Via Facsimile and U.S. Mail
Mail Stop 4720

July 20, 2009

Colin Goddard, Ph.D
Chief Executive Officer
OSI Pharmaceuticals, Inc.
41 Pinelawn Road
Melville, New York 11747

Re: **OSI Pharmaceuticals, Inc.**
Form 10-K for Fiscal Year Ended December 31, 2008
DEF 14A filed April 29, 2009
File No. 000-15190

Dear Dr. Goddard:

We have reviewed your filings and have the following comments. 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 Fiscal Year Ended December 31, 2008

Item 1. Business

Our Marketed Product-Tarceva, page 3

1. In discussing the ATLAS study on page 4, you state that the study "was funded by Genentech and Roche" but that the company may, under its Tripartite Agreement with Genentech and Roche, "elect to make certain payments" for the study. We also note your statement on page 4 that the ATLAS study was terminated in February 2009 based upon the results obtained. Please revise your disclosure to describe the circumstances under which the company may elect to make the referenced payments, including the reasons

why the company might elect to do so, the potential benefits and detriments of both making payments and not making payments, and the aggregate potential payments that may be made. If these payments will not be considered material to the company, please provide an analysis supporting such determination.

Manufacturing and Supply, page 7

2. We note your statement in the second risk factor on page 23 that the company is "dependent on two suppliers for the API for Tarceva and a single supplier for the tableting of Tarceva in the United States." Please file as exhibits to the Form 10-K your long term supply agreements with Sumitomo Chemical Co., Ltd. and Dipharma S.p.A. Also, please revise your disclosure to describe the material terms of each agreement, where appropriate.

Our Clinical Development Programs, page 8

3. Please revise the discussion of your agreement with Eli Lilly and Company on page 9 to provide more information about the royalty provision; either a range or a statement that the percentage is in the single digits, teens, etc. will be sufficient. Also, please describe the term and termination provisions of the agreement.

Divestiture of Eye Disease Business, page 11

4. We note in your discussion of the divestiture of the remaining assets of your eye disease business you state that under the terms of the transaction you will receive potential future milestone and royalty payments. Please quantify the aggregate potential future milestone payments, the amount paid to date, if any, and provide more information about the royalty provision; either a range or a statement that the percentage is in the single digits, teens, etc. will be sufficient. If these payments will not be considered material to the company, please provide an analysis supporting that determination.

Item 2. Properties, page 36

5. Please file as exhibits to the Form 10-K copies of any lease agreement considered material to the company, as described on page 36. See Item 601(b)(10)(ii)(D) of Regulation S-K.

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

Results of Operations
Research and Development, page 49

6. Your Lifecycle Plan describes Phase III drug development activities that appear to indicate likely future Tarceva-related product launches. Please revise your disclosure to identify those drugs in development that are reasonably likely to result in future product

launches and disclose why you believe that to be the case. In addition for each of these drugs, disclose the anticipated completion dates, estimated costs to complete development and the period in which resulting net cash inflows are expected to commence. If you do not maintain research and development costs by project, disclose that fact and provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project. To the extent that you are unable to provide this information, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Commitments and Contingencies, page 56

7. Please revise your presentation to present the future payment periods in this table on a basis consistent with guidance in Item 303 (a) (5) of Regulation S-K.

Consolidated Financial Statements

Notes to Consolidated Financial Statements

(12) Income taxes, page 84

8. Roche is responsible for Tarceva-related sales outside of the United States and reported US dollar equivalent sales of $665 million in 2008. You recorded royalty revenue of $134.6 million from these sales however the foreign component of earnings before income taxes was a loss of $36,000. Please explain the apparent inconsistency between these amounts.

9. Please disclose the years that remain subject to examination by major tax jurisdictions, as required by paragraph 21 of FIN 48.

Item 9A. Controls and Procedures, page 105

10. If, as you appear to indicate, your disclosure controls and procedures were designed to provide reasonable assurance, please revise your disclosure to explicitly state:
    - that your disclosure controls and procedures were designed to provide "reasonable assurance" that the controls and procedures will meet their objectives; and
    - your CEO's and CFO's conclusion about the effectiveness of your disclosure controls and procedures at reasonable assurance level. .

DEF 14A filed April 29, 2009

Compensation Discussion and Analysis
Equity Awards, page 23

11. We note your statement on page 24 that equity awards were made to the company's NEOs within "the recommended +/-20% range of target." Please revise your disclosure

to indicate the specific percentage awarded to each individual NEO and how such percentage was established by the compensation committee.

* * * *

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.

Please contact Frank Wyman, Staff Accountant, at (202) 551-3660 or Don Abbott, Senior Staff Accountant, at (202) 551-3608, if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Laura Crotty, Staff Attorney, at (202) 551-3563 or Jeffrey 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