CONTACT: LISA BAIRD
PHONE: 617-378-7682
E-MAIL: LBAIRD@WMIS.ORG

FOR IMMEDIATE RELEASE

Second Generation 18F-labeled Prostate-Specific Membrane Antigen (PSMA) Targeted Imaging Agent Found to be Highly Sensitive in Detecting Prostate Cancer

WMIS to Offer Unlimited Online Access to Article Published in the Journal of Molecular Imaging and Biology

CULVER CITY, Calif., April 28, 2015 - A first-in-human prostate cancer study released today in the Journal of Molecular Imaging and Biology showed initial safety, biodistribution, and dosimetry results with [^{18}F]DCFPyL, a 2nd generation fluorine-18 labeled small-molecule PSMA inhibitor. The imaging biomarker has been developed at Johns Hopkins University in Baltimore, MD by study co-author, Martin G. Pomper, MD, PhD.

"This initial human evaluation of [^{18}F]DCFPyL demonstrated a number of important findings. The radiotracer was safe, and parallels the expected uptake with significantly improved visual conspicuity of suspected sites of metastatic prostate cancer in comparison to our first generation radiotracer," said Martin G. Pomper, MD, PhD, William R. Brody Professor of Radiology at Johns Hopkins.

[^{18}F]DCFPyL is a 2nd generation small-molecule PET agent that attaches to the prostate-specific membrane antigen (PSMA). Signals from [^{18}F]DCFPyL can then be measured via a PET scan. The study demonstrated that [^{18}F]DCFPyL produced images that showed lower blood pool activity, providing clearer images than the 1st generation agent, [^{18}F]DCFBC, produced by the same group. The study also showed 50 percent lower radiation dose in the most sensitive organs.

According to the American Cancer Society, about 220,800 new cases and about 27,540 deaths will occur from prostate cancer in the United States in 2015. While prostate cancer is often curable, there remain a large number of patients with residual, recurrent and metastatic disease who need imaging for lesion detection, therapeutic monitoring, and restaging. Conventional imaging has not proven to be sufficiently sensitive and specific for detection of prostate cancer lesions.

"The basis of more accurate, molecularly-informed classification of disease is the premise of precision medicine and specific molecular imaging biomarkers are the keys to determine how we classify diseases, how we select therapy, how we monitor therapy, and ultimately how we make treatments more accurate for each individual for better patient outcomes," said Dr. Jason Lewis, Professor and Vice Chair for Research, Emily Tow Jackson Chair at Memorial Sloan-Kettering Cancer Center, and President of the WMIS said, "We commend the team at Johns Hopkins for developing a more sensitive and accurate PSMA."

ABOUT WORLD MOLECULAR IMAGING SOCIETY

The WMIS is dedicated to developing and promoting translational research through multimodality molecular imaging. The education and abstract-driven WMIC is the annual meeting of the WMIS and is held in conjunction with partner societies including the European Society for Molecular Imaging (ESMI) and the Federation of Asian Societies for Molecular Imaging (FASMI). WMIC provides a unique setting for scientists and clinicians with very diverse backgrounds to interact, present, and follow cutting-edge advances in the rapidly expanding field of molecular imaging that impacts nearly every biomedical discipline. Industry exhibits at the congress included corporations who have created the latest advances in preclinical and clinical imaging approaches and equipment, providing a complete molecular imaging educational technology showcase. For more information: www.wmis.org

ABOUT THE JOURNAL MOLECULAR IMAGING and BIOLOGY

Molecular Imaging and Biology presents original research contributions on the utilization of molecular imaging in problems of relevance in biology and medicine. The primary objective of the journal is to provide a forum for the discovery of molecular mechanisms of health and disease through the use of imaging techniques. Among the topics covered are molecular imaging investigations of macromolecular targets involved in significant biological processes; design and evaluation of molecular probes used to investigate macromolecular targets and their functions; and study of in vivo animal models of disease for the development of new molecular diagnostics and therapeutics. The overall goal is to translate basic science discoveries into molecular imaging of disease in patients, both to investigate the biological nature of disease in actual patients and to establish new molecular imaging diagnostic procedures. Molecular Imaging and Biology is the official journal of the World Molecular Imaging Society and the European Society for Molecular Imaging.

###