

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED DECEMBER 31, 2005,

OR

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

FOR THE TRANSITION PERIOD FROM ____ TO ____

Commission file number 0-22025

AASTROM BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Michigan

(State or other jurisdiction of incorporation or organization)

94-3096597

(I.R.S. employer identification no.)

24 Frank Lloyd Wright Dr.
P.O. Box 376
Ann Arbor, Michigan

(Address of principal executive offices)

48106

(Zip code)

(734) 930-5555

(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer - Accelerated filer - Non-accelerated filer -

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate the number of shares outstanding of each of the issuer's classes of common stock as of the latest practicable date.

COMMON STOCK, NO PAR VALUE
(Class)

103,366,136
Outstanding at February 7, 2006

Table of Contents

AASTROM BIOSCIENCES, INC.
Quarterly Report on Form 10-Q
December 31, 2005
TABLE OF CONTENTS

	<u>Page</u>
<u>PART I — FINANCIAL INFORMATION</u>	
<i>Item 1. Financial Statements — Unaudited</i>	
a) <u>Consolidated Condensed Balance Sheets as of June 30, 2005 and December 31, 2005</u>	3
b) <u>Consolidated Condensed Statements of Operations for the three and six months ended December 31, 2004 and 2005 and for the period from March 24, 1989 (Inception) to December 31, 2005</u>	4
c) <u>Consolidated Condensed Statements of Cash Flows for the six months ended December 31, 2004 and 2005 and for the period from March 24, 1989 (Inception) to December 31, 2005</u>	5
d) <u>Notes to Consolidated Condensed Financial Statements</u>	6
<i>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</i>	11
<i>Item 3. Quantitative and Qualitative Disclosures About Market Risk</i>	32
<i>Item 4. Controls and Procedures</i>	32
<u>PART II — OTHER INFORMATION</u>	
<i>Item 1. Legal Proceedings</i>	33
<i>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</i>	33
<i>Item 3. Defaults Upon Senior Securities</i>	33
<i>Item 4. Submission of Matters to a Vote of Security Holders</i>	33
<i>Item 5. Other Information</i>	34
<i>Item 6. Exhibits</i>	34
<u>SIGNATURES</u>	35
<u>EXHIBIT INDEX</u>	36
<u>EXHIBIT 10.88</u>	
<u>EXHIBIT 10.89</u>	
<u>EXHIBIT 31</u>	
<u>EXHIBIT 32</u>	

PART I — FINANCIAL INFORMATION*Item 1. Financial Statements*

AASTROM BIOSCIENCES, INC.
(a development stage company)
CONSOLIDATED CONDENSED BALANCE SHEETS
(Unaudited)

	June 30, 2005	December 31, 2005
Assets		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 14,408,000	\$ 18,225,000
Short-term investments	18,006,000	8,000,000
Receivables, net	193,000	123,000
Inventories	116,000	5,000
Other current assets	421,000	499,000
Total current assets	<u>33,144,000</u>	<u>26,852,000</u>
PROPERTY AND EQUIPMENT, NET	753,000	1,124,000
Total assets	<u>\$ 33,897,000</u>	<u>\$ 27,976,000</u>
Liabilities and Shareholders' Equity		
CURRENT LIABILITIES:		
Accounts payable and accrued expenses	\$ 533,000	\$ 730,000
Accrued employee benefits	336,000	635,000
Total current liabilities	<u>869,000</u>	<u>1,365,000</u>
SHAREHOLDERS' EQUITY:		
Common stock, no par value; shares authorized – 200,000,000; shares issued and outstanding – 102,328,785 and 103,360,588, respectively	158,703,000	159,916,000
Deficit accumulated during the development stage	<u>(125,675,000)</u>	<u>(133,305,000)</u>
Total shareholders' equity	<u>33,028,000</u>	<u>26,611,000</u>
Total liabilities and shareholders' equity	<u>\$ 33,897,000</u>	<u>\$ 27,976,000</u>

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

AASTROM BIOSCIENCES, INC.
(a development stage company)CONSOLIDATED CONDENSED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended December 31,		Six months ended December 31,		March 24, 1989 (Inception) to December 31, 2005
	2004	2005	2004	2005	
REVENUES:					
Product sales and rentals	\$ 212,000	\$ 42,000	\$ 227,000	\$ 57,000	\$ 1,175,000
Grants	162,000	75,000	334,000	240,000	8,288,000
Research and development agreements	—	—	—	—	2,105,000
Total revenues	<u>374,000</u>	<u>117,000</u>	<u>561,000</u>	<u>297,000</u>	<u>11,568,000</u>
COSTS AND EXPENSES:					
Cost of product sales and rentals	39,000	4,000	54,000	9,000	563,000
Cost of product sales and rentals — provision for obsolete and excess inventory	—	—	—	—	2,239,000
Research and development	1,596,000	2,195,000	3,163,000	4,148,000	104,791,000
Selling, general and administrative	1,289,000	2,257,000	2,603,000	4,273,000	43,762,000
Total costs and expenses	<u>2,924,000</u>	<u>4,456,000</u>	<u>5,820,000</u>	<u>8,430,000</u>	<u>151,355,000</u>
LOSS FROM OPERATIONS	<u>(2,550,000)</u>	<u>(4,339,000)</u>	<u>(5,259,000)</u>	<u>(8,133,000)</u>	<u>(139,787,000)</u>
OTHER INCOME (EXPENSE):					
Other income	—	—	—	—	1,249,000
Interest income	97,000	197,000	157,000	503,000	6,468,000
Interest expense	—	—	—	—	(267,000)
Other income	<u>97,000</u>	<u>197,000</u>	<u>157,000</u>	<u>503,000</u>	<u>7,450,000</u>
NET LOSS	<u>\$ (2,453,000)</u>	<u>\$ (4,142,000)</u>	<u>\$ (5,102,000)</u>	<u>\$ (7,630,000)</u>	<u>\$ (132,337,000)</u>
NET LOSS PER SHARE (Basic and Diluted)	<u>\$ (.03)</u>	<u>\$ (.04)</u>	<u>\$ (.06)</u>	<u>\$ (.07)</u>	
Weighted average number of shares outstanding (Basic and Diluted)	<u>89,485,000</u>	<u>102,681,000</u>	<u>86,112,000</u>	<u>102,582,000</u>	

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

AASTROM BIOSCIENCES, INC.
(a development stage company)CONSOLIDATED CONDENSED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six months ended December 31,		March 24, 1989 (Inception) to December 31, 2005
	2004	2005	
OPERATING ACTIVITIES:			
Net loss	\$ (5,102,000)	\$ (7,630,000)	\$ (132,337,000)
Adjustments to reconcile net loss to net cash used for operating activities:			
Depreciation and amortization	72,000	148,000	3,886,000
Loss on property held for resale	—	—	110,000
Amortization of discounts and premiums on investments	—	(72,000)	(683,000)
Stock compensation expense	—	501,000	2,085,000
Inventory write downs and reserves	—	—	2,239,000
Stock issued pursuant to license agreement	—	—	3,300,000
Provision for losses on accounts receivable	—	—	165,000
Changes in assets and liabilities:			
Receivables	(127,000)	70,000	(333,000)
Inventories	28,000	111,000	(2,340,000)
Other current assets	(480,000)	(78,000)	(478,000)
Accounts payable and accrued expenses	118,000	197,000	730,000
Accrued employee benefits	14,000	299,000	635,000
Net cash used for operating activities	<u>(5,477,000)</u>	<u>(6,454,000)</u>	<u>(123,021,000)</u>
INVESTING ACTIVITIES:			
Organizational costs	—	—	(73,000)
Purchase of short-term investments	(10,000,000)	(8,000,000)	(96,062,000)
Maturities of short-term investments	—	18,078,000	88,745,000
Property and equipment purchases	(204,000)	(519,000)	(4,177,000)
Proceeds from sale of property held for resale	—	—	400,000
Net cash (used for) provided by investing activities	<u>(10,204,000)</u>	<u>9,559,000</u>	<u>(11,167,000)</u>
FINANCING ACTIVITIES:			
Net proceeds from issuance of preferred stock	—	—	51,647,000
Net proceeds from issuance of common stock	11,343,000	712,000	98,458,000
Repurchase of common stock	—	—	(49,000)
Payments received for stock purchase rights	—	—	3,500,000
Payments received under shareholder notes	—	—	31,000
Principal payments under capital lease obligations	—	—	(1,174,000)
Net cash provided by financing activities	<u>11,343,000</u>	<u>712,000</u>	<u>152,413,000</u>
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	<u>(4,338,000)</u>	<u>3,817,000</u>	<u>18,225,000</u>
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	<u>16,926,000</u>	<u>14,408,000</u>	<u>—</u>
CASH AND CASH EQUIVALENTS AT END OF PERIOD	<u>\$ 12,588,000</u>	<u>\$ 18,225,000</u>	<u>\$ 18,225,000</u>

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

AASTROM BIOSCIENCES, INC.
(A development stage company)

NOTES TO CONSOLIDATED CONDENSED FINANCIAL STATEMENTS
(Unaudited)

1. Organization

Astrom Biosciences, Inc. was incorporated in March 1989 (Inception), began employee-based operations in 1991, and is in the development stage. The Company operates its business in one reportable segment – research and product development, conducted both on its own behalf and on a limited basis in connection with various collaborative research and development agreements with others, involving the development of proprietary cell-based therapeutics for tissue regeneration.

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

The Company is subject to certain risks related to the operation of its business and development of its products and product candidates. While management believes available cash, cash equivalents and short-term investments are adequate to finance currently planned activities beyond the end of fiscal year 2006 (ending June 30, 2006), the Company will need to raise additional funds in order to complete its product development programs, complete clinical trials needed to market its products, and commercialize additional product candidates. The Company cannot be certain that such funding will be available on favorable terms, if at all. Some of the factors that will impact the Company's ability to raise additional capital and its overall success include: the rate and degree of progress for its product development, the rate of regulatory approval to proceed with clinical trial programs, the level of success achieved in clinical trials, the requirements for marketing authorization from regulatory bodies in the U.S., EU and other countries, the liquidity and market volatility of the Company's equity securities, regulatory and manufacturing requirements and uncertainties, technological developments by competitors, and other factors. If the Company cannot raise such funds, it may not be able to develop or enhance products, take advantage of future opportunities, or respond to competitive pressures or unanticipated requirements, which would negatively impact its business, financial condition and results of operations.

2. Basis of Presentation

The condensed consolidated financial statements included herein have been prepared by us without audit according to the rules and regulations of the Securities and Exchange Commission. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles in the United States of America have been omitted pursuant to such rules and regulations. The financial statements reflect, in the opinion of management, all adjustments (consisting only of normal,

[Table of Contents](#)

recurring adjustments) necessary to state fairly the financial position and results of operations as of and for the periods indicated. The results of operations for the three and six months ended December 31, 2005, are not necessarily indicative of the results to be expected for the full year or for any other period.

These financial statements should be read in conjunction with the audited financial statements and the notes thereto included in our 2005 Annual Report on Form 10-K for the year ended June 30, 2005, as filed with the Securities and Exchange Commission.

The consolidated financial statements include the accounts of Aastrom and its wholly-owned subsidiaries, Aastrom Biosciences GmbH, located in Berlin, Germany and Aastrom Biosciences, Ltd., located in Dublin, Ireland (collectively, the "Company"). All significant inter-company transactions and accounts have been eliminated in consolidation. These subsidiaries have limited operations and are not significant to the consolidated financial statements.

3. Share-Based Compensation

In November 2004, the shareholders approved the 2004 Omnibus Equity Incentive Plan (the "2004 Plan"). The 2004 Plan provides incentives through the grant of stock options (including indexed options), stock appreciation rights, restricted stock purchase rights, restricted stock awards, restricted stock units and deferred stock units. The exercise price of stock options granted under the 2004 Plan shall not be less than the fair market value of the shares on the date of grant. The 2004 Plan replaced the 2001 Stock Option Plan and no new awards will be granted under the 2001 Stock Option Plan. However, any shares that are issuable upon expiration or cancellation of options previously granted under the 2001 Stock Option Plan will be available for future grants under the 2004 Plan. As of December 31, 2005, 3,980,572 shares of common stock are reserved for issuance under the 2004 Plan.

On July 1, 2005, the Company adopted the provisions of Financial Accounting Standards Board Statement No. 123R, "*Share-Based Payment*" (SFAS 123R). SFAS 123R revised SFAS 123, "Accounting for Stock Based Compensation" and supersedes APB Opinion No. 25, "Accounting for Stock Issued to Employees." SFAS 123R requires companies to measure and recognize compensation expense for all employee stock-based payments at fair value over the service period underlying the arrangement. Therefore, the Company is now required to record the grant-date fair value of its graded vesting employee stock-based payments (i.e., stock options and other equity-based compensation) in the statement of operations. The Company adopted FAS 123R using the "modified prospective" method, whereby fair value of all previously-granted employee stock-based arrangements that remained unvested at July 1, 2005 and all grants made on or after July 1, 2005 have been included in the Company's determination of stock-based compensation expense for the three and six months ended December 31, 2005. The Company has not restated its operating results for the three and six months ended December 31, 2004 to reflect charges for the fair value of employee stock-based arrangements.

Table of Contents

The fair value of each employee and director grant of options to purchase common stock is estimated on the date of the grant using the Black-Scholes option-pricing model with the following weighted-average assumptions used for grants for the quarter ended December 31, 2005: 1) risk-free interest rate of 4.5%; 2) expected dividend yield of 0%; 3) expected holding period of 6.6 years based on the simplified method provided for in SEC Staff Accounting Bulletin No. 107 for "plain vanilla options"; 4) expected volatility of 110%; and, 5) an estimated forfeiture rate of 10% of the options granted. The fair value of restricted common stock grants is measured based upon the quoted market price of the Company's common stock on the date of grant.

On December 31, 2005 we had one share-based compensation plan. The compensation costs charged as operating expense for grants under the plan were approximately \$189,000 and \$384,000 for the three and six months ended December 31, 2005, respectively. No tax benefit was recognized related to share-based compensation expense since we have never reported taxable income and we have established a full valuation allowance to offset all of the potential tax benefits associated with our deferred tax assets. In addition, no amounts of share-based compensation cost were capitalized as part of fixed assets or inventory for the periods presented.

During the quarter ended December 31, 2005 we granted 38,700 shares of restricted common stock and 120,000 options to purchase common stock, to directors of the Company. The weighted average grant-date fair value of shares of restricted common stock granted during the three months ended December 31, 2005 was \$2.23. The compensation costs charged as operating expenses for restricted stock was \$117,000 for the three and six months ended December 31, 2005.

A summary of option activity under the plan as of December 31, 2005, and changes during the six months then ended are presented below:

<u>Options</u>	<u>Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Term</u>	<u>Aggregate Intrinsic Value</u>
Oustanding at July 1, 2005	4,085,953	\$ 1.55		
Granted	144,000	\$ 2.91		
Exercised	(279,105)	\$.94		
Forfeited or expired	—	—		
Oustanding at September 30, 2005	3,950,848	\$ 1.64	7.2	\$ 3,632,000
Granted	120,000	\$ 2.23		
Exercised	(194,406)	\$.79		
Forfeited or expired	(262,815)	\$ 1.94		
Oustanding at December 31, 2005	3,613,627	\$ 1.69	7.1	\$ 2,542,000
Exercisable at December 31, 2005	1,679,171	\$ 1.88	6.0	\$ 1,030,000

Table of Contents

A summary of the status of the Company's non-vested shares as of December 31, 2005 is presented below:

<u>Non-vested Options</u>	<u>Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Non-vested at July 1, 2005	2,303,082	\$ 1.26
Granted	144,000	\$ 2.91
Vested	(293,718)	\$.88
Forfeited	—	—
Non-vested at September 30, 2005	2,153,365	\$ 1.43
Granted	120,000	\$ 2.23
Vested	(184,094)	\$ 1.02
Forfeited	(154,815)	\$ 1.32
Non-vested at December 31, 2005	1,934,456	\$ 1.52

As of December 31, 2005 there was approximately \$1,767,000 of total unrecognized compensation cost related to non-vested share-based compensation arrangements (options and restricted shares) granted under the plan. That cost is expected to be recognized over a weighted-average period of 3.4 years.

Prior to July 1, 2005, the Company accounted for employee stock-based grants under the recognition and measurement principles of APB Opinion No. 25, "Accounting for Stock Issued to Employees" and related Interpretations. The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation" for the quarter and six months ended December 31, 2004:

	<u>Quarter Ended December 31, 2004</u>		<u>Six Months Ended December 31, 2004</u>
Reported net loss	\$ (2,453,000)		\$ (5,102,000)
Add: Stock-based employee compensation expense included in reported net loss, net of related tax effects	—		—
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects	(122,000)		(288,000)
Pro forma net loss	<u>\$ (2,575,000)</u>	#	<u>\$ (5,390,000)</u>
Net loss per common share:			
As reported	\$ (0.03)		\$ (0.06)
Pro forma	\$ (0.03)		\$ (0.06)

4. Shareholders' Equity

During the six months ended December 31, 2005, the Company issued 491,203 shares of common stock as part of the employee stock option plans and the Direct Stock Purchase Plan and 205,883 shares of common stock in connection with the exercise of certain warrants previously issued to investors, for net cash proceeds of \$712,000. The Company also issued 354,917 shares of restricted common stock to employees and directors under the 2004 Equity Incentive Plan.

5. Net Loss Per Common Share

Net loss per common share is computed using the weighted-average number of common shares outstanding during the period. Common equivalent shares, consisting of options, warrants for the purchase of common stock and unvested restricted shares of common stock, are not included in the per share calculation where the effect of their inclusion would be anti-dilutive. The aggregate number of common equivalent shares that have been excluded from the computations of net loss per common share for the three and six months ended December 31, 2004 and 2005 is approximately 12,734,000 and 9,016,000, respectively.

6. Short-Term Investments and Restricted Investments

Short-term investments consist of highly rated corporate debt securities with original maturities of over three months and less than one year. Short-term investments are classified as available-for-sale, and are presented at market value, with unrealized gains and losses on investments reflected as a component of shareholders' equity. There were no unrealized gains or losses as of December 31, 2004 or 2005. Interest earned on available-for-sale securities is included in interest income.

Included in other current assets at both June 30, 2005 and December 31, 2005 are \$92,000 and \$93,000, respectively, of bank certificates of deposit which serve as collateral for certain potential European Value Added Taxes.

7. Property and Equipment

During fiscal year 2005, the Company acquired equipment that it intends to use in the future in a specialized facility under the Company's control, for the production of human cells. The cost of this equipment is \$111,000 and has been included in property and equipment at December 31, 2005. The equipment will be depreciated over its useful life when the equipment is placed into service.

8. Reclassification

To conform prior period amounts to current year classifications, the Company has reclassified interest receivable of \$35,000 at December 31, 2004 to other current assets. Interest receivable at December 31, 2005 is \$57,000. This reclassification had no impact on the Company's previously reported current assets, results of operations or cash flows.

Overview of Aastrom

We are a development stage company focused on the development of the *ex vivo* production and sale of proprietary human cell products for use in cell therapy and tissue regeneration. Our pre-clinical and clinical product development programs utilize bone marrow-derived adult stem and progenitor cell mixtures being investigated for aiding in the growth of tissues such as bone, vascular tissue and joints, as well as blood and immune system cells. We currently operate our business in one reportable segment – research and product development, conducted both on our own behalf and on a limited basis in connection with various collaborative research and development agreements with others, involving the development of proprietary cell-based therapeutics for tissue regeneration.

In the expanding fields of cell therapy and tissue regeneration, we are developing proprietary adult bone marrow cell-based products, some of which are in the clinical stage, for the regenerative repair of damaged human tissues and other medical disorders. Our lead products are called “Tissue Repair Cells” (TRCs), a unique mixture of bone marrow-derived adult stem and progenitor cells, produced outside of the body or “*ex vivo*” from a small amount of bone marrow taken from the patient. In clinical trials involving over 200 patients, our TRCs have been demonstrated to be safe and reliable, and appeared to regenerate certain normal healthy human tissues.

We have also developed our proprietary AastromReplicell® System, which is a patented, integrated system of instrumentation and single-use consumable kits for the commercial production of human cells. The AastromReplicell System was developed to provide a manufacturing platform for our proprietary cell products, such as our TRCs. The AastromReplicell System technology has also been applied to the production of dendritic cells and dendritic cell vaccines for third parties requiring automated cell production supporting GMP (Good Manufacturing Practice) compliance. Since this third-party development activity is minimal at present, active development and marketing activities targeting developers of dendritic cells and dendritic cell vaccines have been halted.

Our commercial production pathway for our TRC cell products is in part enabled through the AastromReplicell System platform. This proprietary and automated clinical cell production system combines patented GMP-compliant automated cell production with patented “single-pass perfusion.” Single-pass perfusion is our technology for growing large quantities of highly robust human cells outside the body. These cells include adult stem and progenitor cell mixtures, which are the cells believed to be required for forming tissues such as bone, vascular, cartilage, blood, and immune system cells.

Our primary business model is to establish a core infrastructure for the manufacturing and distribution of TRC cell products for use in multiple therapeutic indications. Currently, we intend to pursue TRC based cell products for the following therapeutic areas:

Table of Contents

- Local bone regeneration for indications such as non-union fractures, spinal fusion, jaw bone reconstruction and osteonecrosis
- Vascular (blood vessel) regeneration in limb ischemia resulting from complications of diabetes and other vascular diseases such as cardiac tissue repair

In the future, we may develop and/or support the development by third parties of products for other areas such as cartilage regeneration and dendritic cell based vaccines.

We do not have the sales and/or marketing organization that will be needed to commercialize our therapeutic products. We intend to seek commercialization partnerships with other companies who have these capabilities, as well as to develop our own ability to either support these relationships and, if necessary, to complete some pilot level of sales and marketing activity ourselves.

In the EU, our business development activities are aided through our small, wholly-owned subsidiaries located in Dublin, Ireland and Berlin, Germany.

Since our inception, we have been in the development stage and engaged in research and product development, conducted principally on our own behalf, but also in connection with various collaborative research and development agreements with others. Our initial business plan was to pursue the bone marrow transplantation markets. At approximately the same time (late fiscal year 1999) that we intended to commence our initial pilot-scale product launch in the EU of the AastromReplicell System with the SC-I kit, data was released at international meetings that resulted in the majority of the patients who would otherwise have been candidates for the SC-I product, to no longer require the use of the product. This loss of market for the SC-I caused us to reorganize our operations and suspend all external activities in October 1999, pending the receipt of additional funding and the completion of the reorganization process. We expanded the capabilities of the AastromReplicell System to include dendritic cell production and initiated pilot marketing activities for the CE Marked DC-I, DCV-I and the DCV-II products. However, only minimal and intermittent revenue has been generated from these products, and as a result it is no longer a priority area for us. Therefore, we have eliminated our marketing efforts promoting the AastromReplicell System as a stand-alone product. Rather our current focus is on utilizing the AastromReplicell System technology in our cell manufacturing facilities to support various TRC development programs. At such time as we satisfy applicable regulatory approval requirements, we expect the sales of our TRC cell products to constitute nearly all of our product sales revenues.

We do not expect to generate positive cash flows from our consolidated operations for at least the next several years and then only if more significant TRC cell product sales commence. Until that time, we expect that our revenue sources will consist of only minor sales of our cell products such as TRCs, and our dendritic cell kits to academic and commercial research centers, grant revenue and research funding, and potential licensing fees, or other financial support from potential future corporate collaborators.

To date, we have financed our operations primarily through public and private sales of our equity securities, and we expect to continue obtaining required capital in a similar manner. As a development-stage company, we have never been profitable and do not anticipate having net income unless and until significant product sales commence. This is not likely to occur until we obtain significant additional funding, complete the required clinical trials for regulatory approvals, and receive the necessary approvals to market our products. Through, December 31, 2005, we have accumulated a net loss of approximately \$132 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, obtain the required regulatory approvals, or complete additional corporate partnering or acquisition transactions.

Clinical Development

Currently, our clinical trials are focused on the utilization of our TRCs in the areas of bone regeneration and vascular regeneration in limb ischemia resulting from diabetes and other diseases.

The pre-clinical and clinical data for our TRCs have shown a substantial increase in the stem or progenitor cells that can develop into either hematopoietic or mesenchymal types of tissues as well as certain key populations of stromal progenitor cells. Stromal (or mesenchymal) cells are integral for bone marrow to generate non-hematopoietic tissues such as bone and cartilage. We demonstrated in the laboratory, and in mice, that our TRC products are capable of forming bone cell lineages. Based on these and other pre-clinical and clinical observations, we initiated clinical trials in the U.S. and European Union (EU) for bone regeneration in patients with severe long bone fractures.

The U.S. Phase I/II clinical trial for the treatment of severe long bone non-union fractures is being actively conducted under an FDA-approved Investigational New Drug (IND) application, at multiple centers (Lutheran General Hospital, Park Ridge, IL, the University of Michigan Health System, Ann Arbor, MI, William Beaumont Hospital, Royal Oak, MI, Lutheran Medical Center, Brooklyn, NY and the University of Nebraska Medical Center, Omaha, NE) with enrollment of up to 20 patients. We have accrued and treated the initial 20 patients identified in the original IND and are continuing required follow-up of those patients. An amendment to the IND, adding an additional 16 patients, was approved by the FDA and we are continuing to enroll patients into this study at the same medical centers.

The studies in the EU were initiated at centers in Spain and Germany, under Ethical Committee approvals. These Phase I/II or “proof of concept” type clinical trials for the use of TRCs in bone grafting of long bone non-union fractures are under protocols specific to their individual sites, and these protocols have differences compared to the U.S. clinical trial protocol. The differences generally relate to the type of carrier matrix, or material, that our TRCs are mixed with prior to the application at the bone repair site. There are also differences in the type of clinical injury being treated among the U.S., Spain and Germany trial sites.

[Table of Contents](#)

Results from the feasibility clinical trial in Spain were disclosed in May 2005. The report stated that all of the patients treated with our TRCs exhibited clinical and functional healing, with 5 of 6 treatments showing bone regeneration at the fracture site as determined by radiographic imaging by 6 months. The trial, conducted at Hospital General de l'Hospitalet, Centro Médico Teknon and Hospital de Barcelona-SCIAS, accrued 5 patients, with one patient receiving treatment for two separate fractures, for a total of 6 different treatments. All patients had severe non-union fractures of a long bone (3 tibia, 2 humeri, 1 clavicle), which had failed to heal in previous standard of care treatments. The patients all underwent open surgery to apply a metal plate internal fixation (replacing previous failed fixation) and our TRCs, to aid in the local bone regeneration. The TRCs were mixed with synthetic commercial matrix and autologous platelet-poor plasma, and applied directly at the fracture site. There are ongoing post-surgical evaluations of all patients using standard clinical and radiographic evaluations of the healing fracture site. When the initial results were disclosed, two of the patients had been evaluated for more than one year after surgery, and a third patient had been monitored for more than 8 months. These patients are now 18 months post-TRC treatment, and no complications or treatment-associated adverse effects have been observed. All six patient treatments have resulted in bone growth and healing. We were granted permission by the Spanish Drug Agency (AEMPS) to commence another non-union fracture bone graft trial in Spain. This trial is actively enrolling patients and can accrue up to 10 patients.

Two patients at the German site, who had been previously treated for leg lengthening (osteogenic distraction) that did not form bone, did not exhibit new bone formation after the experimental TRC therapy. Post hoc laboratory analyses after the surgeries showed that with the mixing protocol in place at the time, it was unlikely that significant numbers of cells were transferred to the patient, which may or may not have contributed to the treatment result. The procedures have been updated, and the protocol remains open for patient accrual.

The expanded U.S. and new Spanish clinical studies will evaluate the TRCs produced without the use of exogenous growth factors or cytokines.

Using the safety and bone regeneration results obtained from the fracture trials, we initiated a jaw (maxilla) bone regeneration clinical feasibility trial in Barcelona, Spain to recruit edentulous patients with severe bone loss who needed a sinus lift procedure to increase bone so that dental implants could be placed. Each patient acted as their own control, with acellular graft placed on one side and acellular graft plus TRCs on the other side. This trial enrolled the targeted 5 patients for the evaluation of bone regeneration resulting from TRCs compared with a standard bone grafting procedure. An interim report was completed and disclosed in December 2005 showing that the treatments that included TRCs had reduced swelling, and significant height increase of the bone in the grafted area as determined by radiographic images. Histologic observations made on tissue sections adjacent to the grafted area showed changes consistent with stimulation of bone turnover and induction of new connective tissue.

We entered into a clinical trial agreement with the Heart & Diabetes Center located in Bad Oeynhausen, Germany to complete a pilot trial to evaluate the safety and potential

[Table of Contents](#)

beneficial effect of TRCs on the vasculature of diabetic patients with limb ischemia. An approved Investigational Medicinal Product Dossier (IMPD) and the cell manufacturing license now required in Germany have been obtained by the clinical site. This trial has initiated patient enrollment and treatment. An unexpected finding in the first patients treated with TRCs was a decrease in marrow cellularity of the bone marrow aspirate of diabetic patients older than 60 years. Despite this, there were sufficient TRCs produced to enable treatment of two of the patients.

