Via Facsimile and U.S. Mail Mail Stop 4720

June 9, 2010

Matthew K. Fust Executive Vice President and Chief Financial Officer Onyx Pharmaceuticals, Inc. 2100 Powell Street Emeryville, CA 94608

Re: Onyx Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2009

Filed February 23, 2010

Definitive Proxy Statement filed April 9, 2010

File Number: 000-28298

Dear Mr. Fust:

We have reviewed your filing and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosures. 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, 2009

<u>Item 1. Business</u> <u>Collaboration, Licensing, Option Agreements, page 10</u>

1. You note in the risk factor "We are dependent on our collaborative relationship with Bayer..." Bayer's right to terminate the collaboration agreement on limited notice and for reasons outside your control. Please revise your disclosure

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regarding the collaboration agreement with Bayer to include a discussion of the term of the agreement and termination provisions.

2. Please revise your disclosure regarding the collaboration agreement with Pfizer to include a range of royalties you would be entitled to receive, the total aggregate potential milestone payments and term and termination provisions.

<u>Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 42</u>

Critical Accounting Policies, Estimates and Judgments
Revenue from Collaboration Agreement, page 45 and Research and Development
Expense, page 47

- 3. Please revise to disclose the amount of changes to prior period estimates of revenues (i.e. commercial profit, marketing and royalties) and expenses (i.e. marketing, sales and research and development) in connection with your collaboration with Bayer recorded in your results of operations for each period presented.
- 4. With respect to your disclosure under revenue from collaboration agreement on page 45 that you "may be required to restate our results for prior periods," please revise to disclose the reason you believe that this disclosure was necessary and under what circumstances a restatement would be required.

Business Combinations, page 45

5. Please revise your disclosure to include additional information regarding the key inputs used to determine the estimated fair value of the contingent consideration liability. For example, please disclose the time needed to complete the development and approval of product candidates and the assumptions you used to determine the timing. Also disclose the discount rate that was used and the method used to determine the rate.

Contractual Obligations and Commitments, page 56

6. Please revise your notes to the table of contractual obligations to include the aggregate amount of potential milestone payments due to BTG along with a description of the events that would trigger the payments. In addition, please revise your disclosure in the notes to the financial statements to include the length of and termination provisions for all material agreements.

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<u>Item 9A. Controls and Procedures</u> Inherent Limitations on Effectiveness of Controls, page 59

7. We note your statement that "disclosure controls and procedures were *sufficiently effective* to provide reasonable assurance that the objectives of our disclosure control system were met." Given the use of the word 'sufficiently', it remains unclear whether your chief executive officer and chief financial officer have concluded that your disclosure controls and procedures are *effective*. Please revise your disclosure to state, in clear and unqualified language, the conclusions reached by your chief executive officer and your chief financial officer on the effectiveness of your disclosure controls and procedures.

Definitive Proxy Statement filed on April 9, 2010

Compensation Discussion and Analysis

2009 Executive Officer Compensation, page 39

- 8. We note that under your annual incentive bonus program, for all named executive officers with the exception of the Chief Executive Officer, 20% of the award is based on individual performance for the applicable year, "measured by comparing achievements for the year with the individual's goals and objectives." We note further that 100% of the target bonus of the Chief Executive Officer and 80% of the target bonus for all other NEOs is linked to corporate performance goals. Please revise your disclosure to provide the following:
 - Identification of all of the corporate performance goals included in the your target achievement level, including a specific discussion of the target achievement levels established for each metric under the financial metrics component or the organizational and development metrics;
 - Identification of the threshold, target, and maximum levels of achievement for each corporate performance goal;
 - Discussion of how the level of achievement of corporate objectives impacts the determination of the payout percentage; and
 - Discussion of individual performance goals and objectives for each NEO and how individual performance impacts the amount of cash bonus awarded for each NEO.

To the extent that the performance goals or metrics were quantified, the discussion in your disclosure should also be quantified.

Risk Considerations in Our Compensation Program, page 55

9. We note your statement that "Our Committee does not believe that our compensation programs as currently structured are reasonably likely to have a

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material adverse effect on the Company." Please advise us of the basis for your conclusion and describe the process you undertook to reach your conclusion.

Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comments. Detailed cover 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 comments on your filing.

Please contact Vanessa Robertson, Staff Accountant, at (202) 551-3649 or Joel Parker, Accounting Branch Chief, at (202) 551-3651 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 Karen Ubell, Staff Attorney, at (202) 551-3873 or Suzanne Hayes, Legal Branch Chief, at (202) 551-3675 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