

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

June 8, 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 completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

Gus Rodriguez Accounting Branch Chief