

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

October 15, 2010

Mr. Craig Collard President and Chief Executive Officer Cornerstone Therapeutics Inc. 1255 Crescent Green Drive, Suite 250 Cary, NC 27518

Re: Cornerstone Therapeutics Inc.

Form 10-K for the year ended December 31, 2009

Form 10-Q for the quarterly period ended March 31, 2010

File No. 000-50767

Dear Mr. Collard:

We have reviewed your August 11, 2010 response to our July 28, 2010 letter and have the following comments.

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. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing your response to these comments, we may have additional comments.

Item 1. Business

Product Returns, page 81

Product Development Pipeline, page 9

1. Please refer to your response to comment two. We believe that the development phase of your product candidates is an important part of understanding your business. Please confirm that you will disclose the development phase of each product candidate listed here, without exception.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Estimates
Revenue Recognition

2. Refer to your response to comment six. Even with \$2.3 million prior period adjustment in sales returns, rather than \$4.2 million, the 46% increase in the reserve appears

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significant. Since you attribute this increase to a greater conversion of prescriptions from SPECTRACEF 200mg to SPECTRACEF 400mg, please tell us:

- Why the changing market factors did not impact your ability to forecast returns;
- Whether the rate of return for 200mg dosage was immediately adjusted when you
 noted the higher than expected sales volume of 400mg dose packs, presumably
 indicating the higher rate of conversion from 200mg dosage to 400 mg dosage. If
 not, quantify the time lag and explain why you did not immediately make this
 adjustment;
- In what quarters during 2009 and for what amounts did you record a provision to results of operations for the return of 2008 sales of SPECTRACEF 200mg; and
- What product(s) resulted in the additional \$1.9 million returns reserve for 2009 product shipments, what quarters these products were shipped, what period you recorded the additional reserve and why.

Consolidated Financial Statements

Note 2: Summary of Significant Accounting Policies

Segment and Geographic Information, page 94

3. Please refer to your response to comment eight. Please demonstrate to us how your expected adjusted gross margins of your branded and generic segments within ten percentage points is indicative of similar long-term financial performance under ASC 280-10-50-11. In this regard, it would appear that a ten-percentage point spread in gross margins is substantial and not indicative of similar long-term financial performance. In your response, please provide us with your historical adjusted gross margin computations for at least each of the last three years.

Advertising, page 100

4. As originally requested, please revise your response to comment 10 to clarify what you mean by "incurred." In responding to this comment please note that ASC 720-35-20 distinguishes accounting for advertising costs between two alternatives based on the types of advertising activities.

Note 4: Goodwill and Product Rights Product Rights, page 103

5. Please refer to your response to comment 12. We believe that the quantification of your product rights by product is useful to investors in assessing their recoverability when analyzed with revenues by product. Accordingly, please confirm that you will disclose product license rights in your future filings.

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Form 10-Q for the Quarterly Period Ended March 31, 2010

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 17

6. Please tell us where you have quantified the revenues you derived through government funded programs, related rebates, and fees in response to comment 13.

General

- 7. We acknowledge the representation made on your behalf by Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, LLP on page 21 of their letter dated August 11, 2010. As previously requested, please provide a statement directly from the company. Please have a duly authorized officer of the company provide this statement separately on EDGAR by acknowledging that:
 - the company is responsible for the adequacy and accuracy of the disclosure in the filing;
 - staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

Please contact Kei Nakada, Staff Accountant, at (202) 551-3659 or Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant