

Via Facsimile and U.S. Mail
Mail Stop 6010

May 16, 2008

Mr. Matthew Emmens
Chief Executive Officer
Shire plc
Hampshire International Business Parch, Chineham
Basingstoke, Hampshire, England, RG24 8EP

Re: Shire plc
Form 10-K for the Fiscal Year Ended December 31, 2007
Filed February 25, 2008
File No. 000-29630

Dear Mr. Emmens:

We have reviewed your April 30, 2008 response to our April 7, 2008 letter and have the following comments. Please amend your filing to comply with these comments and the comments in our April 7th letter. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. In comment one below, we ask you to provide us with information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may raise additional comments and/or request that you further amend your filing.

Form 10-K for the Year Ended December 31, 2007

Item 7 Management's Discussion and Analysis of Financial Condition and....

Critical Accounting Estimates, page 69

1. Refer to your response to comment five. Intangible assets other than goodwill at December 31, 2007 represent 41% of total assets and 144% of shareholders' equity. You state that valuation of intangible assets is a critical accounting estimate and that intangible assets primarily relate to DAYTRANA, DYNEPO, FOSRENOL, PENTASA, REMINYL, REPLAGAL, VYVANSE and XAGRID products. Please revise your disclosure to disaggregate this material asset so an investor may better understand this critical accounting estimate.

PART IV

Mr. Matthew Emmens
Shire plc
May 16, 2008
Page 2

ITEM 15: Exhibits, financial statement schedules, page 102.

2. We note your response to our comment relating to the filing of your agreement with GlaxoSmithKline as an exhibit to your Form 10-K. We disagree with your conclusion that Item 601(a)(4) of Regulation S-K allows the omission of the GlaxoSmithKline agreement. The agreement should be filed as a material contract under Item 601(b)(10). Please promptly file the agreement as an exhibit in an amendment to your Form 10-K. Please note that the agreement as filed with the August 19, 1997 Form 6-K filing of BioChem Pharma Inc. is not available on EDGAR and may not be incorporated by reference into your Form 10-K.
3. We note your response to our comments on the filing of agreements relating to your business combinations with New River Pharmaceuticals, Inc. and Transkaryotic Therapies, Inc. We disagree with your conclusion that the business combination agreement relating to the acquisition of Transkaryotic Therapies, Inc. may be omitted under Item 601(b)(4) of Regulation S-K. The agreement should be filed as a material plan of acquisition under Item 601(b)(2). Please promptly file the agreements relating to your business combinations with New River Pharmaceuticals, Inc. and Transkaryotic Therapies, Inc. as exhibits in an amendment to your Form 10-K.

* * * *

As appropriate, please amend your filing 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 responses to our comments and provides the requested information. Detailed letters greatly facilitate our review. Please file your letter on EDGAR under the form type label CORRESP.

Please contact Kei Ino, Staff Accountant, at (202) 551-3659 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Bryan Pitko, Staff Attorney at (202) 551-3203 or Jeff Riedler, Assistant Director at (202) 551-3715 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant