

FOR IMMEDIATE RELEASE

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AASTROM REPORTS THIRD QUARTER FISCAL YEAR 2008 FINANCIAL RESULTS

Ann Arbor, Michigan, May 12, 2008 -- Aastrom Biosciences, Inc. (Nasdaq: ASTM), a leading regenerative medicine company, today reported financial results for the third fiscal quarter ended March 31, 2008. Since the beginning of the third fiscal quarter, the Company also reported clinical achievements in the cardiac regeneration area, including:

- Encouraging clinical data from the first two patients treated with Aastrom's autologous stem cell therapy for dilated cardiomyopathy (DCM), a type of severe chronic heart failure. This milestone marked the first human application of the Company's Cardiac Repair Cell (CRC) product to regenerate damaged heart tissue in patients with severely impaired cardiac function. Interim data reported on the first two EU compassionate use patients treated with CRCs included:
 - The first patient, a 74 year old male diagnosed with ischemic DCM who also suffered from extensive three-vessel coronary heart disease, renal insufficiency and unstable angina pectoris (chest pain), was treated in November 2007. He presented in class IV heart failure (under New York Heart Association classification guidelines), with a left ventricular ejection fraction of 10% (below the normal range of 60-75% for a typical healthy person), and experiencing severe shortness of breath without physical activity and lying in bed. After CRC treatment and upon hospital discharge, his ejection fraction has improved to 25-30% and clinical improvement to his heart failure stage has been reported.
 - The second patient, a 69 year old female diagnosed with severe DCM, also suffered from extensive three-vessel coronary heart disease and had experienced multiple previous heart attacks, was treated in December 2007. This patient had previously undergone coronary artery bypass grafting, several interventional treatments by catheter and had no other treatment options. After CRC treatment she had experienced an increase in ejection fraction from 25-30% to 45% upon discharge from the hospital.

"The clinical improvement observed in these patients is very encouraging and further supports the development of our U.S. cardiac regeneration program. Similar to the EU compassionate use treatments, our U.S. clinical trial will target the most severe patients suffering from DCM who, other than heart transplant, have no treatment options," said George Dunbar, President and Chief Executive Officer of Aastrom. "Aastrom's technology is already addressing a range of unmet medical needs in the vascular and bone regeneration areas for patients who are suffering from severe diseases or injuries and currently have limited or no treatment options. We look forward to reporting developments from our U.S. cardiac program as they occur."

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Third Fiscal Quarter Ended March 31, 2008 Results

Total revenues for the quarter and nine months ended March 31, 2008, consisting of grant funding and product sales, were \$202,000 and \$373,000, respectively, compared to \$258,000 and \$520,000 for the same periods in fiscal year 2007.

Total costs and expenses for the quarter and nine months ended March 31, 2008 increased to \$5,491,000 and \$16,599,000, respectively, from \$5,180,000 and \$14,766,000 for the same periods in fiscal year 2007.

As a result of the continued expansion of research and development and manufacturing activities to support regulatory submissions, on-going and planned tissue regeneration clinical trials and activities in the U.S. and EU, research and development expenses increased to \$4,032,000 and \$11,800,000, respectively, for the quarter and nine months ended March 31, 2008 compared to \$3,096,000 and \$7,963,000 for the same periods in fiscal year 2007. Research and development expenses for the quarter and nine months ended March 31, 2008, included a non-cash charge of \$204,000 and \$641,000, respectively, compared to \$202,000 and \$492,000 for the same periods in fiscal year 2007, relating to share-based compensation expense.

Selling, general and administrative expenses decreased to \$1,429,000 and \$4,768,000, respectively, for the quarter and nine months ended March 31, 2008 from \$2,070,000 and \$6,786,000 for the same periods in fiscal year 2007. For the quarter and nine months ended March 31, 2008, selling, general and administrative expenses included a non-cash charge of \$324,000 and \$994,000, respectively, compared to \$501,000 and \$1,656,000 for the same periods in fiscal year 2007, relating to share-based compensation expense.

Interest income for the quarter and nine months ended March 31, 2008 decreased to \$266,000 and \$1,017,000, respectively, from \$439,000 and \$1,481,000 for the same periods in fiscal year 2007. 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.

Interest expense was \$25,000 and \$61,000, respectively, for the quarter and nine months ended March 31, 2008 related to long-term debt for equipment acquired during the fiscal year ended June 30, 2007.

Net loss for the quarter ended March 31, 2008 was \$5,048,000, or \$.04 per common share, compared to a net loss of \$4,483,000, or \$.04 per share for the same period in fiscal year 2007. Net loss for the nine months ended March 31, 2008, was \$15,270,000, or \$.12 per common share, compared to \$12,765,000, or \$.11 per share for the same period in fiscal year 2007. The increases in net loss are primarily the result of increased costs and expenses offset in part on a per share basis by an increase in the weighted average number of common shares outstanding.

At March 31, 2008, the Company had \$26.7 million in cash, cash equivalents and short-term investments as compared to \$28.3 million at June 30, 2007. It is expected that our monthly cash utilization will average approximately \$1.8 million for the remainder of fiscal year 2008. If we continue to utilize cash at \$1.8 million per month, our available cash would support operations for approximately 15 months.

