January 8, 2017

Merrimack Concludes Strategic Review; Announces Plan to Divest Assets and Sharpen Strategic Focus

Company to Sell ONIVYDE® and Generic Version of DOXIL® to Ipsen for Up to $1.025 Billion
$200 Million to Be Returned to Stockholders through Special Cash Dividend; Board Commits to Returning Amounts Received from $450 Million in Future Milestones
Refocused Research & Development Company Will Have Resources to Advance Lead Pipeline Candidates MM-121, MM-141 and MM-310

CAMBRIDGE, Mass., Jan. 8, 2017 /PRNewswire/ -- Merrimack Pharmaceuticals, Inc. (NASDAQ: MACK) ("Merrimack" or the "Company") today announced that it has entered into a definitive asset purchase and sale agreement with Ipsen (Euronext: IPN; ADR: IPSEY) for a transaction valued at up to $1.025 billion, plus up to $33 million in net milestone payments retained by Merrimack pursuant to Merrimack's exclusive licensing agreement with Shire, under which Merrimack will:

- Sell to Ipsen its first commercial product ONIVYDE®, including U.S. commercialization rights and its licensing agreement with Shire plc; and
- Sell to Ipsen its generic version of doxorubicin hydrochloride (HCI) liposome injection ("generic DOXIL®") marketed in the United States as DOXIL® and advanced under a development, license and supply agreement with Actavis LLC.

The transaction, which is expected to be completed in the first quarter of 2017, is subject to certain customary closing conditions, including Merrimack stockholder approval and certain governmental regulatory clearances.

Merrimack also today announced the completion of its previously announced strategic pipeline review resulting in the identification of the three most promising clinical programs to focus its development efforts on going forward. In assessing the clinical and financial prioritization of its programs, Merrimack determined that MM-121, MM-141 and MM-310 are the programs with the highest probability of success and the highest return on investment. The Company believes focusing on these programs is in the best interests of Merrimack, its stockholders and cancer patients worldwide.

As a result of the transaction, the refocused pipeline and the previously implemented restructuring initiatives announced in October 2016, Merrimack will have a significantly reduced operating expense structure and a capital structure that is appropriately aligned with the Company's new focus. Upon completing the Ipsen transaction and refocusing effort, the Company will have approximately 80 employees; this represents a reduction of 80% from approximately 400 employees prior to implementing the restructuring in October 2016.

Terms of the Transaction & Use of Proceeds
Under the terms of the agreement, which has been unanimously approved by the Merrimack Board of Directors, Merrimack will receive from Ipsen: $575 million in cash at closing; and up to $450 million in additional regulatory approval-based milestone payments. Merrimack will also retain the rights to receive net milestone payments pursuant to Merrimack's exclusive licensing agreement with Shire for the ex-U.S. development and commercialization of ONIVYDE for up to $33 million. The $33 million of net milestone payments includes payments related to ONIVYDE of $18 million from the sale[1] of ONIVYDE in two additional major European countries, $5 million related to the sale[1] of ONIVYDE in the first major non-European, non-Asian country and $10 million for the first patient dosed in the planned small cell lung cancer (SCLC) trial. The Company believes these near-term payments are highly probable based on current data and expects they will be received in 2017.

Merrimack intends to use the $575 million upfront payment, net of tax reserves and transaction-related and other costs, to:

- Invest $125 million to develop the Company's streamlined oncology pipeline, such that Merrimack will be able to fund itself into the second half of 2019;
- Extinguish the $175 million in outstanding Senior Secured Notes due in 2022, plus approximately $20 million of costs associated with the redemption, such that in addition to a significantly reduced operating expense structure, the Company's capital structure will be appropriate for a development stage biopharmaceutical company; and
- Return at least $200 million to the Company's stockholders through a special cash dividend, which equates to approximately $1.54 per outstanding share of common stock, based on the number of Merrimack outstanding shares today. The Board of Directors plans to approve the special cash dividend after the closing of the transaction, and Merrimack expects it will be paid soon thereafter. The Company will announce a record date and ex-dividend date in due course.

Merrimack will also return to the Company's stockholders 100% of the amounts received of the up to $450 million in additional regulatory approval-based milestone payments for additional indications for ONIVYDE in the U.S., net of taxes owed related to the receipt of these milestones. Prior to any tax impact, gross proceeds for achieving these milestones equates to approximately $3.46 per outstanding share of common stock, based on the number of Merrimack outstanding shares today. The milestones are composed of: $225 million for U.S. Food and Drug Administration ("FDA") approval in first-line pancreatic cancer, $150 million for FDA approval in small cell lung cancer and $75 million for FDA approval in any third indication.

