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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): March 23, 2006

Aastrom Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Michigan	**0-22025**	**94-3096597**
(State or other jurisdiction of incorporation)	(Commission File No.)	(I.R.S. Employer Identification 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 8.01 Other Events.

On March 23, 2006, we issued a press release announcing the receipt from the FDA of orphan drug designation for Tissue Repair Cells used in the treatment of osteonecrosis. A copy of the press release is attached hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits.

Exhibit No.	Description
99.1	Press Release dated March 23, 2006

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: March 23, 2006

AASTROM BIOSCIENCES, INC.

By: /s/ Gerald D. Brennan, Jr.
Gerald D. Brennan, Jr.
Vice President, Administrative and
Financial Operations, CFO

Exhibit 99.1

Aastrom BIOSCIENCES INC
P.O. Box 376 ● Ann Arbor, Michigan 48106 ● Ph: 734-930-5555 ● Fax: 734-665-0485
Located at: Domino's Farms, Lobby L

FOR IMMEDIATE RELEASE

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AASTROM BIOSCIENCES RECEIVES ORPHAN DRUG DESIGNATION FROM THE FDA FOR PROPRIETARY BONE MARROW CELLS

— Potential Treatment for Patients Suffering from Osteonecrosis of the Hip; Major Cause of Hip Replacement —

Ann Arbor, Michigan, March 23, 2006 — Aastrom Biosciences, Inc. (Nasdaq: ASTM), announced today that the Company's proprietary Tissue Repair Cells (TRCs) received an Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) for use in the treatment of osteonecrosis (also known as avascular necrosis). The National Osteonecrosis Foundation indicates that in the U.S. alone, there are at least 20,000 new people diagnosed with this debilitating disease each year, and current therapies are of limited effectiveness.

Osteonecrosis is a painful medical condition where the tissue inside a bone is dying and unable to regenerate itself through natural processes. Ninety percent of the patients afflicted by this disease have osteonecrosis at the hip, or more specifically the femoral head – the ball at the top of the femur bone that rotates inside the hip socket. This disease usually attacks young male adults, and left untreated the femoral head eventually collapses, leading to the requirement of a total hip joint replacement. In the U.S., it is estimated that up to 10% of all hip replacements are performed due to osteonecrosis. There are no established pharmaceuticals for the prevention or treatment of osteonecrosis.

The tissues destroyed in the osteonecrosis disease process include bone, bone marrow and vascular (blood vessels). The diverse tissues involved with this disease have complicated the development of effective treatments in the past. Aastrom's TRCs, a proprietary mixture of stem, stromal and progenitor cells derived from a small sample of the patient's own bone marrow, have been used in clinical trials to regenerate all three of these tissues. With this capability, TRCs may offer a novel means to restore healthy tissue at osteonecrotic sites.

Aastrom is currently preparing a clinical trial protocol to evaluate TRCs in the treatment of osteonecrosis at the hip. In general terms, the expected treatment approach will be to remove the necrotic tissue from the interior of the patient's deteriorated bone, and implant the tissue-regenerating TRCs into the femoral head. The expectation is that if the femoral head/hip joint is strengthened by the re-growth of healthy bone, vascular and marrow tissue, the need for a hip replacement could be delayed or eliminated for patients suffering from this disease.

"With our clinical and developmental research progress using TRCs for the regeneration of healthy bone, vascular and bone marrow tissues, we can begin to target new areas of unmet medical need, such as osteonecrosis," said R. Douglas Armstrong, Ph.D., Chairman and Chief Executive Officer of Aastrom. "We are pleased to receive an orphan drug designation for our TRC cell product as a new treatment option for patients with such a significantly debilitating disease. This progress is a part of our strategic plan for the development of a new concept in products for use in complex orthopedic indications."

The orphan drug designation is granted to select approaches that offer potential therapeutic value in the treatment of rare diseases and conditions. Above and beyond assistance from the Office of

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Orphan Products Development in furthering its TRC tissue regeneration program, Aastrom may receive several other benefits. In particular, Aastrom may be entitled to an expedited FDA review, the reduction or even elimination of filing fees, and the availability of possible tax credits. The Company will also be entitled to marketing exclusivity for seven years once the product receives FDA approval.

About Aastrom Biosciences, Inc.

Aastrom Biosciences, Inc. (Nasdaq: ASTM) is developing products for the repair or regeneration of multiple human tissues, based on its proprietary Tissue Repair Cell (TRC) adult stem cell technology. Aastrom's TRC products contain large numbers of stromal, stem and progenitor cells that are produced from a small amount of bone marrow cells originating from the patient. The AastromReplicell® System, an industry-unique automated cell product manufacturing platform, was developed for the production of standardized, patient-specific TRC products. TRC products have been used safely in humans as a substitute for bone marrow stem cells, and are currently in clinical trials for bone grafting (long bone fractures and spine fusion) and blood vessel regeneration (diabetic limb ischemia) applications. The Company has recently reported positive interim clinical trial results for its TRCs demonstrating both the clinical safety and ability of TRCs to induce healthy new tissue growth (long bone fractures and jaw bone reconstruction).

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

This document contains forward-looking statements, including without limitation, statements regarding product development objectives and expected therapeutic value, potential benefits to be received because of the orphan product classification, planned clinical trials and their results, contemplated regulatory filings, potential product applications and potential advantages of Tissue Repair Cells (TRCs), which involve certain risks and uncertainties. The forward-looking statements are also identified through use of the words "plan," "may," "possible," "potential," "could," "expected," "expectation," 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 results obtained from clinical trial and development activities, regulatory approval requirements, the availability of resources, competitive developments 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.***

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