Via Facsimile and U.S. Mail Mail Stop 6010

April 4, 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 completed our review of your Form 10-K and have no further comments at this time. 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

cc: Michael Blount, Esq.
Seyfarth Shaw LLP
131 South Dearborn Street
Suite 2400
Chicago, IL 60603