



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4720

July 6, 2016

Via E-mail

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

**Re: GlaxoSmithKline plc
Form 20-F for the Fiscal Year December 31, 2015
Filed March 18, 2016
File No. 001-15170**

Dear Mr. Dingemans:

We have reviewed your June 14, 2016 response to our comment 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 these comments within 10 business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe that a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to the comments in our May 18, 2016 letter.

Exhibit 15.2: Annual Report 2015
Group Financial Review
Core results reconciliations, page 62

1. You disclose full non-IFRS income statements to reconcile to your non-IFRS core results, which is inconsistent with updated Compliance and Disclosure Interpretations 102.10 on Non-GAAP Measures issued on May 17, 2016. Notwithstanding your June 11, 2013 and July 24, 2013 responses to comments 1 of both our May 14, 2013 and July 10, 2013 comment letters, respectively, please review this guidance when preparing your next Form 20-F.

Critical Accounting Policies
Turnover, page 70

2. In your response to prior comment 1, you noted that Advair accounted for approximately 50% of the total deduction for rebates and returns in US Global Pharmaceuticals, and the Respiratory portfolio as a whole accounted for more than 75% of the total deduction in the year. You also stated that the higher rebates and chargebacks on these products were therefore the primary reason for the increases in the market driven segments and Government mandated and state programs elements of the gross turnover to net turnover reconciliation. While disclosure throughout your filing discusses the impact Advair has had on turnover, it does not directly state the impact on items that reduce revenues. Please provide similar disclosure noted in your response in your future periodic reports regarding the impact on these items.

Notes to the financial statements

Note 8. Operating profit, page 154

3. Item 16C of Form 20-F requires the disclosure of the nature of the services comprising the fees disclosed. Please provide us a listing of the fees paid to your auditor for 'other assurance services' and 'all other fees' and explain why you have not disclosed the nature of these services. Separately tell us how each service is not prohibited under Rule 2-01 of Regulation S-X.

Note 38. Acquisitions and disposals

2015 Acquisitions

Novartis Consumer Healthcare and Vaccines businesses, page 185

4. We acknowledge your response to prior comment 2. Please tell us why it is appropriate to account for the written put option issued to Novartis separately from the business combination and reference for us the authoritative literature you rely upon to support your accounting. In your response, please ensure you address the following concerns:
 - Tell us whether you would write such a put without charging a premium absent the business combination transaction with Novartis. If so, tell us why when premiums are generally charged when writing puts.
 - If you would not have written such a put without collecting a premium tell us why consideration for the put is not part of the business combination.
 - Explain why it is appropriate to charge shareholders' equity with the present value of the redemption amount at contract inception instead of either goodwill as part of the business combination or your income statement in lieu of put premiums not collected.

Mr. Simon Dingemans
Chief Financial Officer
July 6, 2016
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You may contact Senior Staff Accountants Sasha Parikh at (202) 551-3627 or Mark Brunhofer 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,

/s/ Jim B. Rosenberg

Jim B. Rosenberg
Senior Assistant Chief Accountant
Office of Healthcare and Insurance