



DIVISION OF
CORPORATION FINANCE

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

November 9, 2010

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

**Re: GlaxoSmithKline plc
Form 20-F for Fiscal Year Ended December 31, 2009
File No. 001-15170**

Dear Mr. Heslop:

We have reviewed your September 24, 2010 response to our August 13, 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 this information. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Research and development, page 15

1. We acknowledge your response of our previous comment two. Please address the following additional comments:
 - Please clarify for us whether the “key” projects listed in the table on pages 18 and 19 represent all your projects in phase III, registration or recently approved. If not, please provide us revised draft disclosure to clarify how you identify projects as “key” in order to provide context as to why you provide disclosure about these projects versus others.
 - Although you indicate for various reasons why you believe it may be potentially misleading to investors to provide forward-looking information regarding the “possible commercialization of any product,” we do not understand how the disclosure of historical costs incurred on your significant projects would be speculative or potentially misleading to investors. As previously requested, please provide us revised draft disclosure addressing projects discussed on pages 18 and 19 and pages 189 to 192 to disclose the costs incurred on each significant project during each period presented and to date. Please include in the draft disclosure a description

- of your criteria for deeming a project to be significant. In addition, for all pipeline projects not considered significant, summarize in the draft disclosure the amounts charged to expense for each period by therapeutic category.
- You indicate that you intend to highlight the risks and uncertainties in making estimates of future project costs and information regarding potential future regulatory approval and cash flows by cross-referencing the reader to your risk factor disclosure. Please provide us your proposed revised disclosure and ensure that you reference specific risk factors instead of providing a general cross-reference.

Notes to the financial statements

Note 2: Accounting principles and policies

Revenue, page 101

2. We acknowledge your response to our previous comment seven. Your reference to recognizing revenue when goods are “made available” to external customers implies the recognition of revenue on bill and hold contracts. Please provide us revised draft disclosure of your policy to clearly indicate how goods “made available” meets the revenue recognition criteria in paragraph 14 of IAS 18 and paragraph 1 of the Appendix to IAS 18.

You may contact Mark Brunhofer, Review Accountant, at (202) 551-3638 if you have questions regarding the comments and related matters. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant