

July 13, 2012

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: Nicholas P. Panos

**Re: Aastrom Biosciences, Inc.
Schedule TO-I
Filed June 28, 2012
File No. 005-52095**

Ladies and Gentlemen:

This letter is submitted by Aastrom Biosciences, Inc. (the "Company") in response to the comments of the staff of the Division of Corporation Finance (the "Staff") of the Securities and Exchange Commission (the "Commission") raised in your letter of July 6, 2012 (the "Comment Letter") regarding the Company's Schedule TO-I filed on June 28, 2012 (the "Schedule TO"). For reference purposes, the text of the Comment Letter has been reproduced herein with responses below each numbered comment. The Company is concurrently filing Amendment No. 1 to the Schedule TO (the "Amendment"), which includes changes to the Schedule TO in response to the Staff's comments.

Item 7

1. *Item 7(a) is purportedly inapplicable because no cash will be used for the exchange of the warrants. Notwithstanding this representation, it appears that some cash will be used to repurchase warrants. Under Item 1007(a) of Regulation M-A, the issuer must state the specific sources and total amount of consideration to be used in the transaction, which disclosure includes all forms of consideration required to purchase the maximum amount of securities sought in the offer. You may incorporate by reference into Item 7 a section from the Offer that contains information concerning the cash consideration offered.*

Response 1:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 7" of the Amendment.

2. *On page i of the Offer, the issuer states that it will pay cash equal to the market value of fractional shares based on the closing price of its common stock on the day immediately preceding the expiration date. Given that some cash has the possibility of being issued as tender offer consideration, please revise Item 7(a) to remove the language stating that no cash will be used for the "exchange" in light of this context. Please also comply with the requirements of Item 1007(a) of Regulation M-A by describing the source of this cash.*

Response 2:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 4" of the Amendment.

Cautionary Statement Concerning Forward-Looking Statements

3. *The Private Securities Litigation Reform Act of 1995, by its terms, is inapplicable to tender offers. Please revise to remove the implication that forward-looking statements made in connection with this offer have been protected by the Act's safe harbor provisions.*

Response 3:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions on page 2 of the Amendment.

Pro Forma Financial Information (Unaudited)

4. *We note that the issuer does not qualify for the safe harbor in Instruction 2 of Item 10 of Schedule TO and has provided certain pro forma financial information presumably in response to Item 1010(b) of Regulation M-A. The issuer, however, does not seem to provide information regarding the transaction's effect on the company's ratio of earnings to fixed charges per Item 1010(b)(2) of Regulation M-A. If you do not consider this information material, please advise us of the basis for this view. Otherwise, please revise to include this information given that the reference to Item 503 of Regulation S-K contained within Item 1010 of Regulation M-A is only intended to be instructive.*

Response 4:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 10" of the Amendment.

5. *To the extent that satisfaction of Item 10 of Schedule TO was intended through incorporation by reference alone, please be advised that Instruction 6 to Item 10 of Schedule TO has been interpreted by the Division of Corporation Finance to require that a summary of this financial information be*

Response 5:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 10" of the Amendment.

6. *Numerous disclosures exist that emphasize the Exchange Offer is a "one time offer." Given the stated purposes of this offer, however, it appears the issuer could remain interested in acquiring warrants in the future to the extent not all warrants are tendered. Please confirm that the issuer will never make a tender offer again for the warrants, or revise the disclosure accordingly.*

Response 6:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 4" of the Amendment.

The Exchange Offer—Conditions to the Exchange Offer

7. *In the first and penultimate paragraphs of this section, you state that the issuer may assert the offer conditions regardless of the circumstances giving rise to the event, including any action or omission to act by the issuer. Offer conditions must be both objectively determinable and outside of the issuer's control. See Section II. B. of Exchange Act Release No. 43069 (July 31, 2000). Please revise to remove the implication that offer conditions may be triggered through action or inaction by the bidder.*

Response 7:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 4" of the Amendment.

8. *It appears that Aastrom has inadvertently omitted the word "reasonable" from offer condition (e) on page 19 of the Exchange Offer. Offer conditions that are determinable within the issuer's exclusive discretion imply that conditions may be asserted at any time for any reason, and therefore may result in the offer being considered illusory. Please revise to include an objective standard for the determination of whether this condition has been satisfied. See Section II. B. of Exchange Act Release No. 43069 (July 31, 2000).*

Response 8:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 4" of the Amendment.

9. *By indicating that all determinations made by the issuer concerning conditions will be "final and binding" upon security holders, the disclosure improperly suggests that participation in the offer does not permit security holders to privately pursue a legal*

claim challenging the issuer's determinations. Please revise to include disclosure that makes clear the issuer's determinations may be challenged in a court of competent jurisdiction.

Response 9:

The Company respectfully advises the Staff that it has revised the Schedule TO to incorporate the Staff's comments. Please see revisions in "Item 4" of the Amendment.

As requested in the Comment Letter, the Company acknowledges that:

- The Company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filings; 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 should have any questions concerning the enclosed matters, please contact the undersigned at (734) 418-4425.

Very truly yours,

/s/ Brian Gibson

Brian Gibson, Vice President, Finance

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