

Via Facsimile and U.S. Mail  
Mail Stop 6010

March 3, 2008

Gerald D. Brennan, Jr., Esq.  
Vice President 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 Year Ended June 30, 2007**  
**Filed September 13, 2007**  
**File No. 000-22025**

Dear Mr. Brennan:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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.

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1. Throughout the Form 10-K, you refer to various agreements with third parties that you have not included as exhibits. In particular we note the strategic alliance with

the Musculoskeletal Transplant Foundation, the collaboration with Orthovita and the contract with the Fraunhofer Institute for Interfacial Engineering and Biotechnology. Item 601(b)(10)(ii)(B) of Regulation S-K requires you to include as exhibits contracts that your business is substantially dependent upon. Please provide us with an analysis supporting your determination that your business is not substantially dependent on any of these agreements. To the extent that your business is substantially dependent on any of these agreements, please revise the discussion of the agreements to disclose:

- Aggregate amounts paid/received to date;
- Aggregate potential milestone payments;
- Minimum purchase requirements;
- Required annual payments;
- Duration and termination provisions;
- All other material terms

Please also include each of agreements as exhibits to the Form 10-K.

2. Please include your lease with Domino's Farms Office Park, LLC as an exhibit to the Form 10-K. Item 601(b)(10)(i)(D) of Regulation S-K requires you to file as exhibits any material lease. We note that you use these facilities to support your U.S. clinical trials and that the lease has a six-year noncancelable term.

\* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- 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.

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 comment on your filing.

You may contact Sonia Barros at (202) 551-3655 or me at (202) 551-3715 with questions on any of the comments.

Sincerely,

Jeffrey P. Riedler  
Assistant Director