

Via Facsimile and U.S. Mail
Mail Stop 03-09

April 15, 2005

Mr. Alan M. Wright
Senior Vice President Administrative and Financial Operations
and 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 fiscal year ended June 30, 2004
File No. 000-22025

Dear Mr. Armstrong:

We have reviewed your filing and have the following comments.

We have limited our review of the above referenced filing to only those issues addressed. Where our comments call for disclosure, we think you should amend your document in response to these comments.

In one of our comments, we ask you to provide us with supplemental information so we may better understand your disclosure. Please amend your Form 10-K for the fiscal year ended June 30, 2004 and subsequent Form 10-Qs, and respond to these comments within 15 business days or tell us when you will provide us with a response prior to the expiration of the 15-day period. If we have requested

additional information as well as an amendment, or if you disagree with any comment that calls for disclosure, please provide this letter prior to your amendment. You may wish to provide us with marked copies of the amendment to expedite our review. Your letter should key your responses to our comments. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended June 30, 2004, filed September 13, 2004

Management's Discussion and Analysis of Financial Condition and Results of Operations, pg. 20

1. Please refer to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII - Industry Specific Issues - Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address:

Please disclose the following information for each of your major research and development projects:

- a. The current status of the project;
- b. The costs incurred during each period presented and to date on the project;
- c. The nature, timing and estimated costs of the efforts necessary to complete the project;
- d. The anticipated completion dates;
- e. The risks and uncertainties associated with completing development on schedule, and the consequences to operations, financial position and liquidity if the project is not completed timely; and finally
- f. The period in which material net cash inflows from significant projects are expected to commence.

Regarding b., if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding c. and d., disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Critical Accounting Policies, page 21

2. We acknowledge your systematic approach to determine your reserves for obsolete and excess inventory. Please tell us how this complies to GAAP, specifically Chapter 4 of ARB 43.

Results of Operations, page 22

3. We acknowledge your disclosure about increased grant activity and additional grant awards. Considering the significance of your grant revenue, please quantify and elaborate your discussion about the factors causing the increase. Additionally, please disclose the nature and provisions of these contracts.

Consolidated Statements of Operations, page 35

4. It appears that you have not complied with Rule 5-03 of Regulation S-X in regards to your presentation of product sales and rentals. Please reclassify separately, revenue generated from the sale of products from rental revenue. Please reclassify the costs incurred to generate these product sales and rental income, including the provision for obsolete and excess inventory, to correspond to the revenue classification. Please revise your financial statements accordingly.

* * * *

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging 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 in the filings reviewed by the staff 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Christine Allen, Staff Accountant, at (202) 824-5533 or Kevin Woody, Branch Chief, at (202) 942-7332 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 942-1803.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief

Accountant
??

??

??

??

Mr. R. Douglas Armstrong
Aastrom Biosciences, Inc.
Page 1