Via Facsimile and U.S. Mail Mail Stop 6010

January 18, 2007

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

Re: GlaxoSmithKline plc

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 October 20, 2006 response to our September 19, 2006 letter and have the following comment.

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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. We have read your response to prior comment 1. Paragraph 20 of IAS 7 states that "Under the indirect method, the net cash flow from operating activities is determined by adjusting profit or loss". We acknowledge that profit or loss is not specifically defined in IAS 7. The guidance in IAS 8 directs management to refer to the requirements and guidance in standards dealing with similar and related issues in the absence of a standard that specifically applies. As management made their determinations as to what was meant by "profit or loss" in the context of IAS 7, it is unclear to us why consideration would not have been given to the definition of profit and loss found in IAS 1. It is also unclear, based upon your response, why you believe it is not appropriate to use the definition in IAS 1, and instead believe that a more appropriate presentation would use a measure that excludes certain items of income and expense. Please confirm to us that in future filings, you will revise your presentation to start with net profit or loss, or if

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applicable, net profit or loss attributable to continuing operations, with retrospective application to all periods presented. We would not object if the presentation begins with profit before taxation.

Please respond to this comment within 10 business days or tell us when you will provide us with a response. Please furnish your response via EDGAR under the form type label CORRESP that keys your responses to our comment and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your response to our comment.

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

Sincerely,

Jim B. Rosenberg Senior Assistant Chief Accountant