



DIVISION OF  
CORPORATION FINANCE

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

January 7, 2011

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  
Filed March 4, 2010  
File No. 000-50767**

Dear Mr. Collard:

We have reviewed your November 12, 2010 response to our October 15, 2010 letter and have the following comment.

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.

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

Consolidated Financial Statements  
Note 2: Summary of Significant Accounting Policies  
Segment and Geographic Information, page 94

1. You state in your response to comment three that you concluded that the launch of Curosurf, which resulted in the spread of adjusted gross margin between the branded and generic products to increase to 12 percentage points did not adversely impact your determination of reportable segments. Please explain why you believe this 12 percentage point spread in adjusted gross margin does not impact your determination to aggregate your two operating segments. In this regard, please quantify the magnitude on adjusted gross margin of your Curosurf launch activities in 2009 and demonstrate how you expect your adjusted gross margins to be similar going forward.

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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 comment. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg  
Senior Assistant Chief Accountant