

Via Facsimile and U.S. Mail

December 22, 2010

Kevin C. Gorman, Ph.D.
President and Chief Executive Officer
Neurocrine Biosciences, Inc.
12780 El Camino Real
San Diego, CA 92130

**Re: Neurocrine Biosciences, Inc.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed February 8, 2010
Form 10-Q for the Quarterly Period Ended June 30, 2010
Filed July 29, 2010
Definitive Schedule 14A
Filed April 21, 2010
File No. 000-22705**

Dear Dr. Gorman:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Jason L. Kent, Esq.
Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121