Momenta Pharmaceuticals Presents Preclinical Data for Novel Oncology Compound M402 at AACR Meeting

M402, a Rationally Designed Molecule With a Novel Mechanism of Action, Inhibits Tumor Metastasis in Two Murine Models

CAMBRIDGE, Mass., Apr 20, 2009 (GlobeNewswire via COMTEX News Network) -- Momenta Pharmaceuticals, Inc. (Nasdaq:MNTA), a biotechnology company specializing in the characterization and engineering of complex mixture drugs, today announced results from a preclinical study of its novel oncology drug candidate, M402. The data showed that M402 in combination with chemotherapeutic agents inhibited spontaneous tumor metastasis in a murine metastatic breast carcinoma model. The results were presented in a poster session titled "M-ONC 402 - A Non-Anticoagulant Low Molecular Weight Heparin Inhibits Tumor Metastasis" (abstract #281) on Sunday, April 19, 2009 at the 100th Annual Meeting of the American Association for Cancer Research (AACR), in Denver, Colorado.

"Heparan sulfate glycosaminoglycans (HSGAGs) are complex sugar-based molecules present in the tumor microenvironment that present growth factors, cytokines, and chemokines necessary for tumor cell growth, migration, and survival," commented Takashi Kei Kishimoto, Ph.D., Vice President of Disease Biology at Momenta Pharmaceuticals. "Our novel product candidate, M402, exploits the biology of HSGAGs. Data from preclinical studies have shown that M402 has the potential to modulate angiogenesis and tumor metastasis through a variety of HSGAG-binding proteins," he concluded.

M402 is an HSGAG mimetic engineered from low molecular weight heparin (LMWH) to have potent anti-metastatic properties and low anticoagulant activity. Anti-tumor efficacy was first evaluated in an experimental murine melanoma metastasis model. The data demonstrated that a single dose of M402 administered prior to tumor inoculation significantly reduced tumor colonization in the lung in a dose-dependent manner. Based on these findings, the anti-tumor efficacy of M402 was then assessed for the ability to inhibit spontaneous metastasis in an orthotopic murine metastatic breast carcinoma model. In this model, M402 in combination with cisplatin was shown to significantly inhibit tumor cell metastasis to the lung compared to animals treated with cisplatin alone. Subsequent immunohistological analysis showed a decrease in microvessel density in both primary tumors and lung metastases in the M402 treated group, suggesting that anti-angiogenesis may contribute to the anti-tumor effect of M402.

Additional preclinical studies of M402 will be presented at AACR in a poster "M-ONC 402, a Novel Non-Anticoagulant Heparin Inhibits P-selectin Function and Inhibits Metastatic Seeding of Tumor Cells in Mice" (abstract #5005) on Wednesday, April 22, 2009 from 8:00 AM - 12:00 PM.

About M402

M402 is a heparan sulfate glycosaminoglycan (HSGAG) mimetic engineered from low molecular weight heparin (LMWH) to have potent anti-metastatic properties and low anticoagulant activity. M402, the Company's second novel product candidate, is in preclinical development.

About Momenta

Momenta Pharmaceuticals is a biotechnology company, headquartered in Cambridge, MA, specializing in the detailed structural analysis of complex mixture drugs. Momenta is applying its technology to the development of generic versions of complex drug products, as well as to the discovery and development of novel drugs.

To receive additional information about Momenta, please visit the website at www.momentapharma.com, which does not form a part of this press release.

This news release was distributed by GlobeNewswire, www.globenewswire.com

SOURCE: Momenta Pharmaceuticals

Momenta Pharmaceuticals, Inc.

Beverly Holley
617-395-5189
bholley@momentapharma.com

News Provided by COMTEX