

Mail Stop 6010

November 3, 2008

VIA U.S. MAIL

Mr. Raymond N. Calvert
Vice President, Finance, Chief Financial Officer and Secretary
Northstar Neuroscience, Inc.
2401 Fourth Avenue, Suite 300
Seattle, Washington 98121

**Re: Northstar Neuroscience, Inc.
Form 10-K for the year ended December 31, 2007
Filed March 17, 2008
File No. 001-34078**

Dear Mr. Calvert:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Angela Crane
Accounting Branch Chief