UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

MERRIMACK PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 04-3210530 (I.R.S. Employer Identification No.)

One Kendall Square, Suite B7201 Cambridge, MA (Address of Principal Executive Offices)

02139 (Zip Code)

2011 Stock Incentive Plan (Full Title of the Plan)

Robert J. Mulroy
President and Chief Executive Officer
Merrimack Pharmaceuticals, Inc.
One Kendall Square, Suite B7201
Cambridge, Massachusetts 02139
(Name and Address of Agent for Service)

(617) 441-1000

(Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\square (Do not check if a smaller reporting company)	Smaller reporting company	

CALCULATION OF REGISTRATION FEE

		Proposed Maximum	Proposed Maximum	
	Amount to be	Offering Price Per	Aggregate	Amount of
Title of Securities to be Registered	Registered(1)	Share	Offering Price	Registration Fee
Common Stock, \$0.01 par value per share	4,055,488 shares	\$5.22(2)	\$21,169,648(2)	\$2,132

- 1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the NASDAQ Global Market on February 24, 2016.

EXPLANATORY NOTE

This Registration Statement on Form S-8, relating to the 2011 Stock Incentive Plan of Merrimack Pharmaceuticals, Inc. (the "Registrant"), is being filed for the purpose of registering additional securities of the same class as other securities for which a Registration Statement on Form S-8 has previously been filed and is effective. Accordingly, this Registration Statement incorporates by reference the contents of (i) the Registration Statement on Form S-8, File No. 333-180996, filed with the Securities and Exchange Commission (the "SEC") on April 27, 2012 by the Registrant, relating to the Registrant's 1999 Stock Option Plan, as amended, 2008 Stock Incentive Plan, as amended, and 2011 Stock Incentive Plan, (ii) the Registration Statement on Form S-8, File No. 333-186370, filed with the SEC on February 1, 2013 by the Registrant, relating to the Registrant's 2011 Stock Incentive Plan (iii) the Registration Statement on Form S-8, File No. 333-194313, filed with the SEC on March 4, 2014 by the Registrant, relating to the Registrant's 2011 Stock Incentive Plan and (iv) the Registration Statement on Form S-8, File No. 333-202346, filed with the SEC on February 27, 2015 by the Registrant, relating to the Registrant's 2011 Stock Incentive Plan, in each case except for Item 8, Exhibits, with respect to which the Exhibit Index immediately preceding the exhibits attached hereto is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on this 26th day of February, 2016.

MERRIMACK PHARMACEUTICALS, INC.

By: /s/ Robert J. Mulroy

Robert J. Mulroy President and Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Merrimack Pharmaceuticals, Inc., hereby severally constitute and appoint Robert J. Mulroy and Yasir B. Al-Wakeel, and each of them singly, our true and lawful attorneys with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-8 filed herewith and any and all amendments to said Registration Statement, and generally to do all such things in our name and on our behalf in our capacities as officers and directors to enable Merrimack Pharmaceuticals, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	<u>Title</u>	<u>Date</u>
/s/ Robert J. Mulroy Robert J. Mulroy	President, Chief Executive Officer and Director (Principal Executive Officer)	February 26, 2016
/s/ Yasir B. Al-Wakeel Yasir B. Al-Wakeel	Chief Financial Officer and Head of Corporate Development (Principal Financial Officer)	February 26, 2016
/s/ William A. Sullivan William A. Sullivan	Principal Accounting Officer and Treasurer (Principal Accounting Officer)	February 26, 2016
/s/ Gary L. Crocker Gary L. Crocker	_ Chairman of the Board	February 26, 2016
/s/ John M. Dineen John M. Dineen	Director	February 26, 2016
/s/ Vivian S. Lee, M.D., Ph.D. Vivian S. Lee, M.D., Ph.D.	_ Director	February 26, 2016

Signature	<u>Title</u>	<u>Date</u>
/s/ John Mendelsohn, M.D. John Mendelsohn, M.D.	_ Director	February 26, 2016
/s/ Ulrik B. Nielsen, Ph.D. Ulrik B. Nielsen, Ph.D.	_ Director	February 26, 2016
/s/ Michael E. Porter, Ph.D. Michael E. Porter, Ph.D.	_ Director	February 26, 2016
/s/ James H. Quigley James H. Quigley	_ Director	February 26, 2016
/s/ Russell T. Ray Russell T. Ray	_ Director	February 26, 2016

EXHIBIT INDEX

Exhibit No.	<u>Description</u>
4.1(1)	Restated Certificate of Incorporation of the Registrant
4.2(2)	Amended and Restated Bylaws of the Registrant
5.1	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant
23.1	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
23.2	$Consent\ of\ Price waterhouse Coopers\ LLP,\ independent\ registered\ public\ accounting\ firm\ for\ the\ Registrant$
24.1	Powers of Attorney (included on the signature pages to the Registration Statement)
99.1(3)	2011 Stock Incentive Plan

⁽¹⁾ Previously filed with the Securities and Exchange Commission on April 27, 2012 as Exhibit 4.1 to the Registrant's Registration Statement on Form S-8 (File No. 333-180996) and incorporated herein by reference.

⁽²⁾ Previously filed with the Securities and Exchange Commission on January 13, 2012 as Exhibit 3.5 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-175427), and incorporated herein by reference.

⁽³⁾ Previously filed with the Securities and Exchange Commission on January 13, 2012 as Exhibit 10.3 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-175427), and incorporated herein by reference.

February 26, 2016

Merrimack Pharmaceuticals, Inc. One Kendall Square, Suite B7201 Cambridge, MA 02139

Re: 2011 Stock Incentive Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 4,055,488 shares of common stock, \$0.01 par value per share (the "Shares"), of Merrimack Pharmaceuticals, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2011 Stock Incentive Plan (the "Plan").

We have examined the Certificate of Incorporation and Bylaws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plan, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plan, the Shares will be validly issued, fully paid and nonassessable.

Merrimack Pharmaceuticals, Inc. February 26, 2016 Page 2

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Brian A. Johnson

Brian A. Johnson, Partner

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 26, 2016 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Merrimack Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts February 26, 2016