



DIVISION OF
CORPORATION FINANCE

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

October 31, 2011

Via E-mail

Robert J. Mulroy
President and Chief Executive Officer
Merrimack Pharmaceuticals, Inc.
One Kendall Square, Suite B7201
Cambridge, MA 02139

**Re: Merrimack Pharmaceuticals, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed October 26, 2011
File No. 333-175427**

Dear Mr. Mulroy:

We have reviewed your amended registration statement filed October 26, 2011, 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical accounting policies and significant judgments and estimates
Stock Based Compensation, page 69

1. Please refer to your response to our comment seven in our letter dated August 3, 2011. Please note we may have additional comments once the IPO price is known.

Board Composition and Election of Directors, page 166

2. Please revise your disclosure to identify the party or parties with whom you have an agreement to include in the proxy a proposal to declassify your board of directors. Further, please expand your disclosure to include the nature of this agreement, why you have agreed to it, whether such agreement is binding, and any other terms to which the company has agreed.

Robert J. Mulroy
Merrimack Pharmaceuticals, Inc.
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You may contact Tabatha Akins, Staff Accountant, at (202) 551-3658 or Lisa Vanjoske, Accounting Reviewer, at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Karen Ubell, Staff Attorney, at (202) 551-3873, Dan Greenspan, Branch Chief, at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey Riedler
Assistant Director