MicroDose Therapeutx and Moerae Matrix Announce Collaboration to Develop Novel Inhaled Treatment for Idiopathic Pulmonary Fibrosis (IPF)

Monmouth Junction, NJ, USA, June 19, 2012 – MicroDose Therapeutx, Inc. and Moerae Matrix, Inc. announced today that they have signed a collaboration agreement to develop a dry powder inhalation product of Moerae’s novel MK2 inhibitor, MMI-0100, for the treatment of idiopathic pulmonary fibrosis (IPF), a serious and fatal lung disease for which there are no approved treatments in the U.S. The collaboration will involve the development and supply of a pulmonary drug delivery system for Moerae and/or its partners utilizing MicroDose’s proprietary inhaler technology in support of chronic administration.

“We are pleased to be partnering with a recognized industry leader in pulmonary drug delivery to advance development of MMI-0100 for IPF,” said Cynthia Lander, PhD, Chairman and Chief Executive Officer of Moerae Matrix. “MicroDose’s piezo-driven dry powder inhaler platform is the optimal technology for delivering our first-in-class peptide therapeutic for treatment of IPF.”

Commenting from MicroDose, Scott Fleming, Sr. Vice President, Sales and Marketing said, “Moerae has assembled an impressive team to advance this promising treatment approach for this debilitating disease and we are pleased to be able to contribute to its advancement. This collaboration in IPF expands the utilization of MicroDose’s inhalation technology into yet another extremely important disease area.”

MMI-0100 is a selective inhibitor of MAPKAP kinase 2 (MK2), a key terminal kinase in the transforming growth factor beta (TGF-)/p38 signaling pathway. By targeting a terminal kinase, MMI-0100 has the potential for greater specificity of action and lower off-target toxicity than other anti-fibrotic agents that address targets higher in this important pathway.

“IPF represents an enormous unmet medical need and delivering a drug directly to the lung that inhibits a down-stream kinase in the TGF-beta/p38 pathway is extremely appealing. It is very likely that multiple drugs that interfere with different components of fibrosis will be needed to combat IPF and MK2 inhibition is a novel and exciting target for drug development in this devastating disease.” Paul W. Noble, MD, Professor of Medicine and Chief, Division of Pulmonary, Allergy and Critical Care Medicine, Duke University Medical Center.

“Developing therapeutics for local delivery is a very desirable approach for the treatment of lung diseases in general, and IPF in particular. Doing so should minimize the risk of systemic effects while targeting a kinase now known to be involved in fibrogenesis. Accordingly, this is an attractive approach for treating such a lethal disease”. David S. Wilkes MD. Executive Associate Dean for Research Affairs, August M. Watanabe Professor for Medical Research, Indiana University School of Medicine.

Development of MMI-0100 for treatment of IPF is being funded in part with federal support from the National Heart, Lung, and Blood Institute (NHLBI), part of the National Institutes of
Health (NIH) in the Department of Health and Human Services (DHHS), under the Science Moving TowArds Research Translation and Therapy (SMARTT) program (NHLBI Contract No. HHSN268201100017C).

About IPF
Idiopathic pulmonary fibrosis (IPF) is a progressive, fatal lung disease in which fibrous tissue replaces the alveolar sacs through which we breathe. Over time, scarring of lung tissue causes progressive loss of the ability to breathe effectively, with 70% chance of death occurring within 5 years. There are no approved drug treatments for IPF in the U.S., with the standard of care currently lung transplant.

About MMI-0100
MMI-0100 is in preclinical development for treatment of idiopathic pulmonary fibrosis and other fibrotic conditions. In the bleomycin mouse model, the industry standard for study of pulmonary fibrosis, MMI-0100 has demonstrated a therapeutic benefit by abrogating collagen deposition when dosed after the onset of fibrosis. MMI-0100’s anti-fibrotic activity has consistently been demonstrated in multiple models of fibrotic conditions including pulmonary fibrosis, vascular intimal hyperplasia and post-surgical adhesions. Across model systems, MMI-0100 demonstrates excellent in vivo potency. The company has compiled a full IND-enabling data package on MMI-0100; the compound also demonstrates a favorable toxicology profile and highly scalable manufacturing process.

About Moerae Matrix
Moerae Matrix is a privately held biopharmaceutical company focused on the development of first-in-class targeted therapeutics for fibrotic disease. Based on proprietary technology from Purdue University, the company is advancing a suite of peptide therapeutics that target MAPKAP kinase 2 (MK2), a key terminal kinase in the TGF-beta/p38 pathway, with a high degree of specificity. Moerae Matrix’s first development candidate, MMI-0100, shows excellent activity in multiple models of fibrosis and is IND-ready for clinical development in acute fibrotic indications. Preclinical development is also underway with a pulmonary delivery formulation of MMI-0100 for chronic treatment of idiopathic pulmonary fibrosis. For more information please visit www.moeraematrix.com

About MicroDose Therapeutx
MicroDose Therapeutx is a private pharmaceutical company dedicated to improving the quality of life for people suffering from serious diseases. The company focuses on developing proprietary pulmonary and oral products that address large unmet market opportunities, and on dry powder inhalation and combination oral dosage delivery platforms. The company develops its products and technologies independently, as well as in partnership with leading pharmaceutical companies. MicroDose’s current pipeline targets respiratory diseases such as
asthma and COPD, respiratory viruses and infections - including RSV - as well as IBS-C and constipation. For more information please visit www.mdx.com

About the NHLBI
The NHLBI stimulates basic discoveries about the causes of disease, enables the translation of basic discoveries into clinical practice, fosters training and mentoring of emerging scientists and physicians, and communicates research advances to the public. It creates and supports a robust, collaborative research infrastructure in partnership with private and public organizations, including academic institutions, industry, and other government agencies. The Institute collaborates with patients, families, health care professionals, scientists, professional societies, patient advocacy groups, community organizations, and the media to promote the application of research results and leverage resources to address public health needs. The NHLBI also collaborates with international organizations to help reduce the burden of heart, lung, and blood diseases worldwide. For more information please visit www.nhlbi.nih.gov/new/SMARTT.htm

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