

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-A/A

POST-EFFECTIVE AMENDMENT NO. 1

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR 12(g) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Aastrom Biosciences, Inc.

(Exact name of registrant as specified in charter)

Michigan

(State or other jurisdiction
of incorporation)

94-3096597

(IRS employer
identification no.)

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

(Address of principal executive offices)

48106

(Zip code)

Securities to be registered pursuant to Section 12(b) of the Act:

**Title of each class
to be so registered**

Preferred Stock Purchase Rights

**Name of each exchange on which
each class is to be registered**

The Nasdaq Stock Market Inc.

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(c), please check the following box.

Securities Act registration statement file number to which this Form relates: **001-35280**.

Securities to be registered pursuant to Section 12(g) of the Act: **None**.

Explanatory Note

This Amendment No. 1 to Form 8-A/A is being filed by the registrant for the purpose of amending and supplementing the description of the registrant's securities contained in the Form 8-A filed by the registrant with the Securities and Exchange Commission on August 12, 2011.

Item 1. Description of Registrant's Securities to be Registered.

Amendment to Definition of "Acquiring Person"

In connection with the Securities Purchase Agreement (the "Purchase Agreement") with Eastern Capital Limited, a Cayman exempted company ("ECL"), dated as of March 9, 2012, on March 8, 2012, the Board of Directors of Aastrom Biosciences, Inc. (the "Company") adopted Amendment No. 1 to Shareholders Rights Agreement (the "Amendment"), effective as of March 9, 2012, to the Company's existing shareholder rights plan, as set forth in the Shareholder Rights Agreement, dated as of August 11, 2011, between the Company and Continental Stock Transfer & Trust Company, as Rights Agent (the "Rights Agreement"). The purpose of the Amendment was to amend, among other things, the definitions of "Acquiring Person" and "Affiliate" and "Associate" to permit ECL and its affiliates and associates, including any Immediate Family Members (as defined in the Purchase Agreement) of ECL and its affiliates and associates, to acquire up to 49.9% of beneficial ownership of the Company's securities (including securities purchased pursuant to the Purchase Agreement) without triggering the Rights Agreement, as amended. The foregoing description of the material terms of the Amendment does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement and the Amendment, each of which is attached hereto as an exhibit and is incorporated herein by reference.

Item 2 - Exhibits.

- 3.1 Certificate of Designation, Preferences and Rights of Aastrom Biosciences, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock, filed as Exhibit 3.1 to the Company's Registration Statement on Form 8A on August 12, 2011, and is incorporated herein by reference.
- 4.1 Shareholder Rights Agreement, dated as of August 11, 2011, between Aastrom Biosciences, Inc. and Continental Stock Transfer & Trust Company, as Rights Agent, filed as Exhibit 4.1 to the Company's Registration Statement on Form 8A on August 12, 2011, and is incorporated herein by reference.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

AASTROM BIOSCIENCES, INC.

Date: March 28, 2012

By: /s/ Timothy M. Mayleben
Name: Timothy M. Mayleben
Title: Chief Executive Officer and President

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
3.1	Certificate of Designation, Preferences and Rights of Aastrom Biosciences, Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock, filed as Exhibit 3.1 to the Company's Registration Statement on Form 8A on August 12, 2011, and is incorporated herein by reference.
4.1	Shareholder Rights Agreement, dated as of August 11, 2011, between Aastrom Biosciences, Inc. and Continental Stock Transfer & Trust Company, as Rights Agent, filed as Exhibit 4.1 to the Company's Registration Statement on Form 8A on August 12, 2011, and is incorporated herein by reference.
4.2	Amendment No. 1 to Shareholder Rights Agreement, dated as of March 9, 2012, between Aastrom Biosciences, Inc. and Continental Stock Transfer & Trust Company, as Rights Agent, filed as Exhibit 4.1 to the Company's Current Report on Form 8-K on March 9, 2012, and is incorporated herein by reference.