We recently announced the initiation of a clinical study in the U.S., and are preparing for a clinical study in the EU, to evaluate TRCs in the fusion of the spine vertebrae through new bone formation for patients with degenerative spondylolithesis. Bone does not form spontaneously in this surgical procedure, so these trials will serve as proof-of-concept for this type of clinical situation in humans. This will be the first study in which bone marrow aspirates will be harvested from patients with a degenerative bone disease.

We are also preparing for a clinical study in the EU to evaluate TRCs as a treatment for another degenerative bone disease called osteonecrosis. Few treatment options are available for patients, though recent third-party experiments have indicated some success when the degenerated tissue is cleaned out of the femoral head and large volumes of bone marrow are inserted. Our planned study will substitute our TRCs for the large volumes of bone marrow as a potential treatment for osteonecrosis.

The preliminary results of our pre-pivotal trials may not be indicative of results that will be obtained from subsequent patients in the trials or from more extensive trials. Further, our pre-pivotal or pivotal trials may not be successful, and we may not be able to obtain the required Biologic License Application (BLA) registration in the U.S. or required foreign regulatory approvals (Marketing Authorization) for our TRCs in a timely fashion, or at all. See “Certain Business Considerations.”

In certain non-U.S. regions, autologous cell products such as TRCs may be marketed without further registration permits. We are exploring these types of markets through commercial collaboration agreements to gain additional clinical information with the potential of limited early revenues. We have completed one limited commercial evaluation agreement under this type of arrangement. Growth of this market would also require the establishment of additional cell manufacturing capacity.

Critical Accounting Policies

There are several accounting policies that we believe are significant to the presentation of our consolidated financial statements. The most significant accounting policies include those related to revenue recognition, accounts receivable and inventory.

Revenue recognition – We generate revenue from grants and research agreements, collaborative agreements, product sales and licensing arrangements. Revenue from grants and research agreements is recognized on a cost reimbursement basis consistent with the performance requirements of the related agreements. Revenue from collaborative agreements is

[Table of Contents](#)

recognized when the scientific or clinical results stipulated in the agreement have been met and there are no other ongoing obligations on our part. We recognize revenue from product sales when title to the product transfers and there are no remaining obligations that will affect the customer's final acceptance of the sale. If there are remaining obligations, including training and installation (which we believe to be significant), we do not recognize revenue until completion of these obligations. We recognize revenue from licensing fees under licensing agreements and rental revenue when there are no future performance obligations remaining with respect to such fees. Payments received before all obligations are fulfilled are classified as deferred revenue.

Revenues include rental revenue of \$0 for the quarters and six months ended December 31, 2004 and 2005 and \$93,000 for the period from Inception to December 31, 2005. This revenue was generated from AastromReplicell System rental agreements that have since expired or have been terminated. Based upon our current business strategy we do not expect to generate rental revenues in future periods.

Accounts receivable – We make estimates evaluating collectibility of accounts receivable. We continuously monitor collections and payments from our customers and maintain an allowance for estimated credit losses based on any specific customer collection issues we have identified. While such credit issues have not been significant, there can be no assurance that we will continue to experience the same level of credit losses in the future. As of December 31, 2005, our allowance for doubtful accounts was \$16,000.

Inventories – We value our inventories that consist primarily of the AastromReplicell System and our disposable cell production cassettes and base medium, at the lower of cost (specific identification using the first in, first out method) or market. We regularly review inventory quantities on hand and record a provision to write down excess inventories to their estimated net realizable value.

AastromReplicell System (ARS) Inventories – Based upon market conditions and our historical experience with the ARS product line, the carrying value of our aggregate ARS inventories is reduced if such inventories are held in excess of twelve months without sale because the probability-weighted selling price of the aggregate inventories declines after inventory has been on-hand for more than twelve months. We continue to reduce the aggregate carrying value of ARS inventories over the ensuing six months if the inventories are not sold. The carrying value of ARS inventories under evaluation at potential customer sites are not reduced so long as the estimated selling price (less selling costs) exceeds the carrying value of the inventories under evaluation. In accordance with this policy the carrying value of our ARS inventories was reduced to zero as of June 30, 2005 and remains at zero as of December 31, 2005. Based upon our current business strategy, we will not generate revenues from the sale of ARS inventories in future periods.

Cell Cassette and Base Medium Inventories – We maintain cell cassette and base medium inventories for sale to existing customers and clinical sites. We evaluate

[Table of Contents](#)

the net realizable value of these inventories considering expected future sales quantities, prices and timing, and considering the limited shelf life of these inventories.

These critical accounting policies should be read in conjunction with our consolidated financial statements and related notes and this discussion of our results of operations, as well as in conjunction with our audited financial statements contained in our 2005 Annual Report on Form 10-K.

Results of Operations

Total revenues, consisting of product sales and grant funding, for the quarter and six months ended December 31, 2005 were \$117,000 and \$297,000, respectively, compared to \$374,000 and \$561,000 for the same periods in fiscal year 2005.

Product sales decreased for the quarter and six months ended December 31, 2005 to \$42,000 and \$57,000, respectively, from \$212,000 and \$227,000 for the same periods in fiscal year 2005. The decreases in product revenue are the result of reduced volume of therapy kit sales for clinical trials and research by others. Prior to fiscal year 2005 (ending June 30, 2005), we generated limited revenue from our AastromReplicell System either through customer sales or rental agreements. Based upon our current business strategy, we are not marketing the AastromReplicell System technology as a stand-alone product. Our current focus is on utilizing the AastromReplicell System to manufacture our TRC cell products. At such time as we satisfy applicable regulatory approval requirements, we expect the sales of our TRC cell products to constitute nearly all of our product sales revenues.

Grant revenues decreased for the quarter and six months ended December 31, 2005 to \$75,000 and \$240,000, respectively, from \$162,000 and \$334,000 for the same periods in fiscal year 2005. These decreases are the result of lower grant program activities; however, we continue to pursue grant-funded programs. Grant revenues accounted for 81% of total revenues for the six months ended December 31, 2005, compared to 60% for the same period in fiscal year 2005 and are recorded on a cost-reimbursement basis. Grant revenues may vary in any period based on timing of grant awards, grant-funded activities, level of grant funding and number of grant awards received.

Total costs and expenses increased to \$4,456,000 for the quarter ended December 31, 2005, compared to \$2,924,000 for the quarter ended December 31, 2004.

Costs and expenses include an increase in research and development expenses to \$2,195,000 for the quarter ended December 31, 2005 from \$1,596,000 for the quarter ended December 31, 2004. This increase reflects continued expansion of our research activities, including additional staffing requirements, to support future regulatory submissions, on-going and planned bone grafting and vascular repair clinical trials in the U.S. and EU, product development activities in the area of tissue regeneration and development of centralized facilities for product manufacturing and distribution processes. Research and development expenses for the quarter ended December 31, 2005, also include a non-cash charge of \$121,000

Table of Contents

relating to the adoption of SFAS 123R on July 1, 2005, which requires us to measure the fair value of all employee share-based payments and recognize that value as an operating expense.

Selling, general and administrative costs increased for the quarter ended December 31, 2005 to \$2,257,000 from \$1,289,000 for the quarter ended December 31, 2004. This increase is due to additional employee costs of approximately \$654,000 that include: recruitment and relocation expenses, a bonus paid to an employee, an accrual for future performance bonuses and the salary and fringe benefits for a marketing director position that was vacant during the quarter ended December 31, 2004. Costs also increased for the quarter ended December 31, 2005 by approximately \$103,000 due to additional state filing fees required for increasing our authorized common shares and required activities for financial internal controls compliance and certification. In addition, selling, general and administrative expenses for the quarter ended December 31, 2005, included a non-cash charge of \$185,000 relating to the adoption of SFAS 123R on July 1, 2005.

Total costs and expenses for the quarter ended December 31, 2005 included a decrease in the cost of product sales to \$4,000 compared to \$39,000 for the quarter ended December 31, 2004. The decrease in cost of product sales resulted primarily from inventory of therapy kits that was previously expensed because it was unlikely to be sold.

Total costs and expenses increased to \$8,430,000 for the six months ended December 31, 2005, compared to \$5,820,000 for the six months ended December 31, 2004.

Costs and expenses include an increase in research and development expenses to \$4,148,000 for the six months ended December 31, 2005 from \$3,163,000 for the six months ended December 31, 2004, reflecting increased costs in research activities, product and clinical development, manufacturing processes, regulatory submissions and additional staffing requirements to support our TRC cell product programs. Research and development expenses for the six months ended December 31, 2005, also include a non-cash charge of \$199,000 relating to the adoption of SFAS 123R on July 1, 2005, which requires us to measure the fair value of all employee share-based payments and recognize that value as an operating expense.

Selling, general and administrative costs increased for the six months ended December 31, 2005 to \$4,273,000 from \$2,603,000 for the six months ended December 31, 2004. This increase reflects additional staffing requirements, bonuses paid to certain employees and an accrual for future performance bonuses. This increase also reflects additional consulting and marketing activities, increased legal costs associated with patent protection and increased costs required for financial internal controls compliance and certification. In addition, selling, general and administrative expenses for the six months ended December 31, 2005, included a non-cash charge of \$303,000 relating to the adoption of SFAS 123R on July 1, 2005.

With the adoption of SFAS 123R, we expect an increase in our non-cash operating expenses for employee share-based compensation in the remaining periods of fiscal year 2006 when compared to fiscal year 2005.

[Table of Contents](#)

Interest income was \$197,000 and \$503,000 for the quarter and six months ended December 31, 2005, respectively, compared to \$97,000 and \$157,000 for the same periods in fiscal year 2005. The fluctuations in interest income are due primarily to corresponding changes in the level of cash, cash equivalents and short-term investments during the periods and higher yields from our investments in 2005.

Our net loss was \$4,142,000, or \$.04 per common share for the quarter ended December 31, 2005 compared to \$2,453,000, or \$.03 per common share for the quarter ended December 31, 2004. For the six months ended December 31, 2005, our net loss increased to \$7,630,000, or \$.07 per common share compared to a net loss of \$5,102,000, or \$.06 per common share for the six months ended December 31, 2004. The increase in net loss is primarily the result of increased costs and expenses offset on a per share basis by an increase in the weighted average number of common shares outstanding resulting from sale of our common shares to investors in fiscal year 2005.

Our major ongoing research and development programs are focused on the development of bone marrow-derived adult stem, progenitor and immature cells together with their natural stromal support cells – TRCs – for use in orthopedic indications (bone grafting, spine fusion, and jaw bone reconstruction) and for use in vascular regeneration. Clinical trials using TRCs are underway in both the U.S. and the EU to evaluate bone formation in patients with long bone non-union fractures, and as part of spine fusion surgery in degenerative spine disease of adults. A clinical trial in the EU evaluated bone formation in the jaw (maxilla) bone. An EU clinical trial for the treatment of diabetic limb ischemia resulting from peripheral vascular disease is enrolling patients. All of these potential product applications use TRCs created by our proprietary process and device technologies. We are completing other research and development activities using our TRCs that are intended to improve the functionality for certain clinical indications, to improve shelf life, and to decrease the cost of manufacturing of our TRC products. We are exploring the competency of TRCs to generate various types of human tissues, such as bone, vascular, cartilage and cardiac tissues. Research and development expenses outside of the TRC program consist primarily of immunotherapy programs, engineering and cell manufacturing.

The following table summarizes our research and development expenses for the quarter and six months ended December 31, 2005:

R&D Project	Quarter Ended December 31,		Six Months Ended December 31,	
	2004	2005	2004	2005
TRCs	\$ 1,338,000	\$ 1,908,000	\$ 2,622,000	\$ 3,606,000
Other	258,000	287,000	541,000	542,000
Total	<u>\$ 1,596,000</u>	<u>\$ 2,195,000</u>	<u>\$ 3,163,000</u>	<u>\$ 4,148,000</u>

Because of the uncertainties of clinical trials and the evolving regulatory requirements applicable to TRCs, estimating the completion dates or cost to complete our major research and

[Table of Contents](#)

development program would be highly speculative and subjective. The risks and uncertainties associated with developing our products, including significant and changing governmental regulation and the uncertainty of future clinical study results, are discussed in greater detail in the “Any changes in the governmental regulatory classifications of our products could prevent, limit or delay our ability to market and develop our products,” “Our inability to complete our product development activities successfully would severely limit our ability to operate or finance operations,” and “We must successfully complete our clinical trials to be able to market certain of our products,” sections under the heading “Certain Business Considerations” of this report. The potentially lengthy process of seeking regulatory approvals for our product candidates, and the subsequent compliance with applicable regulations, will require the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, have a material adverse effect on our results of operations. We cannot be certain when any net cash inflow from products validated under our major research and development project, if any, will commence.

Liquidity and Capital Resources

We have financed our operations since inception primarily through public and private sales of our equity securities, which, from inception through December 31, 2005, have totaled approximately \$160 million and, to a lesser degree, through grant funding, payments received under research agreements and collaborations, interest earned on cash, cash equivalents, and short-term investments, and funding under equipment leasing agreements. These financing sources have generally allowed us to maintain adequate levels of cash and other liquid investments.

Our combined cash, cash equivalents and short-term investments totaled \$26,225,000 at December 31, 2005, a decrease of \$6,189,000 from June 30, 2005. During the six months ended December 31, 2005, the primary source of cash, cash equivalents and short-term investments was from equity transactions from the employee stock option plans, warrants to purchase common shares to investors and the Direct Stock Purchase Plan, with net proceeds of \$712,000. The primary uses of cash, cash equivalents and short-term investments during the six months ended December 31, 2005 included \$6,454,000 to finance our operations and working capital requirements, and \$519,000 in capital equipment additions for cell manufacturing and laboratory equipment.

We expect our total capital expenditures for the fiscal year ended June 30, 2006 to be approximately \$1,046,000 primarily for the acquisition of cell manufacturing and laboratory equipment. We expect our monthly cash utilization to average approximately \$1.5 million per month for the remainder of fiscal year 2006.

Our future cash requirements will depend on many factors, including continued scientific progress in our research and development programs, the scope and results of clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in

Table of Contents

filing, prosecuting and enforcing patents, competing technological and market developments and the cost of product commercialization. We do not expect to generate positive cash flow from operations for at least the next several years due to expected spending for research and development programs and the cost of commercializing our product candidates. We intend to seek additional funding through research and development agreements or grants, distribution and marketing agreements and through public or private debt or equity financing transactions. Successful future operations are subject to both technical and business risks, including our continued ability to obtain future funding, satisfactory product development, obtaining regulatory approval and market acceptance for our products among others.

We expect that our available cash and expected interest income will be sufficient to finance currently planned activities beyond the end of fiscal year 2006 (ending June 30, 2006). These estimates are based on certain assumptions which could be negatively impacted by the matters discussed under this heading and under the caption "Certain Business Considerations", included herein. In order to grow and expand our business, and to develop and introduce our 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. We expect that our primary sources of capital for the foreseeable future will be through collaborative arrangements and through the public or private sale of our debt or equity securities. There can be no assurance that such collaborative arrangements, or any public or private funding, will be available on acceptable terms, if at all. Several factors will affect our ability to raise additional funding, including, but not limited to, market volatility of our common stock, continued market listing of our common stock and economic conditions affecting the public markets. If our common stock is delisted from The Nasdaq SmallCap Market, the liquidity of our common stock could be impaired, and prices for the shares of our common stock could be lower than might otherwise prevail.

