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

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant x

Filed by a Party other than the Registrant o

Check the appropriate box:

0

- o Preliminary Proxy Statement
 - Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- o Definitive Proxy Statement
- x Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

Aastrom Biosciences, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- x No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:
 - (5) Total fee paid:
- o Fee paid previously with preliminary materials.
- o Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid:
 - (2) Form, Schedule or Registration Statement No.:
 - (3) Filing Party:
 - (4) Date Filed:

AASTROM BIOSCIENCES, INC.
SUPPLEMENT TO PROXY STATEMENT
for the
ANNUAL MEETING OF SHAREHOLDERS
To Be Held May 7, 2014

April 24, 2014

The Board of Directors (the "Board of Directors") of Aastrom Biosciences, Inc., a Michigan corporation (the "Company"), previously made available proxy materials in connection with the upcoming Annual Meeting of Shareholders (the "Annual Meeting") to be held on Wednesday, May, 7, 2014, including a proxy statement containing important information about the items of business to be considered at the Annual Meeting (the "Proxy Statement"). Unless the context requires otherwise, references to "we," "us," "our," and "Aastrom" refer to Aastrom Biosciences, Inc.

The items of business set forth in the Proxy Statement included, among other things, a proposal to elect six directors to hold office until the 2015 Annual Meeting of Shareholders and/or until their successors have been elected. On April 24, 2014, Ronald M. Cresswell, who had previously been nominated by the Board to stand for re-election at the Annual Meeting, notified Aastrom of his decision to resign from the Board of Directors effective as of May 7, 2014, and that he would not stand for re-election at the Annual Meeting. The Board of Directors thanked Dr. Cresswell for his service to the Company and wished him well in his future endeavors.

The remaining five nominees previously identified in the Proxy Statement will continue to stand for re-election at the Annual Meeting. These remaining five nominees are Robert L. Zerbe, Dominick C. Colangelo, Alan L. Rubino, Nelson M. Sims and Heidi Hagen. All votes cast with respect to Dr. Cresswell, whether "for" or "withhold," and whether cast before or after the date hereof, will be null and void and disregarded at the Annual Meeting. Shareholders should continue to use the proxy card previously distributed to them in connection with the Annual Meeting.

* * * * * *

If any shareholder has already returned his or her properly executed proxy card and would like to change his or her vote on any matter, such shareholder may revoke his or her proxy before it is voted at the Annual Meeting by (1) filing with the Corporate Secretary of Aastrom, at or before the taking of the vote at the Annual Meeting, a written statement of revocation bearing a later date than the proxy, (2) voting by Internet or telephone at a later time, (3) submitting a properly signed proxy card with a later date, or (4) voting in person at the Annual Meeting. Any written statement of revocation or subsequent proxy should be sent so as to be delivered to: Aastrom Biosciences, Inc., 24 Frank Lloyd Wright Drive, Lobby K, Ann Arbor, MI 48105, at or before the taking of the vote at the Annual Meeting.

If any shareholder would like a new proxy card or copies of the Proxy Statement or this update or has any questions, he or she should contact:

Aastrom Biosciences, Inc. 24 Frank Lloyd Wright Drive, Lobby K Ann Arbor, MI 48105 Attention: Mr. Michael W. Elliston, Corporate Secretary