

Via Facsimile and U.S. Mail
Mail Stop 6010

September 19, 2006

Mr. JP Garnier
Chief Executive Officer
GlaxoSmithKline plc
980 Great West Road
Brentford, Middlesex
TW8 9GS England

**Re: Form 20-F for Fiscal Year Ended December 31, 2005
Filed March 3, 2006
File No. 1-15170**

Dear Mr. Garnier:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 20-F for the year ended December 31, 2005

Consolidated Cash Flow Statement

1. Please tell us why it is appropriate to provide a cash flow statement whereby operating profit is adjusted rather than profit after taxation (e.g. net income) to present net cash inflow from operating activities. Refer to applicable guidance from IAS 7 in your response.

Note 37. Employee share schemes

2. Please tell us where you have complied with paragraph 45(c) of IFRS 2.

Note 38. Reconciliation to US Accounting Principles
Intangible assets

3. With regards to intangible assets related to specific compounds or products which are purchased from a third party and are developed for commercial applications, please tell us your basis under IFRS not to amortize these intangible assets until regulatory approval. We did not note such an accounting policy in IAS 38.

Note 40. Transition to IFRS

4. Please tell us what consideration was given to providing the reconciliation of your equity reported under previous GAAP to your equity under IFRS for the end of the latest period presented in the entity's most recent annual financial statements under previous GAAP. Refer to IFRS 1 paragraph 39(a)(ii).

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Please provide us the information requested within 10 business days of the date of this letter or tell us when you will provide a response prior to the expiration of the 10-day period. Please furnish a letter with your response that keys your response to our comments. Detailed letters greatly facilitate our review. You should furnish the letter on EDGAR under the form type label CORRESP. Please understand that we may have additional comments after reviewing your response to our comments.

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 required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

In connection with responding to our comments, please provide, in your letter, a 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

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

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,

Jim B. Rosenberg
Senior Assistant Chief Accountant