If adequate funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of our research and development programs, which may have a material adverse affect on our business. See "Business Risks" and "Notes to Consolidated Financial Statements" in our 2005 Annual Report on Form 10-K and "Notes to Consolidated Financial Statements" and "Certain Business Considerations" included herein.

Certain Business Considerations

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 December 31, 2005, we have incurred a cumulative net loss totaling approximately \$132 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 at least until, and probably after, product sales increase, primarily owing to our research and development programs, including pre-clinical studies and

[Table of Contents](#)

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, maintaining supplies of key manufacturing components, and raising sufficient cash to fund our operating activities. In addition, we may not be able to achieve or sustain profitability.

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 U.S., which we believe will ultimately be the largest market for our products. We will also be required to obtain additional approvals from various foreign regulatory authorities to initiate sales activities of cell products in those jurisdictions, such as the EU. If we cannot demonstrate the safety, reliability and efficacy of our cell product candidates, or of the cells produced in our device products, we may not be able to obtain required regulatory approvals. If we cannot demonstrate the safety and efficacy of our technologies and product candidates, 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 and regulatory agencies in other countries continue to review and inspect marketed products, manufacturers and manufacturing facilities, which may create additional regulatory burdens. 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, regulatory agencies may establish additional regulations that could prevent or delay regulatory approval of our products.

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. Although the AastromReplicell System is currently considered to be unregulated manufacturing equipment in the U.S., the FDA may reconsider this and ultimately choose to regulate the AastromReplicell System under another category. Because our product development programs are designed to satisfy the standards applicable to 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 (such as our TRCs) may, under current regulations be regulated as a biologic product, which requires a BLA.

[Table of Contents](#)

New EU Directives (laws) have become effective, and have influenced the requirements for manufacturing cell products and the conduct of clinical trials. These changes have delayed or in some cases temporarily halted clinical trials of cellular products in the EU. Recent changes and annexes to the European Union Medicinal Products Prime Directive shifted patient-derived cells to the medicinal products category, which will require Marketing Authorization(s) in order to market and sell these products. These new laws may delay some of our current planned clinical trials with TRCs in the EU, and will require clinical trials with data submission and review by one or more European regulatory bodies. There is uncertainty as to the level of trials and data needed and, because of the recent nature of these regulations, there is no established precedent to understand the timeline or other requirements for Marketing Authorization.

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

Commercialization in the U.S. and the EU of our cell product candidates will require completion of substantial clinical trials, and obtaining sufficient safety and efficacy results to support required registration approval and market acceptance of our cell product candidates. 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 cell 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 must successfully complete our clinical trials to be able to market certain of our products.

To be able to market therapeutic cell products in the U.S. and in the EU, 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

[Table of Contents](#)

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.

Our research programs are currently developing and evaluating new variations of TRCs that are intended to improve the functionality for certain clinical indications, to improve shelf life, and to decrease the cost of manufacturing our TRC products. These production process changes may alter the functionality of our TRCs, and would require various levels of experimental and clinical testing and evaluation. Any such testing or clinical study may affect regulatory review process and lengthen the time before TRC products would be commercially available.

Even if successful clinical results are reported for a product from a completed clinical trial, this does not mean that the results will be sustained over time, or are sufficient for a marketable or regulatory approvable product.

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

We will be seeking to obtain regulatory approvals to market our TRC cell products for tissue repair and regeneration 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 TRCs 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 AastromReplicell 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.

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 U.S. 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

Table of Contents

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.

Use of animal-derived materials could harm our product development and commercialization efforts.

Some of the compounds we use in, and are critical to, our TRC manufacturing processes involve the use of animal-derived products, including fetal bovine serum. However, animal-derived cells are not used as “feeder cells” in the growth of human TRCs. Suppliers or regulatory authorities may limit or restrict the availability of such compounds for clinical and commercial use. For example, the occurrence of so-called “mad cow disease” in the U.S. or in New Zealand may lead to a restricted supply of the serum currently required for the TRC manufacturing process. Any restrictions on these compounds would impose a potential competitive disadvantage for our products or prevent our ability to manufacture TRC cell products. Regulatory authorities in the EU are reviewing the safety issues related to the use of animal-derived materials, which we currently use in our production process. It is unknown at this time what actions, if any, the authorities may take as to animal derived materials specific to medicinal products distributed in the EU. Our inability to develop or obtain alternative compounds would harm our product development and commercialization efforts. There are certain limitations in the supply of certain animal-derived materials, which may lead to delays in our ability to complete clinical trials or eventually to meet the anticipated market demand for our cell products.

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

We have only limited internal manufacturing, sales, marketing and distribution capabilities. As market needs develop, we intend to establish and operate commercial-scale manufacturing facilities, which will need to comply with all applicable regulatory requirements. We expect to develop new configurations of the AastromReplicell System for these centralized facilities to enable process and cost efficiencies associated with large-scale manufacturing. Establishing these facilities will require significant capital and expertise. Any delay in establishing, or difficulties in operating, these facilities will limit our ability to meet the anticipated market demand for our cell products. We intend to get assistance to market our future cell products through collaborative relationships with companies with established sales, marketing and distribution capabilities. 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. We may market our TRCs through our own sales force. Our inability to develop and retain a qualified sales force could limit our ability to market, sell and distribute our cell products.

Table of Contents

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 and cell manufacturing facilities. We expect that our available cash and interest income will be sufficient to finance currently planned activities beyond the end of fiscal year 2006 (ending June 30, 2006). 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, clinical 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
- the effect of commercialization activities and facility expansions, if and as required

Because of our long-term funding requirements, we intend to access the public or private equity markets if conditions are favorable to complete a financing, even if we do not have an immediate need for additional capital at that time, or whenever we require additional operating capital. 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.

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 such time, we may enter into financing transactions at prices, which are at a substantial discount to market. 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 \$1.37 and \$4.05 during the twelve month period ended December 31, 2005. The price of our common stock may continue to fluctuate in response to a number of events and factors, such as:

Table of Contents

- 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
- news or reports from other stem cell, cell therapy or tissue engineering companies
- reports by securities analysts
- status of the investment markets
- concerns related to management transitions

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.

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

We are required to meet certain qualitative and 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. In May 2003, and July 2004, we received notification from Nasdaq of potential delisting as a result of our stock trading below \$1.00 for more than thirty consecutive business days. While in each case our stock price recovered within the permitted grace periods and Nasdaq notified us that we were again in full compliance, we cannot provide any assurance that our stock price would again recover within the specified times if future closing bid prices below \$1.00 triggered another potential delisting. The qualitative tests we must meet address various corporate governance matters, including Audit Committee and Board composition. We have experienced recent director resignations and are devoting increased resources to Board member recruitment and retention. If we do not maintain compliance with the Nasdaq requirements within specified periods and subject to permitted extensions, our common stock may be recommended for delisting (subject to any appeal we would file). 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. Delisting would also impair our ability to raise capital.

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

Table of Contents

We rely solely on third parties such as Astro, Moll and Cambrex to manufacture or supply certain of our devices/manufacturing equipment, as well as component parts and other materials used in the cell product manufacturing 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 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.

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.

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 markets for our products are very competitive, subject to rapid technological changes, and vary for different 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 use for bone marrow transplantation, following marrow ablation due to chemotherapy, 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 the practical elimination of this market for our cell-based product for this application.

Our AastromReplicell Systems is 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, the cost or process of treatment and other factors may cause researchers and practitioners to not use our products and we could suffer a competitive disadvantage. As a result, we may be unable to recover the net book value of our inventories. 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, Chief Executive Officer and Chairman of Aastrom. On December 28, 2005, we

Table of Contents

announced that we would begin a search for a new Chief Executive Officer to succeed R. Douglas Armstrong, Ph.D., who announced his intention to transition out of day-to-day management of the Company. Our inability to replace any 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 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 established guidelines and have certain rights in the technology developed with the grant. If we fail to meet

[Table of Contents](#)

these guidelines, we would lose our exclusive rights to these products, and we would lose potential revenue derived from the sale of these 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 and/or TRCs during clinical trials, including clinical trials, or after commercialization, results in adverse events. 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.

We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002 and any adverse results from such evaluation could have a negative market reaction.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 (Section 404), we are required to furnish a report by our management on our internal control over financial reporting. That report must contain, among other matters, an assessment of the design and operating effectiveness of our internal controls over financial reporting as of the end of the fiscal year. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. That report must also contain a statement that our independent registered public accounting firm has issued an attestation report on management's assessment of such internal controls and independent registered public accounting firm's assessment of the design and operating effectiveness of our system of internal accounting controls over financial reporting. If in the future we are unable to assert that our internal control over financial reporting is effective as of the end of the then current fiscal year (or, if our independent registered public accounting firm is unable to attest that our management's report is fairly stated or they are unable to express an unqualified opinion on the the design and operating effectiveness of our internal controls), we could lose investor confidence in the accuracy and completeness of our financial reports, which would have a negative effect on our stock price and our ability to raise capital.

[Table of Contents](#)

Forward-looking statements

This report 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
- adequacy of existing capital to support operations for a specified time
- product development and marketing plan
- clinical trial plans and anticipated results
- anticipation of future losses
- replacement of manufacturing sources
- commercialization plans
- revenue expectations and operating results

These statements are subject to risks and uncertainties, including those set forth in this “Certain Business Considerations” section, and actual results could differ materially from those expressed or implied in these statements. In some cases, you can identify these statements by our 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 report 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.

These business considerations, and others, are discussed in more detail and should be read in conjunction with the “Certain Business Considerations” discussed in our 2005 Annual Report of Form 10-K.

Table of Contents

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As of December 31, 2005, our cash and cash equivalents included money market securities and short-term investments including short-term corporate debt securities with original maturities of less than twelve months. Due to the short duration of our investment portfolio, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio, therefore, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our securities portfolio.

Our sales to customers in foreign countries are denominated in Euros. Our vendors, employees and clinical sites in countries outside the U.S. are typically paid in Euros. However, such expenditures have not been significant to date. Accordingly, we are not directly exposed to significant market risks from currency exchange rate fluctuations. We believe that the interest rate risk related to our accounts receivable is not significant. We manage the risk associated with these accounts through periodic reviews of the carrying value for non-collectibility and establishment of appropriate allowances in connection with our internal controls and policies. We do not enter into hedging transactions and do not purchase derivative instruments.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended, we conducted an evaluation, under the supervision and with the participation of our management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our current disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

During our second quarter of fiscal 2006, there were no changes made in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

From time to time we receive threats or may be subject to litigation matters incidental to our business. However, we are not currently a party to any material pending legal proceedings.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

In November 2005 and December 2005, the holders of warrants issued in July 2003 exercised their warrants to purchase 29,412 and 176,471 shares of common stock at \$1.23 per share. These shares were sold in private placements to accredited investors and were exempt from registration by reason of Section 4(2) of the Securities Act.

Item 3. Defaults Upon Senior Securities

None.

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

- (a) The Annual Meeting of Shareholders of Aastrom Biosciences, Inc. was held on November 2, 2005.
- (b) At the 2005 Annual Meeting of Shareholders, votes were cast on matters submitted to the shareholders, as follows:

Proposal 1: Election of two directors whose terms expire at the 2008 Annual Meeting of Shareholders.

<u>NOMINEE</u>	<u>FOR</u>	<u>WITHHELD</u>
Timothy M. Mayleben	93,177,169	519,718
Stephen G. Sudovar	93,194,969	501,918

In addition to the election of the above referenced directors, the following individuals continue as directors; R. Douglas Armstrong and Alan L. Rubino, as Class III Directors, whose terms expire at the 2006 Annual Meeting of Shareholders; and Susan L. Wyant as a Class I Director, whose term expires at the 2007 Annual Meeting of Shareholders. As previously disclosed on a Form 8-K filed with the SEC, Robert Zerbe was added to the Board of Directors in January 2006.

[Table of Contents](#)

Proposal 2: Ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the year ending June 30, 2006.

<u>FOR</u>	<u>AGAINST</u>	<u>ABSTAIN</u>
93,395,708	218,389	82,790

Item 5. Other Information

None.

Item 6. Exhibits

See Exhibit Index.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

AASTROM BIOSCIENCES, INC.

Date: February 8, 2006

/s/ R. Douglas Armstrong

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

Date: February 8, 2006

/s/ Gerald D. Brennan, Jr.

Gerald D. Brennan, Jr.
Vice President Administrative & Financial
Operations, Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
3.1 *	Restated Articles of Incorporation of the Company, as amended
3.2 **	Bylaws, as amended
10.88	Revised Employment Agreement with with Dr. R. Douglas Armstrong dated December 27, 2005.
10.89	Revised Employment Agreement with James A. Cour dated January 12, 2006.
31	Rules 13a-14(a) and 14(d)-14a Certifications
32	Section 1350 Certifications

* Incorporated by reference to the Company's Quarterly Report Form 10-Q for the quarter ended September 30, 2005.

** Incorporated by reference to the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2005.

REVISED
EMPLOYMENT AGREEMENT

This Revised Employment Agreement (this "Agreement") is entered into as of December 27, 2005, by and between **Aastrom Biosciences, Inc.**, a Michigan corporation ("Employer"), and **R. Douglas Armstrong, Ph.D.** ("Employee").

RECITALS

- A. Employer and Employee are parties to that certain Employment Agreement dated as of August 27, 2004 (the "Prior Agreement").
- B. Employer and Employee desire to make certain revisions, additions and deletions to the terms of the Prior Agreement, as set forth in this Agreement.
- C. Employer and Employee intend that this Agreement shall supersede in the entirety of the Prior Agreement, which Prior Agreement and any other written or oral employment and/or benefits-related agreement, are hereby terminated in their entirety.

AGREEMENTS

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

"Cause" means the occurrence of any of the following events, as determined by the Board of Directors of Employer, in good faith:

(i) Employee's theft, material act of dishonesty or fraud, or intentional falsification of any records of Employer;

(ii) Employee's breach of the Aastrom Biosciences, Inc. Restated Employee Proprietary Information and Invention Agreement or any other agreement with the Employer covering the use or disclosure of confidential or proprietary information of Employer, the ownership of intellectual property or restrictions on competition;

(iii) Employee's gross negligence or willful misconduct in the performance of Employee's assigned duties (but not mere unsatisfactory performance);

or

(iv) Employee's conviction (including any plea of guilty or nolo contendere) of a crime causing material harm to the reputation or standing of Employer or which materially impairs Employee's ability to perform his duties for Employer.

"Cessation Date" means the date when Employee ceases to be employed as the CEO of Employer.

"Change in Control" shall mean the occurrence of any of the following:

(i) Employer is party to a merger or consolidation which results in the holders of voting securities of Employer outstanding immediately prior thereto failing to continue to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 50% of the combined voting power of the voting securities of Employer or such surviving entity outstanding immediately after such merger or consolidation; or

(ii) the sale or disposition of all or substantially all of Employer's assets (or consummation of any transaction having similar effect).

"Code" means the Internal Revenue Code of 1986, as amended, and any successor thereto, and any applicable regulations promulgated thereunder.

"Disability" means that:

(i) Employee has been incapacitated by bodily injury, illness or disease so as to be prevented thereby from effectively performing Employee's duties;

(ii) Such incapacity shall have continued for a period of six (6) consecutive months; and

(iii) Such incapacity will, in the opinion of a qualified physician, be long-term, which shall mean a period exceeding twelve (12) months.

"Employer" means Aastrom Biosciences, Inc., a Michigan corporation, and, following a Change in Control, any Successor that agrees to assume all of the terms and provisions of this Agreement, or a Successor which otherwise becomes bound by operation of law to this Agreement.

"Incumbent Director" means a director who either (i) is a director of Employer as of the Effective Date of this Agreement, or (ii) is elected, or nominated for election, to the Board of Directors with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination.

"Scheduled Termination Date" is defined in Section 5.3.

"Subject Period" is defined in Section 9.1

"Subject Line of Business" is defined in Section 9.1.

"Successor" means Employer and any successor or assign to substantially all of its business and/or assets.

2. Employment. Employer hereby engages Employee, and Employee hereby accepts such engagement, upon the terms and conditions set forth herein.

3. Duties.

3.1 CEO. Employee is engaged as Chief Executive Officer (“CEO”). Employee shall perform faithfully and diligently the duties customarily performed by persons in the position for which employee is engaged, together with such other reasonable and appropriate duties as Employer shall designate from time to time. Employee shall devote Employee’s full business time and efforts to the rendition of such services and to the performance of such duties. As a full-time employee of Employer, Employee shall not be entitled to provide consulting services or other business or scientific services to any other party, without the prior written consent of Employer.

3.2 Focus. Employee will focus his efforts primarily on fund raising, intellectual property, and clinical trial matters for Employer’s business. Employee will also delegate certain management duties to James Cour, the Chief Operating Officer of Employee, in consultation with Employer’s Board of Directors.

3.3 Board. Employee shall remain as Chairman of the Board of Directors of Employer while he remains employed as CEO. Thereafter, it is the present intention of Employer’s Board and Employee for Employee to continue as a member of the Board, subject to customary shareholder meeting election schedule, and with other responsibilities (such as Chairman and committee assignments) to be determined through customary Board processes.

4. Compensation and Fringe Benefits.

4.1 Base Salary. During the term of this Agreement, as compensation for the proper and satisfactory performance of all duties to be performed by Employee hereunder, Employer shall pay to Employee a base salary of Three Hundred Forty-Five Thousand and 00/100 Dollars (\$345,000.00) per year, payable in arrears in equal bi-weekly installments, less required deductions for state and federal withholding tax, Social Security and all other employee taxes and payroll deductions. The base salary shall be increased automatically as of July 1, 2006 to Three Hundred Fifty-Eight Thousand and Eight Hundred Dollars (\$358,800) per year.

4.2 Bonus. Employee shall be eligible to receive equity and cash bonuses in accordance with Employer’s customary incentive plans.

4.3 Customary Fringe Benefits. Employee shall be entitled to such fringe benefits as Employer customarily makes available to employees of Employer engaged in the same or similar position as Employee (“Fringe Benefits”). Such Fringe Benefits may include vacation leave, sick leave, and health insurance coverage, and 401(k) retirement contributions. Employer reserves the right to change the Fringe Benefits on a prospective basis, at any time, effective upon delivery of written notice to Employee.

4.4 Disability Coverage. Employee shall be entitled to long-term disability insurance coverage to the greatest extent available for purchase by the Employer.

4.5 Vacation. Employee is entitled to twenty (20) days of vacation in each calendar year.

4.6 Accumulation. Employee shall earn and accumulate unused vacation and sick leave in accordance with the Company’s policy in effect from time to time. Further,

Employee shall not be entitled to receive payments in lieu of Fringe Benefits, other than for unused vacation leave earned and accumulated at the time the employment relationship terminates.

4.7 Board Compensation. While Employee remains employed and compensated as CEO, Employee shall not receive any separate compensation for service on Employer's Board of Directors. After Employee ceases to be employed as CEO, and while Employee continues thereafter to serve as a member of Employer's Board of Directors, Employee shall be entitled to receive customary Director compensation, the same as other non-employed Directors.

4.8 Consulting Services. After Employee ceases to be employed as CEO, if Employer and Employee mutually agree for Employee to perform specified consulting services (beyond the level of services normal for a member of the Board of Directors), then the parties shall establish mutually approved compensation corresponding to the nature, level and time commitment for such consulting services; and the parties shall enter into a separate consulting agreement regarding the same.

5. Term.

5.1 Commencement. The employment relationship pursuant to this Agreement shall commence on the date as of which this Agreement was executed as set forth above.

5.2 Termination at Will. Employer and Employee acknowledge and agree that Employer's employment currently is "at will" and that their employment relationship may be terminated by either party at any time, with or without Cause; and any such termination by Employer without Cause will activate the payment provisions of Section 6.

5.3 Scheduled Termination. The employment of Employee as Employer's CEO shall terminate on the earlier of (i) October 31, 2006, at 5:00 p.m., and (ii) the date when a new CEO of Employer commences employment with Employer (the "Scheduled Termination Date").

6. Payments Upon Termination; Payments to Stay.

6.1 Payment of Compensation Upon Termination.

6.1.1 General. Upon termination of Employee's employment with the Company, Employee shall be entitled to be paid his base salary through the effective date of such termination, plus the amounts (if any) determined pursuant to Sections 6.1.2, 6.2, 6.3, 6.4 and 7, as full compensation for any and all claims of Employee under this Agreement.

6.1.2 Early Termination. In the event the Scheduled Termination Date is prior to June 30, 2006, or if Employer terminates the employment without Cause prior to June 30, 2006, then Employer shall nevertheless continue to pay to Employee through June 30, 2006 his base salary, bonus and other compensation accrued through June 30, 2006.

6.2 Payment to Stay. In consideration for Employee committing to remain employed full-time with Employer until the Scheduled Termination Date and conditional upon Employee remaining available to serve as CEO until the Scheduled Termination Date, and in recognition of Employee's long-term service to Employer, Employer shall pay to Employee installment payments aggregating to Six Hundred Thirty-Eight Thousand and Two Hundred Dollars (\$638,200), payable as follows:

- a. \$20,000 on the first day of July, August, September, and October 2006 (for an aggregate of \$80,000), and refundable if Employee does not remain available to serve as CEO until the Scheduled Termination Date;
- b. \$30,000 on the first day of November and December 2006 (for an aggregate of \$60,000);
- c. \$242,920 payable on January 4, 2007; and
- d. \$14,182.22 per month for the eighteen (18) months commencing with November 15, 2006, and continuing monthly through April 15, 2008; and each such monthly payment shall be made on the 15th of the month (for an aggregate of \$255,280).

For avoidance of doubt, the foregoing installment payments are in addition to the base salary and bonus amounts payable to Employee for the time he serves as an employee, notwithstanding the fact that some of these installment payments may be made while Employee is still an employee.

6.3 Termination Without Cause. In the event Employee's employment is terminated by Employer without Cause prior to the Scheduled Termination Date, then Employer shall pay to Employee the same sums as specified in Sections 6.1 and 6.2, on the same payment schedule.

6.4 General.

6.4.1 Payroll Taxes. Each of the foregoing payments shall be subject to required customary payroll deductions.

6.4.2 Death. If Employee dies prior to all of the foregoing payments being made, the remaining payments shall be paid as scheduled to Employee's wife (or estate, if Employee's wife is deceased).

6.4.3 Continued Medical Coverage. In the event Employee's employment is terminated, then Employee shall be entitled to elect continued medical insurance coverage in accordance with applicable provisions of the Consolidated Budget Reconciliation Act of 1985 ("COBRA"); and Employer shall pay such COBRA insurance costs for the one year period after the Cessation Date, payable according to such payment schedule as is required for such COBRA insurance.

6.4.4 Accrued Unused Vacation Time. Upon any termination of employment, Employer shall pay to Employee, in accordance with Employer's applicable policies, any accrued unused vacation time, if any.

6.4.5 Section 401(k) Contributions. The Section 401(k) contributions by Employer for Employee's account for 2006 shall become fully vested upon termination of employment, other than a voluntary termination by Employee prior to the Scheduled Termination Date.

6.5 Right to Terminate. Employer retains and reserves the right to terminate the employment of Employee at any time, with or without Cause. For avoidance of doubt, the Section 6.2 payments shall not be owed if Employee's employment is terminated by Employer for Cause, or if Employee voluntarily terminates employment prior to the Scheduled Termination Date; and if the Section 6.2 payments are not paid, then the Sections 9.1 and 9.2 covenants are not applicable.

6.6 No Liability. No director, officer or shareholder of Employer shall have any personal liability for the payment of any severance to Employee.

6.7 Exclusive Remedy. The parties acknowledge and agree that the payments specified in this Agreement constitute Employee's sole and exclusive remedy for any alleged injury or other damages arising out of a termination of Employee's employment under circumstances described herein. Accordingly, as a condition to said payments after a termination of employment, Employee shall sign a customary and reasonable release form, in the form attached hereto as Exhibit A, pursuant to which Employee acknowledges and agrees that Employee has no claims against Employer or any director, officer, shareholder or agent of Employer, or any successor in interest to Employer, with respect to any employment matters or termination of employment (excepting only for accrued salary, accrued vacation leave and reimbursement of customary business expenses incurred on behalf of Employer, all in the ordinary course of business, and the payments to which Employee is entitled to receive pursuant to Sections 4, 6 and 7).

7. Incentive Sale Bonus.

7.1 General. In the event (i) Employer receives a term sheet, letter of intent or agreement from an entity prior to May 1, 2008 for a Change in Control transaction, and (ii) such term sheet, letter of intent or agreement forms the basis for a Change of Control transaction with that entity (or its affiliate) which is ultimately consummated prior to May 1, 2009, then Employee shall be entitled to participate in the incentive sale bonus pool (the "Bonus Pool") described below.

7.2 Funding of Bonus Pool. The Bonus Pool shall be funded by a portion of the net proceeds realized by Employer from a Change in Control, after all liabilities of Employer are satisfied. Said net proceeds may consist of cash, stock or other consideration when and as paid by the acquirer. The Bonus Pool shall be funded in increments consisting of 30% of the first million of net proceeds, 25% of the second million of net proceeds, 15% of the third million

of net proceeds, and 10% of all additional net proceeds up to an aggregate of \$25 million of net proceeds.

7.3 Employee Share of Bonus Pool. Employee shall be entitled to a 50.0% share of the Bonus Pool (which 50% share may be up to \$1,450,000). Payment of this share will be made within thirty (30) days after the Employer receives the specified net proceeds.

7.4 Voluntary Termination by Employee. In the event that Employee voluntarily terminates employment with Employer prior to the Scheduled Termination Date, then Employee shall not be entitled to any share of the Bonus Pool. Alternatively, if Employer decides to terminate Employee for reasons other than "Cause", then Employee shall be entitled to receive Employee's designated share of the Bonus Pool if and when it becomes payable for a transaction as specified in Section 7.1 above.

8. Equity Vesting.

8.1 Equity Vesting. Vesting for stock options and restricted stock grants held by Employee shall be accelerated by one year at the Cessation Date. Following said one year, if and to the extent that Employee continues to provide services to Employer as a Director or consultant, then vesting will continue as specified in the applicable stock option agreements and restricted stock agreements.

8.2 No Amendments. Except as set forth in Section 8.1, this Agreement shall not be deemed to modify the provisions of any stock options or restricted stock granted by Employer to Employee on or before the date hereof.

9. Additional Covenants.

9.1 Non-Competition. While Employee remains as an employee of Employer, and for a period of 18 months thereafter, and plus any longer time period while employee continues as a member of the Board of Directors or as a paid consultant of Employer (collectively called the "Subject Period"), Employee agrees, in consideration of the payments set forth in Section 6.2, that he will not, directly or indirectly, be employed by, provide services to, or have any business connection with, any other corporation, firm, partnership or other entity which competes directly with Employer's business of "cultured stem cell products" (the "Business"). The companies "Osiris" and Viacell are examples of presently existing companies which Employer and Employee mutually acknowledge are currently engaged in the Business. Notwithstanding anything to the contrary, the foregoing shall not preclude Employee after the Cessation Date from being engaged by (i) a large company (e.g., Johnson & Johnson) which has some division, subsidiary or affiliate which is involved with the Business, so long as Employee's work for such large company is not related to the Business (e.g., no reviews, analysis, evaluation, assessment, advice, etc. related to the Business), or (ii) an investment company (such as an investment fund or an investment banker) which has some investment and/or clients involved with the Business, so long as Employee's work for such investment company is not involved with the Business.

9.2 Non-Solicitation of Employees. During the Subject Period, in consideration of the payments set forth in Section 6.2, Employee agrees not to interfere with the

business of Employer by soliciting, inducing, or otherwise causing any full-time employee of Employer to terminate his/her employment with Employer, or to reduce his/her time commitment or scope of services for Employer. The foregoing restriction shall apply to Employee regardless of whether he is acting directly or indirectly, alone or in concert with others. The foregoing restriction is not applicable to any former employee of Employer, after such person has ceased to be an employee of Employer. For avoidance of doubt, the foregoing restriction shall not preclude Employee, while Employee continues to serve as CEO of Employer, from Employee's good faith exercise of his management duties for the best interests of Employer, for terminating employees or changing the scope of duties for employees.

9.3 Confidential Information. Employee acknowledges that Employer has invested substantial time, money and resources in the development and retention of Employer's confidential information and trade secrets (collectively called "Confidential Information"), and that during the course of Employee's employment with Employer, Employee has acquired knowledge of such Confidential Information. So long as such Confidential Information remains confidential and not generally available in the public domain, Employee hereby agrees to maintain the confidentiality of Employer's Confidential Information, and to not use any of such Confidential Information to the detriment of Employer.

9.4 General Cooperation. Following the Cessation Date, Employee shall cooperate generally with Employer to provide relevant historical information known to Employee concerning Employer's past business activities. If significant amounts of time are needed for cooperation requested Employer, Employer will pay reasonable compensation to be mutually approved by both parties.

