the timing of these expenditures. The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of the proceeds from this offering, progress with clinical product development and other cell therapy application programs. In addition, expenditures may also depend on the establishment of new collaborative arrangements with other companies, the availability of other financing, and other factors.

We anticipate that we will be required to raise substantial additional capital to continue to fund the clinical development of our cell therapy applications. Additional capital may be raised through additional public or private financing, as well as collaborative relationships, incurring debt and other available sources.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for Aastrom by Pepper Hamilton LLP, Detroit, Michigan acting as special counsel to Aastrom. Gray Cary Ware & Freidenrich LLP, San Diego, California, has acted as 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, 2003, 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	$ 1,669
Blue Sky fees and expenses	$ 5,000
Printing and engraving expenses	$ 5,000
Legal fees and expenses	$15,000
Accounting fees and expenses	$ 8,500
Nasdaq Filing Fees	$22,500
Miscellaneous	$12,331
Total	$70,000

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Sections 1561 through 1571 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
5.1	Consent and Opinion of Pepper Hamilton LLP
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 (see signature page)

4. ITEM 17. UNDERTAKINGS

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:

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

(b) 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;

(c) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, 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.

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.

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.

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. 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.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-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 October 15, 2003.

AASTROM BIOSCIENCES, INC.

By: /s/ R. Douglas Armstrong

R. Douglas Armstrong, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints R. Douglas Armstrong and Alan M. Wright, and each of such persons, as his or her attorney-in-fact, 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 amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this amendment to the 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 Chairman of the Board of Directors (Principal Executive Officer)	October 15, 2003
/s/ Alan M. Wright Alan M. Wright	Senior Vice President Administrative and Financial Operations, Chief Financial Officer (Principal Financial and Accounting Officer)	October 15, 2003
/s/ Mary L. Campbell Mary L. Campbell	Director	October 15, 2003
/s/ Arthur F. Staubitz Arthur F. Staubitz	Director	October 15, 2003
/s/ Joseph A. Taylor Joseph A. Taylor	Director	October 15, 2003
/s/ Susan L. Wyant Susan L. Wyant	Director	October 15, 2003

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INDEX TO EXHIBITS

EXHIBIT NUMBER	NOTES	DESCRIPTION OF DOCUMENT
5.1		Consent and Opinion of Pepper Hamilton LLP
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 (see signature page)

Exhibit 5.1

October 15, 2003

Aastrom Biosciences, Inc.
Lobby L
24 Frank Lloyd Wright Dr.
Ann Arbor, Michigan 48105

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

Gentlemen:

We have acted as special counsel to Aastrom Biosciences, Inc., a Michigan corporation (the "Company"), in connection with the filing with the Securities and Exchange Commission (the "Commission") of a registration statement on October 15, 2003 (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 issuance by the Company of up to 13,940,700 shares of the Company's Common Stock (the "Shares"), covered by the Registration Statement which may be issued from time to time on a delayed or continuous basis pursuant to Rule 415 under the Act. The Shares will be issued pursuant to a common stock purchase agreement with Fusion Capital Fund II, LLC (the "Purchase Agreement").

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 Restated 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 Shares 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.

In rendering the opinion set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; (v) each

person signing in a representative capacity (other than on behalf of the Company) any document reviewed by us had authority to sign in such capacity; (vi) the Registration Statement, and any amendments thereto (including post-effective amendments) will have become effective and comply with all applicable laws; (vii) the Shares will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and in accordance with the Purchase Agreement; (viii) the Purchase Agreement is enforceable in accordance with its terms; (ix) the certificates representing the Shares, will be duly executed and delivered; and (x) the Restated Articles of Incorporation and the By-Laws of the Company amended to date and resolutions of the Company's Board of Directors specifically authorizing the issuance and sale of the Shares remain in effect and unmodified, except as may be required as set forth in this opinion.

On the basis of the foregoing, we are of the opinion that the Shares, when (i) the terms of the offer, issue and sale have been duly established in conformity with the Purchase Agreement and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (ii) the Shares have been duly executed and authenticated in accordance with the Purchase Agreement and offered, issued and sold as contemplated in the Registration Statement and the Purchase Agreement, and (iii) the Company has received the consideration determined to be adequate in the resolutions of the Company's Board of Directors authorizing the issuance and sale of the Shares, will be duly authorized, validly issued, fully paid, and non-assessable.

The foregoing opinion is qualified to the extent that the enforceability of any document, instrument or the Shares may be limited by or subject to bankruptcy, insolvency, fraudulent transfer or conveyance, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and general equitable or public policy principles.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to update this opinion or otherwise advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

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, because 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

Exhibit 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated August 8, 2003, relating to the financial statements and financial statement schedule, which appears in Aastrom Biosciences, Inc.'s Annual Report on Form 10-K for the year ended June 30, 2003. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

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

Minneapolis, Minnesota
October 14, 2003

EXHIBIT 23.2

[GRAY CARY WARE & FREIDENRICH LETTERHEAD]

October 15, 2003

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 common stock, 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.

We hereby consent to the filing of this consent 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,

/s/ Gray Cary Ware & Freidenrich LLP
- --
GRAY CARY WARE & FREIDENRICH LLP