



June 7, 2011

VIA EDGAR AND FEDERAL EXPRESS

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Jim B. Rosenberg

Re: Aastrom Biosciences, Inc.
Form 10-K for the Year Ended June 30, 2010
Form 10-K/A for the Year Ended June 30, 2010
File No. 000-22025

Ladies and Gentlemen:

This letter is being supplementally furnished by Aastrom Biosciences, Inc. (the "**Company**") in connection with the comments of the staff of the Division of Corporation Finance (the "**Staff**") of the Securities and Exchange Commission (the "**Commission**") raised in your letters dated January 28, 2011 and March 29, 2011 regarding the Company's Form 10-K for the fiscal year ended June 30, 2010 filed on September 7, 2010 and Form 10-K/A for the fiscal year ended June 30, 2010 filed on February 24, 2011 (collectively, the "**Comment Letters**"). As a follow-up to discussions related to the Comment Letters between the Company and certain of its representatives and members of the Staff on June 2, 2011 and June 3, 2011 during which the Staff requested that the Company confirm in writing its accounting for certain of its outstanding warrants to purchase shares of common stock, the Company is providing the following information.

The Company respectfully advises the Staff that it believes that the Company's application of liability accounting for certain of its warrants is the appropriate treatment for such warrants in accordance with Accounting Standards Codification 815, *Derivatives and Hedging* ("**ASC 815**"), which requires that warrant instruments that could potentially require net cash settlement outside the control of the Company, should be initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. In reaching this conclusion, while not directly on point, the Company also considered the guidance presented at the 2006 AICPA National Conference on Current SEC and PCAOB Developments made by Stephanie L. Hunsaker regarding accounting for warrants issued as part of a registered offering (the "**Hunsaker Speech**").

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The warrants that are the focus of the discussion include (collectively, the “**Warrants**”) warrants to purchase an aggregate of 740,131 shares of the Company’s common stock, issued in October 2007 at an exercise price of \$12.72 per share.

These Warrants generally provide that, in the event the related registration statement is not available for the issuance of the Warrant shares, the holder may exercise the Warrant on a cashless basis (i.e., applying a portion of the Warrant shares to the payment of the exercise price).

In determining the appropriate accounting treatment for these Warrants, the Company analyzed the terms of the Warrants and the circumstances related to the issuances of such Warrants. As a result of such analysis, the Company determined that the holder of the Warrant(s) has an expectation that registered shares of common stock of the Company will be issued upon exercise of the Warrant because (1) the Warrants were issued pursuant to a registered offering of securities of the Company, and (2) there may be a contractual obligation of the Company to deliver registered shares upon the exercise of the Warrant. Specifically, the Company advises the Staff that Section 8 (Reservation of Stock; Registration) of the Warrant states that the Company will register the shares “at its sole expense...in order to permit the free tradability of the Warrant shares without restriction.” Furthermore, pursuant to Section 3.3 of Annex II of the purchase agreements between the Company and the purchaser of securities in the October 2007 registered offering, the Company agreed to “use its commercially reasonable best efforts to maintain the effectiveness of the Registration Statement until the expiration of the Warrants.” Lastly, there is no provision in the Warrants that precludes the holder of the Warrant from demanding net cash settlement of such Warrant in the event that an effective registration statement relating to the Warrants is not available.

As a result of the foregoing, the Company respectfully advises the Staff that it believes that the holder of such Warrant has a choice as to the manner of settlement of such Warrant when an effective registration statement is not available for the exercise of such Warrant. The holder may elect to exercise pursuant to the net share settlement provisions such that unregistered shares of common stock are issued upon exercise thereof; however, there is no requirement that the holder do so, rather it is permissive. Alternatively, if the holder of the Warrant does not elect to exercise pursuant to the net share settlement provisions in those circumstances, the holder may be able to allege a breach of contract claim against the Company for failure to deliver registered shares of its common stock upon exercise. Such an alleged claim may lead to an obligation outside of the Company’s control to settle the warrants in cash. The Company also concluded that potential cash settlement was an economically equivalent alternative given that the holder’s cost to litigate would not be a significant enough penalty to make it an uneconomic settlement. Accordingly, in light of the potential foregoing outcome and the guidance in ASC 815 and the Hunsaker Speech, the Company believes that the Warrants are appropriately classified as liabilities of the Company.

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If you should have any questions concerning the enclosed matters, please contact the undersigned at (734) 418-4420.

Very truly yours,

/s/ Scott C. Durbin

Scott C. Durbin, Chief Financial Officer

cc: Timothy Mayleben, *Astrom Biosciences, Inc.*
Mitchell S. Bloom, Esq., *Goodwin Procter LLP*
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