10. General Provisions.

10.1 Attorneys' Fees. In the event of any dispute or breach arising with respect to this Agreement, the party prevailing in any negotiations or proceedings for the resolution or enforcement thereof shall be entitled to recover from the losing party reasonable expenses, attorneys' fees and costs incurred therein.

10.2 Amendment. No amendment or modification of the terms or conditions of this Agreement shall be valid unless in writing and signed by both parties hereto. There shall be no implied-in-fact contracts modifying the terms of this Agreement. However, the noncumulation of benefits provision of Section 10.6 shall apply to any subsequent agreement, unless (i) such provision is explicitly disclaimed in the subsequent agreement, and (ii) the subsequent agreement has been authorized by the Board or a committee thereof.

10.3 Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the employment of Employee, other than relating to the Employer's stock option or restricted stock grants to Employee, and to Employer's standard policies and agreements regarding inventions, trade secrets, proprietary and confidential information, competition, and solicitation of the Employer's employees. This Agreement supersedes all prior agreements, understandings, negotiations and representation with respect to the employment relationship. This Agreement is not intended to and shall not affect, limit or

terminate any plans, programs, or arrangements of Employer that are regularly made available to a significant number of employees or officers of the Employer.

10.4 Successors and Assigns.

10.4.1 Successors of Employer. Employer shall require any Successor, expressly, absolutely and unconditionally to assume and agree to perform this Agreement in the same manner and to the same extent that Employer would be required to perform it if no such succession or assignment had taken place. Failure of Employer to obtain such agreement shall be a material breach of this Agreement.

10.4.2 Heirs and Representatives of Employee. This Agreement shall inure to the benefit of and be enforceable by the Employee's personal and legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

10.5 No Limitation of Regular Benefit Plans. This Agreement is not intended to and shall not affect, limit or terminate any plans, programs, or arrangements of Employer that are regularly made available to a significant number of employees or officers of Employer, including without limitation Employer's incentive compensation plans, 401(k) contribution plans, and stock option and restricted stock plans.

10.6 (Omitted).

10.7 No Assignment of Benefits. The rights of any person to payments or benefits under this Agreement shall not be made subject to option or assignment, either by voluntary or involuntary assignment or by operation of law, including (without limitation) bankruptcy, garnishment, attachment or other creditors process, and any action in violation of this Section 10.7 shall be void.

10.8 Notices.

10.8.1 General. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered, when mailed, if mailed by U.S. registered or certified mail, return receipt requested and postage prepaid, or when shipped, if shipped by nationally known reputable overnight delivery service and shipping charges prepaid. In the case of Employee, notices shall be addressed to Employee at the home address which he most recently communicated to the Employer, in writing. In the case of the Employer, notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

10.8.2 Notice of Termination. Any termination by the Employer of Employee's employment for Cause or by Employee as a result of a voluntary resignation shall be communicated by a notice of termination to the other party hereto given in accordance with Subsection 10.8.1. Such notice shall indicate the specific termination provisions in this Agreement relied upon, shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and shall specify the termination date.

10.9 No Duty to Mitigate. Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking employment with a new employer or in any other manner), nor shall any such payment be reduced by any earnings that Employee may receive from any other source except as otherwise provided herein.

10.10 No Representations. Employee acknowledges that in entering into this Agreement Employee is not relying and has not relied on any promise, representation or statement made by or on behalf of the Employer which is not set forth in this Agreement.

10.11 Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Michigan, without regard to its choice of law rules.

10.12 Waiver. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Agreement.

10.13 Severable Provisions. The provisions of this Agreement are severable, and if any one or more provisions may be determined to be judicially unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

10.14 Tax Withholding. The payments to be made pursuant to this Agreement will be subject to customary withholding of applicable income and employment taxes.

10.15 Consultation. Employee acknowledges that this Agreement confers significant legal rights on Employee, and also involves Employee waiving other potential rights he might have under other agreements and laws. Employee acknowledges that Employer has encouraged Employee to consult with Employee's own legal, tax, and financial advisers before signing the Agreement; and that Employee has had adequate time to do so before signing this Agreement.

10.16 Counterparts. This Agreement may be executed in counterparts, and each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

10.17 Excess Parachute Payment. In the event that any payment or benefit received or to be received by Employee pursuant to this Agreement or otherwise would subject Employee to any excise tax pursuant to Section 4999 of the Code due to the characterization of such payment or benefit as an excess parachute payment under Section 280G of the Code, Employee may elect in his sole discretion to reduce the amounts of any payments or benefits otherwise called for under this Agreement in order to avoid such characterization.

10.18 (Omitted).

10.19 Arbitration. Either party to this Agreement may submit any dispute under this Agreement for binding arbitration of the dispute before an arbitrator mutually acceptable to both parties, the arbitration to be held in Ann Arbor, Michigan, in accordance with the arbitration rules of the American Arbitration Association, as then in effect. If the parties are

unable to mutually agree upon an arbitrator, then the arbitration proceedings shall be held before three arbitrators, one of which shall be designated by the Employer, one of which shall be designated by the claimant and the third of which shall be designated mutually by the first two arbitrators in accordance with the arbitration rules referenced above. The arbitrator(s) sole authority shall be to interpret and apply the provisions of this Agreement; the arbitrator(s) shall not change, add to, or subtract from, any of the Agreement's provisions. The arbitrator(s) shall have the power to compel attendance of witnesses at the hearing. Any court having jurisdiction may enter a judgment based upon such arbitration. The decision of the arbitrator(s) shall be final and binding on the parties to this Agreement and without appeal to any court. Upon execution of this Agreement, the Employee shall be deemed to have waived any right to commence litigation proceedings regarding this Agreement outside of arbitration without the express written consent of the Employer.

10.20 Reporting and Disclosure. The Employer, from time to time, shall provide government agencies with such reports concerning this Agreement as may be required by law, and the Employer shall provide the Employee with such disclosure concerning this Agreement as may be required by law or as the Employer may deem appropriate.

11. Employee's Representations. Employee represents and warrants that Employee (i) is free to enter into this Agreement and to perform each of the terms and covenants contained herein, (ii) is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, and (iii) will not be in violation or breach of any other agreement by reason of Employee's execution and performance of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date set forth above.

EMPLOYER:

Aastrom Biosciences, Inc.

By: _____

EMPLOYEE:

R. Douglas Armstrong, Ph.D.

Address: 5330 Falkirk Court
Superior, MI 48198

EXHIBIT A
FORM OF RELEASE
RELEASE AGREEMENT

THIS AGREEMENT (this "Agreement") is made by and between R. Douglas Armstrong, Ph.D. ("Executive") and Aastrom Biosciences, Inc. ("Company").

RECITALS

- A. Executive's employment as an executive officer of Company, is to terminate effective , 2006 (the "Effective Date").
- B. Executive has been given the opportunity to review this Agreement, to consult with legal counsel, and to ascertain his rights and remedies.
- C. Executive and Company, without any admission of liability, desire to settle with finality, compromise, dispose of, and release any and all claims and demands asserted or which could be asserted arising out of Executive's employment at and separation from Company.

In consideration of the foregoing and of the promises and mutual covenants contained herein, it is hereby agreed between Executive and Company as follows:

AGREEMENT

1. Release. In exchange for the good and valuable consideration set forth in that certain Employment Agreement, made as of December ____, 2005, between the Company and Executive (the "Employment Agreement"), and conditional upon Company making the payments as required by the Employment Agreement, Executive hereby releases, waives and discharges any and all manner of action, causes of action, claims, rights, charges, suits, damages, debts, demands, obligations, attorneys fees, and any and all other liabilities or claims of whatsoever nature, whether in law or in equity, known or unknown, including, but not limited to, age discrimination under The Age Discrimination In Employment Act of 1967 (as amended), employment discrimination prohibited by other federal, state or local laws, and any other claims, which Executive has claimed or may claim or could claim in any local, state or federal or other forum, against Company, its directors, officers, employees, agents, attorneys, successors and assigns as a result of or relating to Executive's employment at and separation from Company and as an officer of Company as a result of any acts or omissions by Company or any of its directors, officers, employees, agents, attorneys, successors or assigns ("Covered Acts or Omissions") which occurred prior to the date of this Agreement; excluding only (i) those to compel the payment of amounts due to Executive as provided in the Employment Agreement, (ii) enforcement of any rights of Executive under any stock option or restricted stock agreements with the Company or (iii) those for indemnification under the Company's articles of

incorporation, bylaws or applicable law by reason of his service as an officer or director of the Company.

2. Return of Company Property. Executive agrees to immediately return to Company all property, assets, manuals, materials, information, notes, reports, agreements, memoranda, customer lists, formulae, data, know-how, inventions, trade secrets, processes, techniques, and all other assets, materials and information of any kind or nature, belonging or pertaining to Company (“Company Information and Property”), including, but not limited to, computer programs and diskettes or other media for electronic storage of information containing Company Information and Property, in Executive’s possession, and Executive shall not retain copies of any such Company Information and Property. Executive further agrees that from and after the date hereof he will not remove from Company’s offices any Company Information and Property, nor retain possession or copies of any Company Information and Property. Notwithstanding the foregoing, Employee shall be entitled to retain (i) any non-confidential materials, and (ii) the electronic equipment which he uses as of the Cessation Date (i.e., personal lap top computer, home computers, printer, palm pilot, cell phone), to be itemized at the Cessation Date; but all confidential information shall be deleted from such equipment – other than information which Employer elects may remain so as to facilitate Employee’s subsequent services as a Director and/or consultant.

3. No Derogative Statements. Executive agrees that he shall never make any statement that negatively affects the goodwill or good reputation of the Company, or any officer or director of Company, except as required by law, and except that such statements may be made to members of the Board of Directors of the Company.

4. No Covered Litigation. Executive covenants and agrees that he shall never commence or prosecute, or knowingly encourage, promote, assist or participate in any way, except as required by law, in the commencement or prosecution, of any claim, demand, action, cause of action or suit of any nature whatsoever against Company or any officer, director, employee or agent of Company (“Covered Litigation”) that is based upon any claim, demand, action, cause of action or suit released pursuant to this Agreement or involving or based upon the Covered Acts and Omissions.

5. Reading. Executive further agrees that he has read this Agreement carefully and understands all of its terms.

6. Understanding. Executive understands and agrees that he was advised to consult with an attorney and did so prior to executing this Agreement.

7. Timing. Executive understands and agrees that he has been given twenty-one (21) days within which to consider this Agreement.

8. Revocation Right. Executive understands and agrees that he may revoke this Agreement for a period of seven (7) calendar days following the execution of this Agreement (the “Revocation Period”). This Agreement is not effective until this revocation period has expired. Executive understands that any revocation, to be effective, must be in writing and either (a) postmarked within seven (7) days of execution of this Agreement and addressed to Aastrom

Biosciences, Inc., 24 Frank Lloyd Drive, Ann Arbor, Michigan 48105 or (b) hand delivered within seven (7) days after execution of this Agreement to Aastron Biosciences, Inc., 24 Frank Lloyd Drive, Ann Arbor, Michigan 48105. Executive understands that if revocation is made by mail, mailing by certified mail, return receipt requested, is recommended to show proof of mailing.

9. Voluntary Signing. In agreeing to sign this Agreement and separate from Company, Executive is doing so completely voluntarily and of his own free-will and without any encouragement or pressure from Company and agrees that in doing so he has not relied on any oral statements or explanations made by Company or its representatives.

10. Confidentiality. Both parties agree not to disclose the terms of this Agreement to any third party, except as is required by law, or as is necessary for purposes of securing counsel from either parties' attorneys or accountants.

11. No Admissions. This Agreement shall not be construed as an admission of wrongdoing by Company.

12. Entirety; Amendment. This Agreement contains the entire agreement between Executive and Company regarding the matters set forth herein. Any modification of this Agreement must be made in writing and signed by Executive and each of the entities constituting the Company.

13. Michigan Law. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of Michigan, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Michigan or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Michigan.

14. Invalidity. In the event any provision of this Agreement or portion thereof is found to be wholly or partially invalid, illegal or unenforceable in any judicial proceeding, then such provision shall be deemed to be modified or restricted to the extent and in the manner necessary to render the same valid and enforceable, or shall be deemed excised from this Agreement, as the case may require, and this Agreement shall be construed and enforced to the maximum extent permitted by law, as if such provision had been originally incorporated herein as so modified or restricted, or as if such provision had not been originally incorporated herein, as the case may be.

15. Remedies. If there is a breach or threatened breach of the provisions of this Agreement, Company may, in addition to other available rights and remedies, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce, or prevent any violation of, any of the provisions of this Agreement.

16. Offset. In the event that Executive violates the terms of this Agreement, in addition to other available rights and remedies, the Company shall be entitled to an offset against any payments remaining owed under the Employment Agreement in an amount equal to any damages caused to Company as a result of such violations.

The parties hereto have entered into this Agreement as of the Effective Date set forth above.

COMPANY:

AASTROM BIOSCIENCES, INC.

By: _____

EXECUTIVE:

R. Douglas Armstrong, Ph.D.

**AMENDED AND RESTATED
EMPLOYMENT AGREEMENT**

This Amended and Restated Employment Agreement (the "Agreement") is entered into as of January 12, 2006, by and between **Aastrom Biosciences, Inc.**, a Michigan corporation ("Employer"), and **James A. Cour** ("Employee").

RECITALS

- A. Employer and Employee are parties to that certain Employment Agreement entered into as of June 11, 2004 (the "Existing Employment Agreement").
- B. Employer and Employee are also parties to certain other written employment and/or benefits-related agreements as follows: (i) Relocation Expenses Reimbursement Agreement (collectively, the "Other Agreements").
- C. Employer and Employee desire to amend and restate the Existing Employment Agreement to incorporate into a single document the terms and conditions of the Existing Employment Agreement and the Other Agreements as set forth herein.
- D. Employer and Employee intend that this Agreement shall supersede in their entirety the Existing Employment Agreement and the Other Agreements, which Existing Employment Agreement and Other Agreements are, by this Agreement, hereby terminated in their entirety.

AGREEMENTS

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

"**Acquiring Corporation**" shall mean the surviving, successor or purchasing corporation or parent corporation thereof, in a Change in Control, as the case may be.

"**Cause**" means the occurrence of any of the following events, as determined by the Board of Directors of Employer, in good faith:

(i) Employee's theft, material act of dishonesty or fraud, or intentional falsification of any records of Employer;

(ii) Employee's breach of the Aastrom Biosciences, Inc. Employee Proprietary Information and Invention Agreement or any other agreement with the Employer covering the use or disclosure of confidential or proprietary information of Employer, the ownership of intellectual property or restrictions on competition;

(iii) Employee's gross negligence or willful misconduct in the performance of Employee's assigned duties (but not mere unsatisfactory performance);

or

(iv) Employee's conviction (including any plea of guilty or nolo contendere) of a crime causing material harm to the reputation or standing of Employer or which materially impairs Employee's ability to perform his duties for Employer.

