

April 4, 2013

Merrimack Pharmaceuticals Announces Top-Line Results From A Single Arm Phase 2 Advanced Lung Cancer Study In Patients With Resistance To An Anti-EGFR Tyrosine Kinase Inhibitor

CAMBRIDGE, Mass., April 4, 2013 /PRNewswire-USNewswire/ -- Merrimack Pharmaceuticals, Inc. (NASDAQ:MACK) today announced that one cohort of a Phase 2 non-small cell lung cancer (NSCLC) study did not meet its primary endpoint. The cohort evaluated MM-121 in combination with erlotinib to treat patients with NSCLC whose disease progressed on an anti-EGFR tyrosine kinase inhibitor (EGFR-TKI). MM-121 is being evaluated in two additional NSCLC cohorts as well as Phase 2 studies for the treatment of advanced ovarian cancer, hormone-receptor positive breast cancer and HER2 negative breast cancer.

The primary objective of this 50 patient, single arm study was to determine the potential of MM-121, a novel signaling inhibitor targeting ErbB3, to modulate or reverse resistance to erlotinib, an EGFR targeted therapy, commonly used in the treatment of NSCLC, in patients who have acquired resistance to EGFR-TKI therapy. The primary endpoint of this cohort was to obtain a 40 percent progression free survival rate at four months of treatment. Secondary endpoints included biomarker assessment of patients enrolled in the study.

A secondary objective of the study was to evaluate tissue samples from patient biopsies to assess whether the biomarker hypothesis behind MM-121 could be translated into a clinical setting. In order to conduct this analysis, pre-dose biopsies were required from each patient upon entering the study.

"These are data on the first of three NSCLC patient populations where we are studying the potential benefit of MM-121 in combination with erlotinib. A strong component of these studies is a focused translational program directed toward the identification of a biomarker profile for the combination in this difficult to treat cancer," said Akos Czibere, MD, PhD, Senior Medical Director of the MM-121 program at Merrimack. "We are disappointed by the overall clinical results in this population, but are encouraged by our preliminary biomarker analysis which we believe will be important for the identification of a predictive diagnostic when analyzed in the context of the overall clinical development program."

This is one cohort (Group C) of a larger, ongoing randomized Phase 2 study evaluating MM-121 to treat other groups of patients with NSCLC. The study also includes patients with EGFR wild-type tumors who have recurring or progressive disease following at least one chemotherapy-containing regimen in the metastatic setting and who have had no prior EGFR-TKI therapy (Group A) and patients with a known EGFR-activating mutation who have had no prior EGFR-TKI therapy in the metastatic setting (Group B). MM-121 is also being evaluated in Phase 2 studies for the treatment of advanced ovarian cancer, hormone-receptor positive breast cancer and HER2 negative breast cancer.

MM-121 is a fully human monoclonal antibody that targets ErbB3, a cell surface receptor implicated in tumor growth and survival. By inhibiting ErbB3 signaling, MM-121 is designed to restore sensitivity, delay resistance and enhance the anti-tumor effect of a combination therapy partner. Sanofi and Merrimack entered into an exclusive, global license and collaboration agreement for MM-121 in 2009.

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, including the potential benefits of MM-121 in combination with erlotinib, the safety of its drug candidates, the ability to develop a predictive diagnostic and the ability to achieve 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 and conduct of future clinical trials, availability of data from ongoing clinical trials, expectations for regulatory approvals, development progress of Merrimack's companion diagnostics 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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