

Via Facsimile and U.S. Mail
Mail Stop 6010

April 1, 2009

Mr. Simon Bicknell
Company Secretary
GlaxoSmithKline plc
980 Great West Road
Brentford
Middlesex
TW8 9GS
UNITED KINGDOM

**Re: GlaxoSmithKline plc
Form 20-F for the Year Ended December 31, 2008
Filed March 4, 2009
File No. 001-15170**

Dear Mr. Bicknell:

We have reviewed your filing and have the following comment.

Where indicated, we think you should revise your Form 20-F in response to this comment. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. In our comment, we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 comment 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 filed March 4, 2009

Exhibits, page 212

1. We note that you acquired Reliant Pharmaceuticals, Inc. in December 2007 for £814 million pounds, but it does not appear that the acquisition agreement has been filed as an exhibit to your public reports. Please file this agreement as an exhibit to your Form 20-F or provide us with an analysis supporting your determination that this agreement is not a material contract. Please refer to paragraph 4(a) of the Instructions as to Exhibits on Form 20-F.

* * * *

Please amend your Form 20-F and respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your amendment that keys your response to our comment and provide any requested information. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

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
- 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 comment on your filing.

Mr. Simon Bicknell
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Please contact Nandini Acharya, Staff Attorney at (202) 551-3495, Daniel Greenspan, Special Counsel at (202) 551-3623 or me at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director