



DIVISION OF  
CORPORATION FINANCE

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

March 29, 2011

Mr. Scott Durbin  
Chief Financial Officer  
Aastrom Biosciences, Inc.  
24 Frank Lloyd Wright Drive,  
P. O. Box 376,  
Ann Arbor, MI 48106

**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**

Dear Mr. Durbin:

We have reviewed your February 18, 2011 response to our January 28, 2011 letter and your amendments to Form 10-K for the year ended June 30, 2010 and Forms 10-Q for the quarterly periods ended September 30, 2009, December 31, 2009, March 31, 2010 and September 30, 2010 and have the following comments.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended June 30, 2010

Item 1. Business  
Production

1. We note your response to our prior comment 2. Please be more specific in your explanation regarding your third-party agreements. In particular, please describe the components and materials you obtain through each of these agreements and why you believe that you would only experience a minor disruption if any of the agreements were amended or terminated.

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Form 10-K/A for the fiscal year ended June 30, 2010

Notes to Consolidated Financial Statements

Note 6: Stock Purchase Warrants, page 52

2. We acknowledge your response to our previous comment five and your disclosure describing your restatement in Note 2. Please provide us proposed revised disclosure for this footnote to be included in your future periodic reports that identifies the instruments that could potentially be net cash settled in the absence of express language precluding such settlement and those that have anti-dilution price protection features. Separately describe the types of events that would trigger the exercise price adjustments and how the price adjustments will be calculated.
3. Please explain to us why you include your January 2010 Class B warrants as liabilities in your restated financial statements. In this regard, please help us understand how the apparent preclusion of settlement for cash or other consideration in the event you are unable to deliver Warrant Shares as stipulated in Section 3.3(a) of your Class B warrant agreement filed as Exhibit 4.2 to your Form 8-K filed on January 27, 2010 and the apparent absence of an anti-dilution price protection provision is indicative of liability treatment. In your response, please clarify for us whether there are any other provisions in the Class B warrant that necessitate liability treatment and reference for us the authoritative literature you rely upon to support your accounting.
4. We do not believe that a Black-Scholes valuation model appropriately captures the value of warrants that include anti-dilution price protection provisions. In this regard the Black-Scholes model is a single-path model that does not take into account the potential exercise price adjustments under your warrants' anti-dilution price protection provisions. Please use an appropriate valuation model such as a binomial or lattice model.

Please contact Kei Nakada, Staff Accountant, at (202) 551-3659 or Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638, if you have questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Scot Foley, Staff Attorney, at (202) 551-3383 or Jeff Riedler, Assistant Director, at (202) 551-3715 with questions on any of the other comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief Accountant