"Change in Control" shall mean the occurrence of any of the following:

(i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")), other than a trustee or other fiduciary holding securities of Employer under an employee benefit plan of Employer, becomes the "beneficial owner" (as defined in Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Employer representing 50% or more of (A) the outstanding shares of common stock of Employer or (B) the combined voting power of Employer's then-outstanding securities;

(ii) Employer is party to a merger or consolidation which results in the holders of voting securities of Employer outstanding immediately prior thereto failing to continue to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least 50% of the combined voting power of the voting securities of Employer or such surviving entity outstanding immediately after such merger or consolidation; or

(iii) the sale or disposition of all or substantially all of Employer's assets (or consummation of any transaction having similar effect).

"Current Residence" shall mean the Employee's residence in Illinois as of June 2004.

"Disability" means that:

(i) Employee has been incapacitated by bodily injury, illness or disease so as to be prevented thereby from effectively performing Employee's duties;

(ii) Such incapacity shall have continued for a period of six (6) consecutive months; and

(iii) Such incapacity will, in the opinion of a qualified physician, be long-term, which shall mean a period exceeding twelve (12) months.

"Employer" means Aastrom Biosciences, Inc., a Michigan corporation, and, following a Change in Control, any Successor that agrees to assume all of the terms and provisions of this Agreement, or a Successor which otherwise becomes bound by operation of law to this Agreement.

"Good Reason" means the occurrence of any of the following conditions following a Change in Control, without Employee's informed written consent, which condition(s) remain(s) in effect ten (10) days after written notice to Employer from Employee of such condition(s):

(i) assignment of Employee to responsibilities or duties that are not a Substantive Functional Equivalent of the position which Employee occupied prior to the Change in Control;

(ii) any decrease in Employee's base salary or target bonus amount (subject to applicable performance requirements with respect to the actual amount of bonus compensation earned by Employee);

(iii) any failure by Employer to (A) continue to provide Employee with the opportunity to participate, on terms no less favorable than those in effect for the benefit of any employee group which customarily includes a person holding the employment position or a comparable position with Employer then held by Employee, in any benefit or compensation plans and programs, including, but not limited to, Employer's life, disability, health, dental, medical, savings, profit sharing, stock purchase and retirement plans, if any, in which Employee was participating immediately prior to the date of the Change in Control, or their equivalent, or (B) provide Employee with all other fringe benefits (or their equivalent) from time to time in effect for the benefit of any employee group which customarily includes a person holding the employment position or a comparable position with Employer then held by Employee;

(iv) the relocation of Employee's work place for Employer to a location more than 50 miles from the location of the work place prior to the Change in Control, or the imposition of travel requirements substantially more demanding of Employee than such travel requirements existing immediately prior to the Change in Control; or

(v) any material breach of this Agreement by Employer.

“New Residence” shall mean the Employee's new principal residence located within fifty (50) miles of Ann Arbor, Michigan.

“Relocation Costs” shall mean the following actual out-of-pocket costs incurred by the Employee:

(i) Coach class airfare for Employee's family to move from Employee's Current Residence to Ann Arbor, Michigan, or, in the alternative, reimbursement of reasonable automobile operating costs (gas, tolls, etc.), not to exceed the current IRS permitted per mile allowances, for up to two automobiles required to move the Employee's family.

(ii) Cost for packing, shipping, and unloading personal household furnishings and belongings from Employee's Current Residence to his New Residence, including temporary storage as needed.

(iii) Shipment of one personal vehicle from Illinois to Ann Arbor, Michigan, via common carrier.

(iv) All real estate sales commissions paid by Employee on the sale of his Current Residence, up to 6% of the gross proceeds realized by the Employee from such sale.

(v) Usual, customary and reasonable closing costs incurred by Employee in connection with the sale of his Current Residence if typically paid by the seller. Closing costs shall be defined as transfer taxes, documentary stamp taxes, title insurance premiums, recording charges, appraisals, inspections, attorneys fees, surveys, escrow fees and such other usual, customary and reasonable closing costs as are specifically approved by the Chairman and Chief Executive Officer of Employer. Closing Costs shall not include payments required at closing for real property taxes or assessments, or proration of utilities or other prepaid expenses.

(vi) Coordination services to be provided by Prudential Relocation Management, or an equivalent service provider.

(vii) Usual, customary and reasonable closing costs incurred by Employee in connection with the purchase of a New Residence if typically paid by the buyer. Closing costs shall be defined as inspections, attorney fees, mortgage application fees, recording fees and such other usual, customary and reasonable closing costs as are specifically approved by the Chairman and Chief Executive Officer of the Employer. Closing Costs shall not include payments required at closing for real property taxes or assessments, proration of utilities or other prepaid expenses, real estate sales commissions or mortgage points.

(viii) The aggregate of all of the above-described costs shall not exceed \$75,000.00 without prior written agreement of Employer.

“Substantive Functional Equivalent” means an employment position occupied by Employee after a Change in Control that:

(i) is in a substantive area of competence consistent with Employee’s experience and not materially different from the position occupied by Employee prior to the Change in Control;

(ii) requires Employee to serve in a role and perform duties that are functionally equivalent to those performed prior to the Change in Control (such as, executive officer);

(iii) carries a title that does not connote a lesser rank or corporate role than the title held by Employee prior to the Change in Control; and

(iv) does not otherwise constitute a material, adverse change in Employee’s responsibilities or duties, as measured against Employee’s responsibilities or duties prior to the Change in Control, causing it to be of materially lesser rank or responsibility.

“Successor” means Employer and any successor or assign to substantially all of its business and/or assets.

2. Employment. Employer hereby engages Employee, and Employee hereby accepts such engagement, upon the terms and conditions set forth herein.

3. Duties. Employee is engaged as President and Chief Operating Officer. Employee shall perform faithfully and diligently the duties customarily performed by persons in

the position for which employee is engaged, together with such other reasonable and appropriate duties as Employer shall designate from time to time. Employee shall devote Employee's full business time and efforts to the rendition of such services and to the performance of such duties. As a full-time employee of Employer, Employee shall not be entitled to provide consulting services or other business or scientific services to any other party, without the prior written consent of Employer.

4. Compensation and Fringe Benefits.

4.1 Base Salary. During the term of this Agreement, as compensation for the proper and satisfactory performance of all duties to be performed by Employee hereunder, Employer shall pay to Employee a salary of Two Hundred Sixty Thousand and 00/100 Dollars (\$260,000.00) per year, increased to Two Hundred Seventy Two Thousand Five Hundred and 00/100 Dollars (\$272,500) per year effective as of July 1, 2005, payable in arrears in equal semi-monthly installments, less required deductions for state and federal withholding tax, Social Security and all other employee taxes and payroll deductions. The base salary shall be subject to review and adjustment on an annual basis.

4.2 Customary Fringe Benefits. Employee shall be entitled to such fringe benefits as Employer customarily makes available to employees of Employer engaged in the same or similar position as Employee ("Fringe Benefits"). Such Fringe Benefits may include vacation leave, sick leave, and health insurance coverage. Employer reserves the right to change the Fringe Benefits on a prospective basis, at any time, effective upon delivery of written notice to Employee.

4.3 Vacation. Employee is entitled to twenty (20) days of vacation in each calendar year.

4.4 Accumulation. Employee shall earn and accumulate unused vacation and sick leave in accordance with the Company's policy in effect from time to time. Further, Employee shall not be entitled to receive payments in lieu of Fringe Benefits, other than for unused vacation leave earned and accumulated at the time the employment relationship terminates.

4.5 Relocation Costs.

4.5.1 Temporary Housing. Employee agrees to relocate his principal domestic residence to within fifty (50) miles of Ann Arbor, Michigan by January 1, 2005. Employee shall promptly offer his Current Residence for sale through Prudential Relocation Management. Until Employee purchases a new home in the Ann Arbor, Michigan area, but in no event later than January 1, 2005, Employer shall provide Employee (and, beginning August 10, 2004 if Employee's Current Residence has not been sold by such date, Employee's immediate family) furnished, temporary housing in the Ann Arbor, Michigan area or, at Employer's option, reimburse the Employee for Employee's actual out-of-pocket cost to obtain furnished, temporary housing in the Ann Arbor, Michigan area.

4.5.2 Relocation Costs. Employer shall pay for the Relocation Costs either through payments to Prudential Relocation Management or by direct reimbursement of Employee upon presentation of appropriate invoices and/or receipts for the expenditures and

expenses for the Relocation Costs. The Employee shall be required to refund and pay to Employer 100% of the Relocation Costs that have been paid by the Employer on the following terms:

(i) If Employee's employment with Employer ceases within 18 months after Employee commences full-time employment with Employer (the "Commencement Date"), due to the Employee voluntarily electing to leave the employ of Employer, or Employer terminating the Employee for Cause, Employee hereby agrees to refund and pay to Employer 100% of the Relocation Costs that have been paid by Employer.

(ii) If Employer elects to terminate the employment of Employee without Cause, then Employee shall have no obligation to refund any of the Relocation Costs. If Employee's employment terminates due to Employee's death or disability, then Employee shall have no obligation to refund any of the Relocation Costs.

(iii) With respect to any of the Relocation Costs which Employee does become obligated to refund to Employer, as specified above, said refund shall be made within six months after the termination of employment. Any portion of the Relocation Costs which are obligated to be refunded by Employee, and which are not refunded within said six (6) months, shall thereafter bear a late payment charge of 10% per annum.

5. Term.

5.1 Commencement Date. The employment relationship pursuant to this Agreement shall commence on July 6, 2005. For purposes of Section 4.5.2 the Commencement Date shall be July 5, 2004.

5.2 Termination at Will. Employer and Employee acknowledge and agree that Employer's employment currently is "at will" and that their employment relationship may be terminated by either party at any time, with or without Cause.

6. Payments Upon Termination.

6.1 Payment of Compensation Upon Termination. Upon termination of Employee's employment with the Company, Employee shall be entitled to be paid his base salary through the effective date of such termination, as full compensation for any and all claims of Employee under this Agreement or otherwise, except as set forth in Section 6.2.

6.2 Payment of Severance Upon Termination.

6.2.1 Severance. In the event Employee's employment is terminated by Employer without Cause, or in the event of Employee's termination of his employment for Good Reason within twelve (12) months following a Change in Control, then Employer shall pay to Employee severance payment equal to nine (9) months of Employee's then current salary rate, less customary payroll deductions. The severance payment shall be paid in equal installments over nine (9) months in accordance with the Employer's normal payroll periods, except that severance payments due following a Change in Control shall be paid in a lump sum immediately following the Change in Control.

6.2.2 Continued Medical Coverage. In the event Employee's employment is terminated, then Employee shall be entitled to elect continued medical insurance coverage in accordance with applicable provisions of the Consolidated Budget Reconciliation Act of 1985 ("COBRA").

6.2.3 Right to Terminate. Employer retains and reserves the right to terminate the employment of Employee at any time, with or without Cause. For avoidance of doubt, said severance payment shall not be owed if Employee's termination is for Cause, if Employee voluntarily terminates employment for reasons other than as specified in Section 6.2.1 hereof or if Employee's employment terminates as a result of Employee's death or disability.

6.2.4 No Liability. No director, officer or shareholder of Employer shall have any personal liability for the payment of any severance to Employee.

6.3 Resignation. Employee's entitlement to any compensation or benefits under this Section 6 (other than compensation and benefits earned by Employee through the date of Employee's termination of employment) is conditioned upon Employee's resignation from all capacities in which Employee is then rendering services to Employer, including from the Board of Directors and any committees thereof on which Employee serves.

6.4 Exclusive Remedy. The parties acknowledge and agree that the payments specified herein constitute Employee's sole and exclusive remedy for any alleged injury or other damages arising out of a termination of Employee's employment under circumstances described herein. Accordingly, as a condition to receipt of said payments, Employee shall sign a customary and reasonable release form, in the form attached hereto as Exhibit A, pursuant to which Employee acknowledges and agrees that Employee has no claims against Employer or any director, officer, shareholder or agent of Employer, or any successor in interest to Employer, with respect to any employment matters or termination of employment (excepting only for accrued salary, accrued vacation leave and reimbursement of customary business expenses incurred on behalf of Employer, all in the ordinary course of business, or any incentive sale bonus to which Employee may be entitled, if any).

7. General Provisions.

7.1 Attorneys' Fees. In the event of any dispute or breach arising with respect to this Agreement, the party prevailing in any negotiations or proceedings for the resolution or enforcement thereof shall be entitled to recover from the losing party reasonable expenses, attorneys' fees and costs incurred therein.

7.2 Amendments. No amendment or modification of the terms or conditions of this Agreement shall be valid unless in writing and signed by both parties hereto. There shall be no implied-in-fact contracts modifying the terms of this Agreement. However, the noncumulation of benefits provision of Section 7.6 shall apply to any subsequent agreement, unless (i) such provision is explicitly disclaimed in the subsequent agreement, and (ii) the subsequent agreement has been authorized by the Board of Directors of the Employer or a committee thereof.

7.3 Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the employment of Employee, other than relating to the Employer's stock

option grants to Employee, the Employer's inventions, trade secrets, and proprietary and confidential information, competition with the Employer and solicitation of the Employer's employees. This Agreement supersedes all prior agreements, understandings, negotiations and representation with respect to the employment relationship, including, without limitation, the Existing Employment Agreement and the Other Agreements, each of which is hereby terminated in its entirety.

7.4 Successors and Assigns. This Agreement shall inure to the benefit of and be enforceable by the Employee's personal and legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

7.5 No Limitation of Regular Benefit Plans. This Agreement is not intended to and shall not affect, limit or terminate any plans, programs, or arrangements of Employer that are regularly made available to a significant number of employees or officers of the Employer, including without limitation Employer's stock option plans.

7.6 Noncumulation of Benefits. Employee may not cumulate cash severance payments under both this Agreement and another agreement. If Employee has any other binding written agreement with Employer which provides that, upon a Change in Control or termination of employment, Employee shall receive one or more of the benefits described in Sections 6 of this Agreement (i.e., the payment of cash compensation), then with respect to those benefits the aggregate amounts payable under this Agreement shall be reduced by the amounts paid or payable under such other agreements.

7.7 No Assignment of Benefits. The rights of any person to payments or benefits under this Agreement shall not be made subject to option or assignment, either by voluntary or involuntary assignment or by operation of law, including (without limitation) bankruptcy, garnishment, attachment or other creditors process, and any action in violation of this Section 7.7 shall be void.

7.8 Notices. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered, when mailed, if mailed by U.S. registered or certified mail, return receipt requested and postage prepaid, or when shipped, if shipped by nationally known reputable overnight delivery service and shipping charges prepaid. In the case of Employee, notices shall be addressed to Employee at the home address which he most recently communicated to the Employer, in writing. In the case of the Employer, notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

7.9 No Duty to Mitigate. Employee shall not be required to mitigate the amount of any payment contemplated by this Agreement (whether by seeking employment with a new employer or in any other manner), nor shall any such payment be reduced by any earnings that Employee may receive from any other source except as otherwise provided herein.

