Via Facsimile and U.S. Mail Mail Stop 6010

May 11, 2006

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

Re: Shire plc

Form 10-K for Fiscal Year Ended December 31, 2005

Filed March 1, 2006 File No. 000-29630

Dear Mr. Emmens:

We have limited our review of your filing to the issues we have addressed in our comments. In our comments, 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.

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 filings. 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 – December 31, 2005

<u>Item 7: Management's Discussion And Analysis Of Financial Condition And Results Of Operations, page 42</u>

Critical Accounting Estimates, page 62

(v) Sales Deductions, page 64

1. We believe that your disclosure related to estimates of items that reduce gross revenue such as rebates with government agencies, contractual rebates with HMOs, product returns, trade discounts, wholesaler chargebacks, and coupons

Matthew Emmens Shire plc May 11, 2006 Page 2

> could be improved as follows, provide us the following information in disclosuretype format:

- a) The nature and amount of each accrual at the balance sheet date and the effect that could result from using other reasonably likely assumptions than what you used to arrive at each accrual such as a range of reasonably likely amounts or other type of sensitivity analysis.
- b) For the factors that you describe in your discussion that you consider in making this estimate, to the extent that each factor is quantifiable, discuss both quantitative and qualitative information and discuss to what extent information is from external sources (e.g., end-customer prescription demand, third-party market research data comparing wholesaler inventory levels to end-customer demand). For example, in discussing your estimate of product that may be returned, consider disclosing and discussing, preferably by product and in tabular format, the total amount of product (in sales dollars) that could potentially be returned as of the balance sheet date and disaggregated by expiration period.
- c) If applicable, discuss any shipments made as a result of incentives and/or in excess of your customer's ordinary course of business inventory level. Discuss your revenue recognition policy for such shipments.
- d) A roll forward of the liability for each estimate for each period presented showing the following:
 - Beginning balance,
 - Current provision related to sales made in current period,
 - Current provision related to sales made in prior periods,
 - Actual returns or credits in current period related to sales made in current period,
 - Actual returns or credits in current period related to sales made in prior periods, and
 - Ending balance.

(vii) Inventory, page 65

- 2. We believe that your critical accounting estimate disclosure related to inventory valuation could be improved. Please provide to us, in disclosure-type format:
 - A discussion of the significant assumptions underlying your estimates of inventory valuation including your estimates for inventory obsolescence, returns, damaged goods and other allowances;
 - The amount of changes in estimates recorded in each period presented; and
 - The effect that reasonably likely changes may have on your estimate as of the latest year presented.

Matthew Emmens Shire plc May 11, 2006 Page 3

Financial Statements

25. Segment reporting, page F-53

3. Please provide us, in disclosure type format, revised disclosure that includes your product sales by major product or product type. Refer to paragraph 37 of SFAS 131.

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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 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 include 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 filings;
- 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 comments on your filing.

Matthew Emmens Shire plc May 11, 2006 Page 4

You may contact James Peklenk, Staff Accountant, at (202) 551-3661, or Jim Atkinson, Accounting Branch Chief, at (202) 551-3674 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