Management's Comments
"The agreement to sell ONIVYDE and generic DOXIL, and our decision to focus on MM-121, MM-141 and MM-310, conclude a comprehensive process that our Board conducted to maximize value for stockholders and confirms the strength of our technology and the power of systems biology," said Gary Crocker, Chairman of Merrimack's Board of Directors and interim President and CEO. "With this transformative step, Merrimack is moving forward as a more focused research and development company targeting three clinical stage assets with outstanding value potential. The transaction proceeds will allow Merrimack to realign its capital structure and fund the pipeline into the second half of 2019, as well as return cash to stockholders in the form of the special dividend. This strategic transaction also enhances stockholder value by providing sufficient, non-dilutive capital to fund our new, strongly-focused clinical objectives for MM-121, MM-141 and MM-310, and to participate in the potential upside of expected value-inflection points from each targeted program. We are confident that the actions we are taking are the best way to deliver innovative oncology treatments for cancer patients, while creating value for stockholders."

"Through the transaction announced today, we are streamlining our operating structure to significantly reduce operating expense, while bolstering our capital structure through an infusion of cash and the extinguishment of the Senior Secured Notes," said Dr. Yasir Al-Wakeel, CFO and Head of Corporate Development of Merrimack. "Going forward, we will have a more focused capital allocation program dedicated to advancing MM-121, MM-141 and MM-310. With the multi-year cash runway provided by this transaction, Merrimack will have ample resources to fund its development programs into the second half of 2019, by which time we expect to have additional data regarding the viability of MM-121, MM-141 and MM-310."

Pipeline Focused on MM-121, MM-141 and MM-310
As part of the Company's strategic shift toward research and development, Merrimack will focus on developing innovative and promising anti-cancer agents through clinical proof-of-concept (PoC). Going forward Merrimack is dedicated to accelerating the time to clinically meaningful data in precisely defined patient populations, while optimizing the use of available resources. The Merrimack Board determined that MM-121, MM-141 and MM-310 represent the best opportunities to optimize and extract value for stockholders and cancer patients worldwide:

- **MM-121 (seribantumab)** is a first in class fully human monoclonal antibody that binds to the HER3 receptor and targets HRG+ cancers. Merrimack is currently conducting the SHERLOC study, evaluating MM-121 in HRG+ non-small cell lung cancer patients in combination with docetaxel or pemetrexed. The primary endpoint of the ongoing SHERLOC study is overall survival and it is planned to enroll 280 patients. Given the new strategic direction of Merrimack to develop its pipeline candidates through PoC, Merrimack will modify the ongoing SHERLOC study to a smaller Phase 2 study with progression free survival as the primary endpoint, targeting top-line results by year-end 2018. Likewise, following completion of the transaction, Merrimack intends to initiate an additional Phase 2 trial to demonstrate MM-121's effectiveness in advanced HER2 negative, ER+/PR+ and HRG+ breast cancer.
- **MM-141 (istiratumab)** is a bispecific tetravalent antibody and a potent inhibitor of the PI3K/AKT/mTOR pathway by targeting IGF1-R and HER3. Currently, Merrimack is conducting the CARRIE study, a Phase 2 trial evaluating MM-141 in metastatic pancreatic cancer patients with high levels of free IGF1 in combination with nab-paclitaxel and gemcitabine in the front-line setting. The ongoing CARRIE study planned to enroll 140 patients and to evaluate the activity of MM-141 in both the free IGF high and the free IGF1 high and HRG+ patient population. Given that the prevalence of both biomarkers is greater than 50%, the Company is confident that it can modify the ongoing CARRIE study to more rapidly obtain clinically meaningful data. This modified CARRIE study will target to enroll 80 patients and Merrimack estimates top-line data to be reported in the first half of 2018.
- **MM-310** is expected to begin a first in human Phase 1 study to evaluate its safety and efficacy in the first quarter of 2017. MM-310 is an antibody directed nanotherapeutic (ADN) that contains a prodrug of docetaxel and targets the

EphA2 receptor, which is highly-expressed in most solid tumor types. MM-310 was designed to improve the therapeutic window of docetaxel in major indications such as prostate, ovarian, bladder, gastric and lung cancers. MM-310 utilizes the same proprietary nano-liposomal technology as ONIVYDE, facilitating the antibody-targeted delivery of the chemotherapeutic agent docetaxel.

With the demonstration of clinical value, Merrimack will seek partners at the appropriate time to complete the development, registration and commercialization of MM-121, MM-141 and MM-310.

Other Pipeline Molecules
Other molecules in the Company's pipeline remain valuable and will be put on hold until such time as Merrimack determines conditions are appropriate to invest in them. In connection with the conclusion of the pipeline review, Merrimack has decided to:

- Discontinue the Phase 1 clinical study of MM-151, an oligoclonal therapeutic consisting of a mixture of three fully human monoclonal antibodies, in patients with solid tumors and in colorectal cancer in combination with ONIVYDE. Merrimack remains optimistic about the clinical value of MM-151 and will actively seek partners or outside financing to take over development;
- Defer continued investment in MM-131, MM-302 and several preclinical programs until partnering opportunities or other funding sources are identified; and
- Focus early stage discovery efforts.

Advisers
BofA Merrill Lynch and Credit Suisse Securities (USA) LLC are serving as financial advisers to Merrimack and Skadden, Arps, Slate, Meagher & Flom LLP is serving as legal adviser.

Conference Call
Merrimack will hold an investor conference call to discuss the transaction announcement and the results of its full pipeline review Monday at 8:00 a.m. (Eastern Time). To access the call, please dial (877) 564-1301 in the U.S. or (224) 357-2394 internationally and provide the passcode: 49722113.

A live webcast will be accessible in the Investor Relations section of Merrimack's website, http://investors.merrimack.com/. An investor presentation regarding the announcement can also be found in the Investor Relations section of Merrimack's website.

The webcast of the conference call will be archived in the Investor Relations section of Merrimack's website for six weeks.

About Merrimack

Merrimack Pharmaceuticals is a biopharmaceutical company based in Cambridge, Massachusetts. More information can be found at www.merrimack.com.

Additional Information about the Transaction and Where to Find It
This disclosure is being made in respect of the asset sale contemplated by the Asset Purchase and Sale Agreement between the Company and Ipsen. The proposed asset sale will be submitted to the Company's stockholders for their consideration. In connection with the proposed asset sale, the Company will file a proxy statement with the Securities and Exchange Commission ("SEC"). This press release does not constitute a solicitation of any vote or proxy from any stockholder of the Company. **INVESTORS ARE URGED TO READ THE PROXY STATEMENT CAREFULLY AND IN ITS ENTIRETY WHEN IT BECOMES AVAILABLE AND ANY OTHER RELEVANT DOCUMENTS OR MATERIALS FILED OR TO BE FILED WITH THE SEC OR INCORPORATED BY REFERENCE IN THE PROXY STATEMENT, BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE ASSET SALE.** The final proxy statement will be mailed to the Company's stockholders. In addition, the proxy statement and other documents will be available free of charge at the SEC's internet website, www.sec.gov. When available, the proxy statement and other pertinent documents also may be obtained free of charge at the Company's website, www.merrimack.com, or by directing a written request to Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, telephone number (617) 441-1000.

Participants in the Solicitation
Merrimack and its directors, executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies in connection with the proposed asset sale. Information about Merrimack's directors and executive officers is included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 26, 2016 and the proxy statement for Merrimack's 2016 annual meeting of stockholders, filed with the SEC on April 25, 2016. Additional information regarding these persons and their interests in the transaction will be included in the proxy statement relating to the proposed asset sale when it is filed with the SEC. These documents can be

obtained free of charge from the sources indicated above.

Forward Looking Statements
This release contains forward-looking statements of the Company that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this release are forward-looking statements. Forward looking statements can be identified by the use of the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. The Company's forward-looking statements include, among others, statements about the expected dividend, potential milestone payments, and Company's expectations with respect to the consummation of the proposed transaction and its ability to fund its operations, including continued investment in its research and development pipeline. Actual events or results may differ materially from those described in this release due to a number of risks and uncertainties. Risks and uncertainties include, among other things, risks related to the satisfaction of the conditions to closing the asset sale (including the failure to obtain necessary approvals) in the anticipated timeframe or at all; whether stockholders approve the deal; whether any legal action is brought that results in a delay in or prohibition of the consummation of the transaction; whether the Company receives payments related to the milestone events under its contract with Shire, when expected or at all, or under the asset purchase agreement; whether the Company's expenses are as predicted; the amount of any working capital adjustment in the transaction; whether the Company is able to satisfy the necessary legal tests required to make the anticipated dividend; disruption from the transaction making it more difficult to maintain business and operational relationships; negative effects of this announcement or the consummation of the proposed transaction on the market price of the Company's common stock; significant transaction costs; unknown liabilities; other business effects, including the effects of industry, market, economic, political or regulatory conditions; and those risk factors discussed in the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016 filed with the SEC on November 9, 2016 and its other filings with the SEC. The forward-looking statements in this release represent the Company's views as of the date of this release. The Company anticipates that subsequent events and developments will cause its views to change. However, while it may elect to update these forward-looking statements at some point in the future, it has no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing the Company's views as of any date subsequent to the date of this release.

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[1] Sale is defined as the earlier of first commercial sale or receipt of pricing/reimbursement approval.