For the past 6-10 months, the global economy and capital markets have been challenging for the small cap biotech sector. This situation makes the timing and potential for our future equity financings uncertain. We are taking action to reprioritize our development and clinical programs by redirecting our primary focus to our cardiac regeneration program. This program reprioritization, along with reductions in overhead and staff of approximately 20 to 25 employees is intended to reduce our average cash utilization to approximately \$1.2 million per month for fiscal year ended June 30, 2009.

In an attempt to regain compliance with the \$1.00 minimum closing bid price deficiency, we brought a proposal to our shareholders to authorize the Board of Directors to amend our Restated Articles of

Incorporation to execute a reverse split of our issued and outstanding common stock if they determine it is in the best interests of Aastrom and its shareholders in March 2008. On April 8, 2008 our Special Meeting of Shareholders was adjourned because the Board determined it was essential to provide additional time to continue to obtain greater shareholder turnout and achieve the necessary two-thirds vote required by our charter for this proposal. The Special Meeting reconvened on May 6, 2008, and the proposal was withdrawn by the Board of Directors. Even though more than seventy-five percent (75%) of the shares that were actually voted, were cast in favor of the reverse stock split proposal, it did not receive approval of two-thirds (or 66-2/3%) of all outstanding shares as required by our charter for this proposal. Due to the high number of outstanding shares that were not voted at all, the two-thirds requirement was not obtained. As a result, our management and Board of Directors will continue to evaluate options to preserve our current Nasdaq Capital Market listing and to fund our regenerative medicine clinical programs

Aastrom Conference Call Information

George W. Dunbar, President and Chief Executive 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 2008 financial results at 4:15 p.m. (EDT) today, May 12, 2008. 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.investorcalendar.com/IC/CEPage.asp?ID=128408>. 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/> until August 13, 2008. Also, through May 22, 2008, 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: 282280.

About Aastrom Biosciences, Inc.

Aastrom is a leading regenerative medicine company engaged in the development of autologous cell products for the repair or regeneration of human tissue. The Company's proprietary Tissue Repair Cell (TRC) technology involves the use of a patient's own cells to manufacture products to treat a range of chronic diseases and serious injuries affecting vascular, bone, cardiac and neural tissues. Aastrom's TRC-based products contain increased numbers of stem and early progenitor cells, produced from a small amount of bone marrow collected from the patient. The TRC technology platform has positioned Aastrom to advance multiple products into clinical development. Currently, the Company has a vascular regeneration product in clinical development for the treatment of critical limb ischemia (called the RESTORE-CLI trial), a bone regeneration product in Phase III development for the treatment of osteonecrosis of the femoral head (called the ON-CORE trial), a cardiac regeneration product in clinical development for dilated cardiomyopathy and a preclinical research program targeting unmet needs in neural health. Aastrom product candidates to treat osteonecrosis of the femoral head and dilated cardiomyopathy have been designated for orphan drug status by the FDA. 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, clinical activity timing, intended product development and commercialization objectives, adequacy of existing capital to support operations for a specified time, future capital needs, and potential advantages and application of Tissue Repair Cell (TRC) Technology, all of which involve certain risks and uncertainties. These statements are often, but are not always, made through the use of words or phrases such as "anticipates," "estimates," "plans," "expects," "management believes," "we believe," "we intend," and similar words or phrases, or future or conditional verbs such as "will," "would," "should," "could," "may," or similar expressions. 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, competitive developments, and 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:

| | Quarter ended March 31, | | Nine months ended March 31, | |
|---|-------------------------|-------------------|-----------------------------|--------------------|
| | 2007 | 2008 | 2007 | 2008 |
| REVENUES: | | | | |
| Total revenues | \$ 258 | \$ 202 | \$ 520 | \$ 373 |
| COSTS AND EXPENSES: | | | | |
| Cost of product sales and rentals | 14 | 30 | 17 | 31 |
| Research and development | 3,096 | 4,032 | 7,963 | 11,800 |
| Selling, general and administrative | 2,070 | 1,429 | 6,786 | 4,768 |
| Total costs and expenses | 5,180 | 5,491 | 14,766 | 16,599 |
| OTHER INCOME (EXPENSE): | | | | |
| Interest income | 439 | 266 | 1,481 | 1,017 |
| Interest expense | - | (25) | - | (61) |
| Total other income | 439 | 241 | 1,481 | 956 |
| NET LOSS | \$ (4,483) | \$ (5,048) | \$ (12,765) | \$ (15,270) |
| NET LOSS PER COMMON SHARE | | | | |
| (Basic and Diluted) | \$ (.04) | \$ (.04) | \$ (.11) | \$ (.12) |
| Weighted average number of common shares | | | | |
| outstanding | 119,640 | 132,705 | 119,443 | 127,909 |

CONSOLIDATED BALANCE SHEET DATA:

| | June 30, 2007 | March 31, 2008 |
|--|------------------|-------------------|
| ASSETS | | |
| Cash and cash equivalents | \$ 13,439 | \$ 26,713 |
| Short-term investments | 14,886 | - |
| Receivables, net | 78 | 63 |
| Inventories | 8 | - |
| Other current assets | 1,766 | 1,865 |
| Property and equipment, net | 2,671 | 2,321 |
| Total assets | \$ 32,848 | \$ 30,962 |
| LIABILITIES AND SHAREHOLDERS' EQUITY | | |
| Current liabilities | \$ 3,500 | \$ 1,836 |
| Long-term debt | 1,097 | 898 |
| Shareholders' equity | 28,251 | 28,228 |
| Total liabilities and shareholders' equity | \$ 32,848 | \$ 30,962 |

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