DIVISION OF CORPORATION FINANCE

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

Mail Stop 4720

February 2, 2011

Mr. Scott C. Durbin Chief Financial Officer and Secretary Aastrom Biosciences, Inc. 24 Frank Lloyd Wright Drive, Lobby K Ann Arbor, Michigan 48105

> Re: Aastrom Biosciences, Inc. Preliminary Proxy Statement Filed January 31, 2011 File No. 000-22025

Dear Mr. Durbin:

We have limited our review of your filing to the matters discussed below.

Please respond to this letter by filing a revised information statement. If you do not believe our comment applies to your facts and circumstances or do not believe a revision is appropriate, please tell us why in your response.

After reviewing any revised disclosure and any information you provide in response to this comment, we may have additional comments.

<u>Proposal No. 1: Proposal to Amend the Articles to Increase the Number of Shares of</u> Authorized Common Stock

1. Please expand the discussion to state whether you have any additional plans, commitments, arrangements, understandings, or agreements, either written or oral, regarding the reservation or issuance of common stock subsequent to the increase in the number of authorized shares other than in connection with the shares already reserved, the increase in the number of shares available under the 2009 Omnibus Incentive Plan, and the "at the market" offering to which you already refer.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

Mr. Scott C. Durbin Aastrom Biosciences, Inc. February 2, 2011 Page 2

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

If you have any questions, please call John L. Krug, Senior Counsel, at (202) 551-3862, or me at (202) 551-3715.

Sincerely,

Jeffrey Riedler Assistant Director