



DIVISION OF
CORPORATION FINANCE

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

December 21, 2010

Mr. Tae Heum Jeong
Chief Financial Officer
Rexahn Pharmaceuticals, Inc.
15245 Shady Grove Road, Suite 455
Rockville, MD 20850

Re: Rexahn Pharmaceuticals, Inc.
Form 10-K for the year ended December 31, 2009
Filed March 31, 2010
File No. 001-34079

Dear Mr. Jeong:

We have reviewed your October 15, 2010 and December 3, 2010 responses to our September 17, 2010 letter and have the following comments.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing your response to these comments, we may have additional comments.

Research and Development Projects, page 37

1. Please revise your disclosures as proposed in response to comment three to also quantify the research and development expenses that were incurred for the projects identified during each period that are presented in the financial statements.

Financial Statements

Notes to the Financial Statements

9. Common Stock, page F-15

2. We acknowledge your response to our previous comment five and your separate assessment in your letter dated December 3, 2010. We are still evaluating your assessment that the anti-dilution rights associated with common stock should be accounted for as a liability under ASC 480-10-25-14. In your December 3, 2010 letter, you indicate that even if liability accounting under ASC Topic 480 is inappropriate, you would be required to account for this provision as a derivative liability under ASC Topic 815. In this regard, please explain to us why you believe this provision would be net

settleable under ASC 815-10-15-83 and 15-99 through 15-139 when it appears that you must settle the provision gross by issuing shares.

3. We acknowledge your representation in response to our previous comment five that the warrants should have been reclassified as liabilities at January 1, 2009 upon the adoption of the new guidance beginning at ASC 815-40-15-5. Please also provide us your analysis to support that these warrants should not have been reflected as liabilities upon issuance. Please reference the authoritative literature you relied upon to support your accounting.
4. Your materiality assessment provided in your December 3, 2010 response on the warrants and the anti-dilution rights associated with common stock appears to indicate that the related errors are, at a minimum, quantitatively material to your financial statements.
 - Please revise your materiality assessment to separately quantify the financial impact of the error for your warrants and for the anti-dilution rights associated with common stock.
 - Please provide the impact for each error by quarter for 2009 and 2010.
 - Please revise your assessment to also include the impact on your total liabilities.
 - Assuming you can substantiate that the warrants should not have been accounted for as liabilities upon issuance, as requested in the preceding comment, please provide the fair values assigned to the warrants at issuance, upon the adoption of the provisions of EITF 07-5 on January 1, 2009 and at each quarterly balance sheet date starting at March 31, 2009.
 - Please provide the fair values assigned to the anti-dilution rights associated with common stock upon issuance and for the following subsequent balance sheet dates:
 - December 31, 2007, 2008 and 2009
 - Each quarter end in 2009 and 2010.
 - Regarding the fair values assigned in the preceding two bullets, please explain to us how you computed the fair values. Please tell us what valuation models you used to determine fair values and provide the assumptions used in those models. To the extent you use the Black-Scholes option pricing model please explain to us why you use that model, instead of a binomial or lattice pricing model to value your warrants. In this regard the Black-Scholes model does not take into account the warrants' down-round protection. It appears to us that the price adjustment feature would add value to the warrant for which the binomial or lattice models are better suited.
5. We acknowledge your response to our previous comment six. Please explain to us why the provision identified in the first paragraph of page 15 of your October 15, 2010 letter that permits the holder to opt for cash settlement in the event of a Fundamental Transaction does not necessitate liability accounting under ASC 815-40-25-7 through 25-10 and ASC 815-40-55-2 through 55-6. In addition, please provide us the proposed revised disclosure you intend to include in future periodic reports that describes the anti-dilution provisions of these warrants.

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Please contact Kei Nakada, Staff Accountant, at (202) 551-3659 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