

Via Facsimile and U.S. Mail
Mail Stop 4720

June 1, 2009

Mr. Graham Hetherington
Chief Financial Officer
Shire Plc
5 Riverwalk, Citywest Business Campus, Dublin 24,
Republic of Ireland

Re: Shire Plc
Form 10-K for the Year Ended December 31, 2008
Filed February 27, 2009
Form 10-Q for the Quarterly Period Ended March 31, 2009
Filed May 7, 2009
File No. 000-29630

Dear Mr. Hetherington:

We have reviewed your filings 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 documents. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

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 10-K for the Fiscal Year Ended December 31, 2008

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Estimates

(iii) Sales Deductions, page 72

1. You disclose that you accept customer returns of products where the shelf life has expired. Please confirm that you do not accept returns of un-expired product, other than the damaged goods and new product launch guaranteed sales you disclose separately. Please revise your disclosure here and in the financial statements to clarify how you account for returns of expired product:
 - whether you refund the sales price either in cash or credit, or whether you exchange the product from your inventory;
 - what happens to returned product;
 - the time period over which you accept returns; and
 - for those returns that you exchange the product from your inventory, how you account for your estimate of these returns at the time of sale of the product and how you account for returns at the date they are actually returned to you. Provide us an analysis supporting your accounting treatment with reference to the authoritative literature you rely upon to support your accounting. It also may be helpful to provide us an example showing the journal entries made.

Item 14: Principal accountant fees and services, page 108

2. You disclose that you paid fees to Deloitte LLP for assisting the remuneration committee. Please revise your disclosure to indicate the nature of the services performed by Deloitte for these fees. In addition, please explain to us how these services are not precluded under Rule 2-01(c)(4)(vi) of Regulation S-X which prohibits auditors from performing any management functions of an audit client. In your response, please specifically address whether any of these services involve performing any decision-making, supervisory or ongoing monitoring functions.

Notes to the Consolidated Financial Statements

Note 2: Summary of significant accounting policies

(n) Share-based compensation, page F-18

3. You disclose that you estimate the fair value of share-based awards with market-based performance conditions using a binomial valuation model. Your combined use of the term "market-based performance conditions" is confusing in the

context of SFAS 123R which defines market, performance and service conditions separately. It appears from your disclosures in Note 33 that some of your awards have market conditions. Please revise your policy disclosure to indicate how you account for your awards with market conditions. In this regard, please indicate:

- how you determine the fair value for these awards;
- how you determine the requisite service period;
- over what period you record related compensation expense;
- how you adjust that period, if necessary; and
- whether you reverse compensation for awards where the market condition is not met.

Note 31: Income taxes, page F-63

4. Please revise your disclosure to disclose the nature and amount of each permanent difference and explain why it increases or decreases, as applicable, your effective tax rate in 2008 and in 2006. In addition, please explain to us how SFAS 109 precludes the recognition of a deferred tax asset related to tax deductible amortization that you disclose on page F-65.

Note 33: Share-based compensation plans, page F-70

5. It appears from disclosures throughout this note that you have share-based awards denominated in pounds sterling, presumably for ordinary shares traded on the London Stock Exchange, and in U.S. dollars, presumably for American Depositary Shares traded on the NASDAQ Global Select Market. It is also apparent from your List of Subsidiaries filed as Exhibit 21 that you have subsidiaries throughout Europe and the Americas and from your Segment note 27, that a significant amount of your revenues are generated outside the UK or the US. Please explain to us whether you grant share-based awards to employees outside the UK or the US. If so, please explain to us whether you account for these awards as liabilities under paragraph 33 of SFAS 123R or explain to us how you account for these awards and reference the authoritative literature you rely upon to support your accounting.

Form 10-Q for the Quarterly Period Ended March 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Estimates

(i) Sales Deductions

6. You disclose that the launch of the generic version of ADDERALL XR in April 2009 has introduced additional uncertainties into your estimates of Medicaid and MCO rebates for the product. In the results of operations discussion you indicate that you increased total sales deductions for this product from 24% of gross sales

in 2008 to 37% in Q1 2009. You also disclose that you based your rebate accrual amount on your “better estimate” within a range of reasonably possible rebate levels and that it would not be meaningful for you to quantify the sensitivity to change for each individual assumption or uncertainty you identify. You go on to indicate that collectively these individual assumptions could significantly impact ADDERALL XR product sales and the results of operations in the future. Please address the following:

- Revise to disclose the nature of each significant assumption and why you do not believe it meaningful to present sensitivity information for each of them;
- Explain to us how your policy of basing the amount accrued on the “better estimate” complies with GAAP and reference for us the authoritative literature you rely upon to support your accounting.
- Revise to disclose the aggregate range of reasonably possible changes in your Medicaid and MCO rebate estimates for ADDERALL XR.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish 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. Graham Hetherington
Shire Plc
June 1, 2009
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You may contact Ibolya Ignat, Staff Accountant at (202) 551-3656, or Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638 if you have questions regarding these comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant