



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

DIVISION OF
CORPORATION FINANCE

May 14, 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 filing 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 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. Your current presentation 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. Refer to Question 102.10 of the SEC Compliance and Disclosure Interpretations: Non-GAAP Financial Measures.

Notes to Financial Statements

Note 6. Segment Information, page 151

2. You present core subtotals such as core operating profit, core depreciation and amortization, core impairment and core impairment reversals, and you present non-core items, non-core depreciation and amortization, non-core impairment and non-core impairment reversals. It does not appear appropriate to include these non-GAAP measures in the notes to the financial statements in accordance with Item 10(e)(1)(ii)(c) of Regulation S-K. Please provide proposed revised disclosure to be included in future Forms 20-F that eliminates these subtotals and items in your reconciliations.

Note 38. Acquisitions and disposals

2012 Acquisitions, page 188

3. On page 145 your accounting policy states that business combinations are accounted for using the acquisition accounting method. However, your disclosure under this note indicates that the acquisition of Human Genome Sciences and Shionogi-ViiV Healthcare was accounted for under the purchase method. Please confirm to us that these acquisitions were in fact accounted for under the acquisition method in accordance with paragraph 4 of IFRS 3, if true.

Human Genome Sciences, page 188

4. Please provide us the following information regarding the pre-existing collaborations you accounted for in the acquisition of Human Genome Sciences:
 - A description of the transaction including:
 - the parties in the collaborations and what the collaborations relate to; and
 - the party that settled the collaboration and the date of settlement;
 - How you determined the gain; and
 - Why the settlement is treated as consideration in the business combination transaction rather than a separate transaction in accordance with paragraph 52 of IFRS 3.
5. A majority of the assets acquired in your acquisition of Human Genome Sciences relates to intangible assets. Please provide us proposed disclosure to be provided in future periodic reports that discusses each intangible asset acquired and their fair value. Refer to paragraphs 59 and 63 of IFRS 3.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Mr. Simon Dingemans
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In responding to our comments, please provide a written statement from the company 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.

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