UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 8-K

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

> Date of report (date of earliest event reported): May 8, 2007

Aastrom Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Michigan (State or other jurisdiction of incorporation) **0-22025** (Commission File No.) 94-3096597 (I.R.S. EmployerIdentification No.)

24 Frank Lloyd Wright Drive P.O. Box 376 Ann Arbor, Michigan 48106 (Address of principal executive offices)

Registrant's telephone number, including area code: (734) 930-5555

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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Item 2.02 Results of Operations and Financial Condition.

On May 8, 2007, we issued a press release announcing financial results and achievements for our third fiscal quarter ended March 31, 2007. A copy of the press release is attached hereto as Exhibit 99.1.

Pursuant to General Instruction B.2 of Form 8-K, this report and the exhibit are not deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall this report and the exhibit be incorporated by reference into our filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, except as expressly set forth by specific reference in such future filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.		Description	
99.1	Press Release dated May 8, 2007		
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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 hereunto duly authorized.

Date: May 8, 2007

AASTROM BIOSCIENCES, INC.

By: <u>/s/ Gerald D. Brennan</u>, Jr.

Gerald D. Brennan, Jr. Vice President Administrative & Financial Operations and CFO

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FOR IMMEDIATE RELEASE

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AASTROM REPORTS THIRD QUARTER FISCAL YEAR 2007 FINANCIAL RESULTS

- Company Achieves Multiple Clinical Milestones; Initiates Several Clinical Trials -

Ann Arbor, Michigan, May 8, 2007 — Aastrom Biosciences, Inc. (Nasdaq: ASTM), a regenerative medicine company, today reported financial results for the third fiscal quarter ended March 31, 2007. The Company also reported clinical milestones achieved since January of 2007:

- FDA approval of U.S. Phase III multi-center clinical trial to treat patients debilitated by osteonecrosis of the femoral head. This prospective, controlled, randomized trial seeks to enroll 120 patients at up to 20 clinical sites.
- Initiation of U.S. Phase IIb multi-center clinical trial to treat patients suffering from critical limb ischemia, the end stage of peripheral arterial disease. This prospective, controlled, randomized, double-blind trial seeks to enroll 120 patients at up to 20 clinical sites.
- Initiation of and patient treatments in a pivotal clinical trial for osteonecrosis of the femoral head in Spain.
- Receipt of Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) for the treatment of dilated cardiomyopathy (DCM).
- Positive interim data reported from the U.S. long bone non-union fracture trial at annual meeting of American Academy of Orthopaedic Surgeons. To date, multiple bone bridges, which are evidence of healing, have been observed in 90% of the patients who have completed the 12 month follow-up.

"Last fall we outlined several significant clinical milestones that we wanted to achieve over the course of calendar year 2007. We are pleased with the progress we have made to date, especially with the recent announcements that the FDA approved two of our U.S. clinical trials. Within the last week, we have initiated both a Phase III clinical trial for the treatment of osteonecrosis of the femoral head and a Phase IIb clinical trial to treat critical limb ischemia, both of which are significant achievements. We are recruiting clinical sites for the osteonecrosis multi-center trial. Patient recruitment is currently ongoing for the critical limb ischemia trial, and additional sites are expected to be added over the next few months," said George Dunbar, President and Chief Executive Officer of Aastrom. "We are focused on our goal of bringing TRC-based therapies to physicians and their patients. As we continue to initiate and execute clinical trials in our targeted therapeutic areas, we are building a strong foundation for our future in regenerative medicine. We look forward to reporting the achievement of additional clinical milestones during the remainder of 2007."

Third Fiscal Quarter Ended March 31, 2007 Results

Total revenues for the quarter and nine months ended March 31, 2007, consisting of product sales and grant funding, were \$258,000 and \$520,000, respectively, compared to \$238,000 and \$535,000 for the same periods in fiscal year 2006.

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Aastrom Biosciences § Domino's Farms, Lobby L § 24 Fcank Lloyd Wright Dr. § Ann Arbor, MI 48105 USA Tel: 734-930-5555 § Fax : 734-665-0485 § mail@aastrom.com § www.aastom.com Total costs and expenses for the quarter and nine months ended March 31, 2007 increased to \$5,180,000 and \$14,766,000, respectively, from \$5,037,000 and \$13,467,000 for the same periods in fiscal year 2006.

Research and development expenses for the quarter and nine months ended March 31, 2007 increased to \$3,096,000 and \$7,963,000, respectively, from \$2,597,000 and \$6,745,000 for the same periods in fiscal year 2006. These increases reflect continued expansion of our research and development activities to support future regulatory submissions, on-going and planned tissue regeneration clinical trials in the U.S. and EU and the development of facilities for product manufacturing. Research and development expenses for the quarter and nine months ended March 31, 2007, also include non-cash charges of \$202,000 and \$492,000, respectively, compared to \$90,000 and \$288,000 for the same periods in fiscal year 2006, relating to share-based compensation expense.

Selling, general and administrative costs decreased for the quarter, and slightly increased for the nine months, ended March 31, 2007 to \$2,070,000 and \$6,786,000, respectively, from \$2,438,000 and \$6,711,000 for the same periods in fiscal year 2006. For the quarter and nine months ended March 31, 2007, these costs include non-cash charges of \$501,000 and \$1,656,000, respectively, compared to \$200,000 and \$503,000 for the same periods in fiscal year 2006, relating to share-based compensation expense.

Interest income for the quarter and nine months ended March 31, 2007 increased to \$439,000 and \$1,481,000, respectively, from \$250,000 and \$753,000 for the same periods in fiscal year 2006. 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 to improved yields from our investments.

Net loss for the quarter ended March 31, 2007 was \$4,483,000, or \$.04 per share, compared to a net loss of \$4,549,000, or \$.04 per share for the same period in fiscal year 2006. Net loss for the nine months ended March 31, 2007, was \$12,765,000, or \$.11 per share, compared to \$12,179,000, or \$.12 per share for the same period in fiscal year 2006. The change in net loss per share for the nine month periods 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.

At March 31, 2007, the Company had \$32.6 million in cash, cash equivalents and short-term investments as compared to \$43.0 million at June 30, 2006.

Aastrom Conference Call Information

George W. Dunbar, President and Chief Executive Officer, Gerald D. Brennan, Jr., Vice President, Administrative & Financial Operations and Chief Financial Officer, and Elmar R. Burchardt, M.D., Ph.D., Vice President, Medical Affairs of Aastrom Biosciences, Inc., will host a conference call to review and discuss the third quarter fiscal year 2007 financial results at 9:00 a.m. (EDT) today, May 8, 2007. Interested parties should call toll-free (877) 407-9205, or from outside the U.S. (201) 689-8054, fifteen minutes before the start of the call to register and identify themselves as registrants of the 'Aastrom Conference Call'. Any registered caller on the toll-free line may ask to be placed in the queue for the Question & Answer session. The call will be simulcast on the web at http://www.vcall.com/IC/CEPage.asp?ID=115723. A podcast of the call may be downloaded from the web at the internet address above. If you are unable to participate during the live call, the webcast will be available for replay at http://www.investorcalendar.com/ for 60 days. Also, through May 18, 2007, an audio replay of the call will be available by dialing toll-free (877) 660-6853, or from outside the U.S. (201) 612-7415; when prompted on the phone line, the Account # is: 286 and the Conference ID# is: 237442.

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About Aastrom Biosciences, Inc.

Aastrom is a regenerative medicine company developing autologous cell products for the repair or regeneration of multiple human tissues, based on its proprietary Tissue Repair Cell (TRC) Technology. Aastrom's TRC-based products are a unique cell mixture of stem and progenitor cells, produced from a small amount of bone marrow taken from the patient. TRC-based products have been used in over 250 patients, and are currently in clinical trials for bone regeneration (osteonecrosis of the femoral head, long bone fractures and spine fusion applications) and vascular regeneration (critical limb ischemia applications). The Company is also developing programs to address cardiac and neural regeneration indications. TRC-based products have received Orphan Drug Designation from the FDA for use in the treatment of osteonecrosis of the femoral head and the treatment of dilated cardiomyopathy, a severe chronic disease of the heart.

For more information, visit Aastrom's website at www.aastrom.com. (astmf)

This document contains forward-looking statements, including without limitation, statements concerning clinical trial plans and expectations, intended product development and commercialization objectives, expected milestones, plans for the current fiscal year and potential product applications, which involve certain risks and uncertainties. The forward-looking statements are also identified through use of the words "planned," "expected," "seeks," and other words of similar meaning. Actual results may differ significantly from the expectations contained in the forward-looking statements. Among the factors that may result in differences are the inherent uncertainties associated with clinical trial and product development activities, regulatory approval requirements, the availability of resources and the allocation of resources among different potential uses. **These and other significant factors are discussed in greater detail in Aastrom's Annual Report on Form 10-K and other filings with the Securities and Exchange Commission.**

— Financial Table Follows —

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AASTROM BIOSCIENCES, INC.

(Unaudited)

(In thousands, except per share amounts)

CONSOLIDATED STATEMENTS OF OPERATIONS DATA:

Property and equipment, net

		ed March 31,	Nine months en	
REVENUES:	2006	2007	2006	2007
Total revenues	\$ 238	\$ 258	\$ 535	\$ 520
COSTS AND EXPENSES:	<u>+ 100</u>	<u> </u>	<u> </u>	<u> </u>
Cost of product sales	2	14	11	17
Research and development	2,597	3,096	6,745	7,963
Selling, general and administrative	2,438	2,070	6,711	6,786
Total costs and expenses	5,037	5,180	13,467	14,766
OTHER INCOME	250	439	753	1,481
NET LOSS	\$ (4,549)	\$ (4,483)	\$ (12,179)	\$ (12,765)
NET LOSS PER COMMON SHARE				
(Basic and Diluted)	\$ (.04)	\$ (.04)	\$ (.12)	\$ (.11)
Weighted average number of common shares outstanding	103,033	119,640	102,730	119,443
CONSOLIDATED BALANCE SHEET DATA:				
			June 30,	March 31,
			2006	2007
ASSETS				
Cash and cash equivalents			\$ 9,034	\$ 27,608
Short-term investments			33,963	4,999
Receivables, net			139	96
Inventories			1	8
Other current assets			528	478

Total assets	\$ 44,881	\$ 34,569
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities	\$ 2,539	\$ 2,293
Shareholders' equity	42,342	32,276
Total liabilities and shareholders' equity	\$ 44,881	\$ 34,569

1,216

1,380

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