



DIVISION OF
CORPORATION FINANCE

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

July 10, 2013

Via E-mail

Mr. Simon Dingemans
Chief Financial Officer
GlaxoSmithKline plc
980 Great West Road
Brentford, Middlesex
TW8 9GS
England

**Re: GlaxoSmithKline plc
Form 20-F for the Year Ended December 31, 2012
Filed March 8, 2013
File No. 001-15170**

Dear Mr. Dingemans:

We have reviewed your June 11, 2013 response to our May 14, 2013 letter and have the following comments.

Please respond to this letter within 10 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 you provide, we may have additional comments and/or request that you amend your filing.

Exhibit 15.2

Core Results, page 60

1. We acknowledge your response to our comment one. Although you exclude some captions in the table presented on page 60 that are presented in the full consolidated GAAP financial statements on page 140, the basic fundamentals are presented and thus appears to represent a full non-GAAP income statement. We continue to believe that your current presentation of the table on page 60 places undue prominence on the full non-GAAP income statements. Please provide us proposed disclosure to be included in future Forms 20-F that removes the full non-GAAP income statement.

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Human Genome Sciences, page 188

2. We acknowledge your response to our comment four. Guidance in paragraph 52 of IFRS 3 indicates that a transaction entered into by the acquirer before the combination is likely to be a separate transaction. Please confirm to us that the settlement of your pre-existing relationship did not occur prior to the business combination.

You may contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant