



DIVISION OF
CORPORATION FINANCE

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

November 1, 2010

Kevin C. Gorman
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
Form 10-Q for the Quarterly Period Ended June 30, 2010
Definitive Schedule 14A
Filed April 21, 2010
File No. 000-22705**

Dear Mr. Gorman:

We have reviewed your September 9, 2010 response to our August 27, 2010 letter and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Form 10-K for Fiscal Year Ended December 31, 2009

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
Results of Operations of Years Ended December 31, 2009, 2008, and 2007, page 37

1. Refer to your comment two. Based on your response and your disclosure on page 55 of your Form 10-K, you classify administrative expenses and allocations of corporate costs as research and development expense. Please tell us how these expenses/costs qualify as research and development expenses, and provide us proposed revisions to your disclosure here and in the notes to the financial statements as to their nature.

Notes to Consolidated Financial Statements

Note 1. Organization and Summary of Significant Accounting Policies
Restructuring, page 55

2. Refer to comment three. Please note that the guidance cited in SAB Topic 5.P.3 focuses on presenting restructuring charges as operating activities as opposed to non-operating based on the historical presentation of the activity. Further, it remains unclear how severance costs qualify as planned search or critical investigation aimed at discovery of new knowledge or the translation of research findings or other knowledge into a plan or design for a new product or process. Please confirm to us that you will remove these costs from research and development expense in future filings.

Form 10-Q for the Period Ended June 30, 2010

Item 1. Financial Statements

Notes to the Condensed Consolidated Financial Statements

11. Significant Collaborative Research and Development Agreements page 11

3. Refer to comment four. It remains unclear what your obligations are under the collaboration agreements. Please provide us draft disclosure to be included in future filings of your obligations under the agreements including those related to joint committees, development plans and research programs. In addition, please include in the draft disclosure the estimated terms of the collaborative development period and the collaborative research period.

Definitive Proxy Statement on Schedule 14A

Compensation Discussion and Analysis

Equity Awards, page 31

4. We note your response to our prior comment five. While the Board ultimately decided not to make equity awards in 2009, disclosure is nonetheless required if the Board established performance goals at the beginning of the performance period that it intended to use to make determinations of equity awards at the conclusion of the period. This is consistent with your disclosure of the performance goals and Board evaluation of that performance related to cash bonuses awards on pages 29 and 30 of the proxy statement. We note in that case as well the Board determined not to award annual bonuses, yet you have included a discussion of the goals, level of achievement and the Boards' evaluation of performance. Therefore, please provide us with draft disclosure for an amendment that discloses any goals and objectives, both company-wide and individual, that you established at the beginning of the performance period to be used in the determination of equity awards for 2009, together with the Board's assessment of each officer's performance.

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You may contact Tabatha Akins, Staff Accountant (202) 551-3658 or Joel Parker, Accounting Branch Chief at (202) 551-3651 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. Please contact Scot Foley, Attorney Advisor at (202) 551-3383 or Daniel Greenspan, Special Counsel at (202) 551-3623 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant