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Merrimack Pharmaceuticals' Preclinical Research Shows MM-111 Restores Sensitivity To Chemotherapy And HER2-targeted Treatment In Gastric Cancer Model

Study Presented at AACR 2013 Examines Bispecific Antibody in Combination with Paclitaxel and Trastuzumab

CAMBRIDGE, Mass., April 10, 2013 /PRNewswire/ -- Merrimack Pharmaceuticals, Inc. (NASDAQ: MACK) today announced preclinical study results showing that the novel bispecific therapy MM-111 restored tumor sensitivity to the chemotherapy agent, paclitaxel, and HER2-targeted treatment, trastuzumab, in a HER2+ gastric cancer model. The research was presented as part of the American Association for Cancer Research's 2013 Annual Meeting in Washington, DC, April 6-10, 2013 .

Overexpression of the HER2 (ErbB2) cell surface receptor has been reported in 10-25 percent of gastric and esophageal cancers. The HER2 receptor triggers tumor growth and survival when it binds together with an additional receptor known as HER3 (ErbB3) and another protein called heregulin. HER3 expression has been associated with poor prognosis in gastric cancer. MM-111 is designed to anchor to both receptors, HER2 and HER3, on the cell surface and block heregulin's ability to transmit tumor growth signals, thus inhibiting the tumor cell's ability to thrive.

"The protein heregulin can often cause resistance to standard chemotherapy and targeted treatments in gastric tumors that express both HER2 and HER3," said Ulrik Nielsen, PhD, Co-Founder and Chief Scientific Officer of Merrimack. "We are encouraged to see that this resistance is overcome in preclinical models when MM-111 is used in combination with trastuzumab and paclitaxel."

Merrimack is initiating a Phase 2 study testing MM-111 in combination with paclitaxel or with paclitaxel and trastuzumab for the treatment of advanced gastric, esophageal and gastroesophageal junction (GEJ) cancers. Merrimack is also currently conducting a Phase 1 study of MM-111 across multiple HER2+ tumors, including breast, colorectal, gastric, esophageal and ovarian cancers.

Study Results

Results of the preclinical study showed that the combination of MM-111 with trastuzumab is synergistic in a preclinical HER2-expressing gastric cancer model. Additionally, the study found that heregulin desensitizes gastric tumor cells to the effects of trastuzumab and paclitaxel. The addition of MM-111 to the paclitaxel and trastuzumab regimen, or the addition of MM-111 to either paclitaxel or trastuzumab, restored sensitivity of tumors to treatment in the model.

About Merrimack Pharmaceuticals, Inc.
Merrimack Pharmaceuticals is a biopharmaceutical company discovering, developing and preparing to commercialize innovative medicines paired with companion diagnostics for the treatment of cancer. Merrimack applies Network Biology, its proprietary systems biology-based approach to biomedical research, throughout the research and development process. Merrimack currently has six targeted therapeutic oncology candidates in clinical development.

Forward-Looking Statement
To the extent that statements contained in this press release are not descriptions of historical facts, they are forward-looking statements reflecting the current beliefs and expectations of management made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements include any statements about Merrimack's strategy, future operations, future financial position and future expectations and plans and prospects for Merrimack, and any other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions. In this press release, Merrimack's forward-looking statements include statements about the potential effectiveness of its drug candidates and its ability to translate preclinical data into future clinical success. Such forward-looking statements involve substantial risks and uncertainties that could cause Merrimack's clinical development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the initiation of future clinical trials, availability of data from ongoing clinical trials, expectations for regulatory approvals and other matters that could affect the availability or commercial potential of Merrimack's drug candidates or companion diagnostics. Merrimack undertakes no obligation to update or revise any forward-looking statements. Forward-looking statements should not be relied upon as representing Merrimack's views as of any date subsequent to the date hereof. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Merrimack's business in general, see the

"Risk Factors" section of Merrimack's Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 20, 2013 and other reports Merrimack files with the SEC.

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