



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

July 7, 2010

Douglas C. MacLellan  
President and Chief Executive Officer  
Radiant Pharmaceuticals Corporation  
2492 Walnut Avenue, Suite 100  
Tustin, CA 92780-7039

**Re: Radiant Pharmaceuticals Corporation  
Amendment No. 1 to Schedule 14A Filed June 22, 2010  
Form 10-K Filed April 15, 2009  
Form 10-Q Filed November 23, 2009  
Form 10-K/A Filed May 3, 2010  
Form 10-Q Filed May 24, 2010  
File No. 001-16695**

Dear Mr. MacLellan:

We have reviewed your response letters filed June 10, 2010 and June 22, 2010 and the above-referenced filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

**Amendment No. 1 to Schedule 14A Filed June 22, 2010**

**General**

1. Please refer to prior comment two. Please include the pro forma information for the year ended December 31, 2009 in the proxy to reflect the deconsolidation of JPI as of September 29, 2009.

About the 2010 Annual Meeting of Stockholders, page 1

2. You disclose that you are sending this proxy statement and the accompanying proxy to your stockholders on July 2, 2010. Please revise to include a reasonable mailing date as this date has already occurred.

Introduction to the Proposals, page 3

3. We have reviewed your June 22, 2010 response to prior comment 6. Please revise your disclosure in this section to quantify the amount of expenses for which management has not been reimbursed and the amount of salaries that the company has not paid. If these salaries were formerly owed but are now paid, please clarify accordingly. Please also disclose in the body of the proxy statement the types of expenses that comprised entertainment expenses reimbursable by you.
4. You disclose that at the date this Proxy Statement went to print, you have received default notices from a few note holders. Please revise to clarify the number of holders which have sent a default notice to you and the aggregate principal amount of the underlying notes for which you have received a default notice.

Potential Issuance Authorized by this Proxy Statement, page 4

5. We are reissuing prior comment 9. It appears from your disclosure throughout this proxy statement that the 2010 Equity Incentive Plan Options are described in Proposal 10. Please revise your table accordingly.

Proposal 1, page 5

6. Please revise your disclosure to clarify the number of shares that are potentially issuable under the exchange agreement.
  - In your June 22, 2010 response to prior comment 16 and on page 8 of your revised proxy statement, you state that there are 18,497,613 shares that are potentially issuable under the exchange agreement and/or for which you are seeking approval of the issuance of in this proposal;
  - On page 7 of your revised proxy statement, you disclose that there are 14,996,413 that are potentially issuable under the exchange agreement; and
  - On page 7 of your revised proxy statement, you disclose that if this proposal receives the necessary approval, you are authorized to issue up to an aggregate of 19,054,108 additional shares of common stock.Please revise to remove these inconsistencies.
7. We have reviewed your June 22, 2010 response to prior comment 17. If true, please clarify that you have not registered the potential issuance of common stock under the

exchange agreement in connection with your Series 1 and 2 Notes. In connection with Proposals 5 through 8, please revise your disclosure on pages 14, 15, 17 and 18 to clarify that you are seeking to register the respective number of shares on the registration statement, but only the transactions registered on the registration statement when it is taken effective will be eligible for sale pursuant thereto.

Introduction to Proposals 5, 6, 7 and 8, page 11

8. You state that a copy of the Form of Note and Warrant Purchase Agreement, Form of Note, Form of Warrant, and Form of Registration Rights Agreement for the 2010 Debt Financing are filed as Exhibits 10.1, 10.2, 10.3, and 10.4, respectively, to the Current Reports on Form 8-K that you filed on March 26, 2010 and April 8, 2010, respectively. You have not filed a Form 8-K on April 8, 2010. Please revise accordingly.
9. You also state that the descriptions of the transactions contemplated by the above listed Exhibits do not purport to be complete and are qualified in their entirety by reference to the full text of the exhibits incorporated by reference. Please revise your disclosure to disclose all material terms of these agreements and clarify that the description contains all material terms of the agreements.

Proposal 9, page 18

10. You state that if your stockholders approve Proposals 1 through 8, you may issue up to 96,209,034 shares of your common stock. Based on your disclosures on pages 4 and 5, it appears that the 96,209,034 also includes the issuance of shares in Proposal 10. Please revise accordingly.
11. In response to prior comment 10, you state that you are not currently contemplating another financing. Please revise your disclosure in this section to clarify whether or not you have any additional plans for the additional authorized shares other than those discussed in Proposals 1-8 and 10.

Proposal 10, page 19

12. We have reviewed your response to prior comment 28. Pursuant to Item 10(c) of Schedule 14A, please restore the information required by Item 201(d) of Regulation S-K. If you have shares listed in this table that have not been approved by security holders, please expand your disclosure to describe briefly, in narrative form, the material features of the plan. See Item 201(d)(3) of Regulation S-K.

Proposal 11, page 22

13. Please revise your disclosure here and under “Officers and Directors” to provide the information required by Item 401(e) of Regulation S-K. This disclosure should include for each director, a brief discussion of the director’s specific experience, qualifications, attributes or skills that led to the conclusion that the person should serve as your director, in light of your business and structure. If material, this disclosure should cover more than the past five years, including information about the person's particular areas of expertise or other relevant qualifications.

Corporate Governance  
Governance Committee, page 27

14. You disclose that your Governance Committee and Board of Directors considers diversity amount other factors in director candidates. Pursuant to Item 407(c)(2)(vi) of Regulation S-K, please revise to disclose how your nominating committee considers diversity.

Incorporation of Certain Documents by Reference, page 35

15. We have reviewed your June 22, 2010 response to prior comment 32. Please advise us which documents you are incorporating in response to Item 13(b)(2) of Schedule 14A. Please revise your proxy statement to clarify that you will deliver with this proxy statement a copy of each document incorporated by reference in response to Item 13(b)(2) of Schedule 14A.
16. Please revise your disclosure to provide the information required by Item 202 of Regulation S-K in your proxy statement. Items 11 and 12 of Schedule 14A do not specifically permit this information to be incorporated by reference. See General Instruction D of Schedule 14A.
17. We note that you are seeking to incorporate by reference various Form 8-Ks that relate to Proposals 5 through 8. Please revise your proxy statement to provide all material information regarding these proposals in your proxy statement rather than incorporating such information by reference. See General Instruction D of Schedule 14A.

**Form 10-K filed on April 15, 2009**

18. We have reviewed your June 10, 2010 response to prior comment 33. Please expand your proposed disclosure for your next amended Form 10-K regarding your Collaboration agreement with Mayo Clinic to disclose that the agreement is terminable upon thirty days written notice by you and terminable by Mayo Clinic for reasonable cause upon thirty days written notice.

**Form 10-Q filed on November 23, 2009**

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations  
U.S. Operations, page 31

19. We have reviewed your June 10, 2010 response to prior comment 37. Please expand your proposed disclosure for your next amended Form 10-K regarding your distribution agreement with Grifols USA, LLC to disclose that either party may terminate the agreement without cause after the second anniversary with one year written notice.

**Form 10-K/A Filed May 3, 2010**

Item 10. Directors, Executive Officers and Corporate Governance, page 91

20. On pages 94 and 98, you disclose that Mr. Zheng is one of your directors. Please expand your disclosure to include the disclosure required by Item 401 of Regulation S-K for Mr. Zheng.
21. Please revise your disclosure to provide the information required by Item 401(e) of Regulation S-K. This disclosure should include for each director, a brief discussion of the director's specific experience, qualifications, attributes or skills that led to the conclusion that the person should serve as your director, in light of your business and structure. If material, this disclosure should cover more than the past five years, including information about the person's particular areas of expertise or other relevant qualifications.

Note 2 Organization and Summary of Significant Accounting Policies  
Deconsolidation, page 52

22. We have reviewed your response to comment 34 and have the following comments:
- Elaborate on how sales, cost of sales, gross margin, and selling, general and administrative expenses were used in your determination of the value.
  - With respect to comparable public companies, please clarify what is meant by the statement "those that possessed similar to those of the Company". Further, please

tell us what consideration was given to the size of the comparable companies, and how the comparable companies ultimately affected your valuation of the investment in JPI.

- c. Please clarify how you determined the discount for a lack of marketability and lack of control was reasonable and disclose the percentage discount used.
- d. Tell us how you used a combination of the market and income approach.

23. Please refer to your response to comment 35. Please clarify in the filing (1) how often financial information is provided by JPI, (2) whether financial information is now being received on a timely basis; and if not, the approximate lag in receipt of information, and how that lag period affects your financial statements.

**Form 10-Q Filed May 24, 2010**

Item 1. Financial Statements

Notes to Unaudited Condensed Consolidated Financial Statements

Note 12 – Related Party Transactions, page 20

24. With respect to the note from JPI, please tell us why over six months after the deconsolidation, the payment terms have not been finalized. Further, please tell us how you concluded that the remaining balance is still collectible.

Note 13 – Subsequent Events

Note Financing, page 20

25. Please clarify where in your condensed consolidated balance sheets you intend to classify the warrants issued in conjunction with the Note Financings.

Shares Issued in Connection with Warrant Exercises and Financing Arrangements, page 22

26. Please tell us how you intend to account for the reversal and re-conversion of debt.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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.

Douglas C. MacLellan  
President and Chief Executive Officer  
Radiant Pharmaceuticals Corporation  
July 7, 2010  
Page 7

You may contact Tabatha Akins at (202) 551-3658 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer Riegel at (202) 551-3575 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Rachel Schmierer  
Leser, Hunter, Taubman & Taubman  
17 State Street, Suite 1610  
New York, New York 10004