7.10 No Representations. Employee acknowledges that in entering into this Agreement Employee is not relying and has not relied on any promise, representation or statement made by or on behalf of the Employer which is not set forth in this Agreement.

7.11 Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of Michigan, without regard to its choice of law rules.

7.12 Waiver. Either party's failure to enforce any provision of this Agreement shall not in any way be construed as a waiver of any such provision, or prevent that party thereafter from enforcing each and every other provision of this Agreement.

7.13 Severable Provisions. The provisions of this Agreement are severable, and if any one or more provisions may be determined to be judicially unenforceable, in whole or in part, the remaining provisions shall nevertheless be binding and enforceable.

7.14 Tax Withholding. The payments to be made pursuant to this Agreement will be subject to customary withholding of applicable income and employment taxes.

7.15 Consultation. Employee acknowledges that this Agreement confers significant legal rights on Employee, and also involves Employee waiving other potential rights he might have under other agreements and laws. Employee acknowledges that Employer has encouraged Employee to consult with Employee's own legal, tax, and financial advisers before signing the Agreement; and that Employee has had adequate time to do so before signing this Agreement.

7.16 Counterparts. This Agreement may be executed in counterparts, and each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

7.17 Excess Parachute Payment. In the event that any payment or benefit received or to be received by Employee pursuant to this Agreement or otherwise would subject Employee to any excise tax pursuant to Section 4999 of the Code due to the characterization of such payment or benefit as an excess parachute payment under Section 280G of the Code, Employee may elect in his sole discretion to reduce the amounts of any payments or benefits otherwise called for under this Agreement in order to avoid such characterization.

7.18 Claims Procedure for Severance Payments.

7.18.1 Administrator. The administrator for purposes of the severance payments provided by Section 6.2 of this Agreement shall be the Employer ("Administrator"), whose address is 24 Frank Lloyd Wright Dr., P.O. Box 376, Ann Arbor, Michigan 48106, and whose telephone number is 734-930-5555. The "Named Fiduciary" as defined in Section 402(a)(2) of ERISA, also shall be the Employer. The Employer shall have the right to designate one or more employees as the Administrator and the Named Fiduciary at any time, and to change the address and telephone number of the same. The Employer shall give the Employee written notice of any change in the Administrator and Named Fiduciary, or in the address or telephone number of the same.

7.18.2 Claims. The Administrator shall make all determinations as to the right of any person to receive benefits under this Agreement. Any denial by the Administrator of a claim for benefits by the Employee ("the claimant") shall be stated in writing by the Administrator and delivered or mailed to the claimant within ten (10) days after receipt of the claim, unless special

circumstances require an extension of time for processing the claim. If such an extension is required, written notice of the extension shall be furnished to the claimant prior to the termination of the initial 10-day period. In no event shall such extension exceed a period of ten (10) days from the end of the initial period. Any notice of denial shall set forth the specific reasons for the denial, specific reference to pertinent provisions of this Agreement upon which the denial is based, a description of any additional material or information necessary for the claimant to perfect the claim, with an explanation of why such material or information is necessary, and any explanation of claim review procedures, and the time limits applicable to such procedures, including a statement of the claimant's right to bring a civil action under ERISA Section 502(a) after exhausting all levels of appeal provided herein, written to the best of the Administrator's ability in a manner that may be understood without legal or actuarial counsel.

7.18.3 Review of Claim Denial. A claimant whose claim for benefits has been wholly or partially denied by the Administrator may request, within sixty (60) days following the date of such denial, in a writing addressed to the Administrator, a review of such denial. The claimant shall be entitled to submit such issues or comments in writing or otherwise, as the claimant shall consider relevant to a determination of the claim, and the claimant may include a request for a hearing in person before the Administrator. Prior to submitting the request, the claimant shall be entitled to review such documents as are relevant to the claim. The claimant may, at all stages of review, be represented by counsel, legal or otherwise, of the claimant's choice. All requests for review shall be promptly resolved. The Administrator's decision with respect to any such review shall be set forth in writing and shall be mailed to the claimant not later than ten (10) days following receipt by the Administrator of the claimant's request unless special circumstances, such as the need to hold a hearing, require an extension of time for processing, in which case the Administrator's decision shall be so mailed not later than twenty (20) days after receipt of such request.

7.18.4 Arbitration. A claimant who has followed the procedure in paragraphs 7.18.2 and 7.18.3 of this Section, but who has not obtained full relief on the claim for benefits, may, within sixty (60) days following the claimant's receipt of the Administrator's written decision on review, apply in writing to the Administrator for arbitration of the claim as provided in Section 7.19.

7.19 Arbitration.

(a) Either party to this Agreement, after complying with the requirements of Section 7.18, to the extent applicable, may submit any dispute under this Agreement for binding arbitration of the dispute before an arbitrator mutually acceptable to both parties, the arbitration to be held in Ann Arbor, Michigan, in accordance with the arbitration rules of the American Arbitration Association, as then in effect, and the rights of claimant under Section 7.18. If the parties are unable to mutually agree upon an arbitrator, then the arbitration proceedings shall be held before three arbitrators, one of which shall be designated by the Employer, one of which shall be designated by the claimant and the third of which shall be designated mutually by the first two arbitrators in accordance with the arbitration rules referenced above. The arbitrator(s) sole authority shall be to interpret and apply the provisions of this Agreement; the arbitrator(s) shall not change, add to, or subtract from, any of the Agreement's provisions. The arbitrator(s)

shall have the power to compel attendance of witnesses at the hearing. Any court having jurisdiction may enter a judgment based upon such arbitration. Except as set forth in Section 7.18, the decision of the arbitrator(s) shall be final and binding on the parties to this Agreement and without appeal to any court. Except as set forth in Section 7.18, upon execution of this Agreement, the Employee shall be deemed to have waived any right to commence litigation proceedings regarding this Agreement outside of arbitration without the express written consent of the Employer.

(b) In the case of a dispute relating to severance payments provided by Section 6.2, the decision of the arbitrator(s) shall be delivered or mailed to the claimant within sixty (60) days of the claimant's initial request for review of the denied claim under Section 7.18, unless special circumstances require an extension of time. If an extension is needed the arbitrator(s) shall, before the end of the sixty (60) day period, give to the claimant written notice of the special circumstances requiring the extension and the date by which the arbitrator(s) expect(s) to render a decision. The extension of time shall not exceed sixty (60) days from the end of the initial sixty (60) day period. Notwithstanding the provisions of Section 7.19(b), in the case of a dispute relating to severance payments provided by Section 6.2, the claimant shall not be precluded from challenging the arbitrator's decision under Section 502(a) of ERISA.

7.20 ERISA. The severance compensation provided by Section 6.2 of this Agreement constitutes an unfunded compensation arrangement for a member of a select group of the Employer's management and any exemptions under ERISA, as applicable to such an arrangement, shall be applicable to this Agreement. Section 7.18, Section 7.19(b), Section 7.20 apply to the severance compensation provided by Section 6.2 of this Agreement.

7.21 Reporting and Disclosure. The Employer, from time to time, shall provide government agencies with such reports concerning this Agreement as may be required by law, and the Employer shall provide the Employee with such disclosure concerning this Agreement as may be required by law or as the Employer may deem appropriate.

8. Employee's Representations. Employee represents and warrants that Employee (i) is free to enter into this Agreement and to perform each of the terms and covenants contained herein, (ii) is not restricted or prohibited, contractually or otherwise, from entering into and performing this Agreement, and (iii) will not be in violation or breach of any other agreement by reason of Employee's execution and performance of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date set forth above.

EMPLOYER:

Aastrom Biosciences, Inc.

By:

 R. Douglas Armstrong, Ph.D.

EMPLOYEE:

 James A. Cour

Address: _____

EXHIBIT A
TO AASTROM BIOSCIENCES, INC.
EMPLOYMENT AGREEMENT

RELEASE AGREEMENT

THIS AGREEMENT ("Agreement") is made by and between James A. Cour ("Executive") and Aastrom Biosciences, Inc. (the "Company").

RECITALS

- A. Executive has terminated employment as an executive officer of Company, effective _____, ____.
- B. Executive has been given the opportunity to review this Agreement, to consult with legal counsel, and to ascertain his rights and remedies.
- C. Executive and Company, without any admission of liability, desire to settle with finality, compromise, dispose of, and release any and all claims and demands asserted or which could be asserted arising out of Executive's employment at and separation from Company.

In consideration of the foregoing and of the promises and mutual covenants contained herein, it is hereby agreed between Executive and Company as follows:

AGREEMENT

1. In exchange for the good and valuable consideration set forth in that certain Employment Agreement, made as of January ____, 2006, between the Company and Executive (the "Employment Agreement"), Executive hereby releases, waives and discharges any and all manner of action, causes of action, claims, rights, charges, suits, damages, debts, demands, obligations, attorneys fees, and any and all other liabilities or claims of whatsoever nature, whether in law or in equity, known or unknown, including, but not limited to, age discrimination under The Age Discrimination In Employment Act of 1967 (as amended), employment discrimination prohibited by other federal, state or local laws, and any other claims, which Executive has claimed or may claim or could claim in any local, state or federal or other forum, against Company, its directors, officers, employees, agents, attorneys, successors and assigns as a result of or relating to Executive's employment at and separation from Company and as an officer of Company as a result of any acts or omissions by Company or any of its directors, officers, employees, agents, attorneys, successors or assigns ("Covered Acts or Omissions") which occurred prior to the date of this Agreement; excluding only (i) those to compel the payment of amounts due to Executive as provided in the Employment Agreement, (ii) enforcement of any rights of Executive under any stock option agreements with the Company or (iii) those for indemnification under the Company's articles of incorporation, bylaws or applicable law by reason of his service as an officer or director of the Company.
 2. Executive agrees to immediately return to Company all property, assets, manuals, materials, information, notes, reports, agreements, memoranda, customer lists, formulae, data, know-how, inventions, trade secrets, processes, techniques, and all other assets, materials and
-

information of any kind or nature, belonging or pertaining to Company (“Company Information and Property”), including, but not limited to, computer programs and diskettes or other media for electronic storage of information containing Company Information and Property, in Executive’s possession, and Executive shall not retain copies of any such Company Information and Property. Executive further agrees that from and after the date hereof he will not remove from Company’s offices any Company Information and Property, nor retain possession or copies of any Company Information and Property.

3. Executive agrees that he shall never make any statement that negatively affects the goodwill or good reputation of the Company, or any officer or director of Company, except as required by law, and except that such statements may be made to members of the Board of Directors of the Company.

4. Executive covenants and agrees that he shall never commence or prosecute, or knowingly encourage, promote, assist or participate in any way, except as required by law, in the commencement or prosecution, of any claim, demand, action, cause of action or suit of any nature whatsoever against Company or any officer, director, employee or agent of Company (“Covered Litigation”) that is based upon any claim, demand, action, cause of action or suit released pursuant to this Agreement or involving or based upon the Covered Acts and Omissions.

5. Executive further agrees that he has read this Agreement carefully and understands all of its terms.

6. Executive understands and agrees that he was advised to consult with an attorney and did so prior to executing this Agreement.

7. Executive understands and agrees that he has been given twenty-one (21) days within which to consider this Agreement.

8. Executive understands and agrees that he may revoke this Agreement for a period of seven (7) calendar days following the execution of this Agreement (the “Revocation Period”). This Agreement is not effective until this revocation period has expired. Executive understands that any revocation, to be effective, must be in writing and either (a) postmarked within seven (7) days of execution of this Agreement and addressed to Aastrom Biosciences, Inc., 24 Frank Lloyd Drive, Ann Arbor, Michigan 48105 or (b) hand delivered within seven (7) days of execution of this Agreement to Aastrom Biosciences, Inc., 24 Frank Lloyd Drive, Ann Arbor, Michigan 48105. Executive understands that if revocation is made by mail, mailing by certified mail, return receipt requested, is recommended to show proof of mailing.

9. In agreeing to sign this Agreement and separate from Company, Executive is doing so completely voluntarily and of his own free-will and without any encouragement or pressure from Company and agrees that in doing so he has not relied on any oral statements or explanations made by Company or its representatives.

10. Both parties agree not to disclose the terms of this Agreement to any third party, except as is required by law, or as is necessary for purposes of securing counsel from either parties’ attorneys or accountants.

11. This Agreement shall not be construed as an admission of wrongdoing by Company.

12. This Agreement contains the entire agreement between Executive and Company regarding the matters set forth herein. Any modification of this Agreement must be made in writing and signed by Executive and each of the entities constituting the Company.

13. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of Michigan, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Michigan or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Michigan.

14. In the event any provision of this Agreement or portion thereof is found to be wholly or partially invalid, illegal or unenforceable in any judicial proceeding, then such provision shall be deemed to be modified or restricted to the extent and in the manner necessary to render the same valid and enforceable, or shall be deemed excised from this Agreement, as the case may require, and this Agreement shall be construed and enforced to the maximum extent permitted by law, as if such provision had been originally incorporated herein as so modified or restricted, or as if such provision had not been originally incorporated herein, as the case may be.

15. If there is a breach or threatened breach of the provisions of this Agreement, Company may, in addition to other available rights and remedies, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce, or prevent any violation of, any of the provisions of this Agreement.

16. In the event that Executive violates the terms of this Agreement, in addition to other available rights and remedies, the Company shall be released of all of its remaining obligations under the Severance Agreement.

The parties hereto have entered into this Agreement as of this _____ day of _____, ____.

AASTROM BIOSCIENCES, INC.

By: _____

Name: _____

Title: _____

EXECUTIVE

James A. Cour

CERTIFICATION

I, R. Douglas Armstrong, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aastrom Biosciences, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2006

/s/ R. Douglas Armstrong

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

CERTIFICATION

I, Gerald D. Brennan, Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aastrom Biosciences, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2006

/s/ Gerald D. Brennan, Jr.

Gerald D. Brennan, Jr.
Vice President Administrative & Financial
Operations, Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Aastrom Biosciences, Inc. (the "Company") on Form 10-Q for the quarter ended December 31, 2005, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, R. Douglas Armstrong, Chief Executive Officer and Chairman of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 ("Section 906"), that:

- (1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 8, 2006

/s/ R. Douglas Armstrong

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

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Aastrom Biosciences, Inc. (the "Company") on Form 10-Q for the quarter ended December 31, 2005, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gerald D. Brennan, Jr., Vice President Administrative and Financial Operations and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 ("Section 906"), that:

- (1) The Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934 (15 U.S.C. 78m); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 8, 2006

/s/ Gerald D. Brennan, Jr.

Gerald D. Brennan, Jr.

Vice President Administrative & Financial
Operations, Chief Financial Officer
(Principal Financial and Accounting Officer)