Lantheus Medical Imaging, Inc. to Present Clinical Data on Investigational Cardiac PET Imaging Agents at American Society of Nuclear Cardiology

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N. BILLERICA, Mass. (September 20, 2010) – <u>Lantheus Medical Imaging, Inc.</u>, a worldwide leader in diagnostic medical imaging, today announced that seven abstracts related to two of the company's cardiac Positron Emission Tomography (PET) imaging candidates will be presented at <u>ASNC2010</u>, the 15th Annual Scientific Session of the <u>American Society of Nuclear</u> <u>Cardiology</u>, being held September 23-26, 2010 in Philadelphia. Data being presented include preliminary results from a single site Phase 2 study on flurpiridaz F 18 (formerly known as BMS747158), a myocardial perfusion PET imaging candidate in development to diagnose coronary artery disease, and Phase 1 data on LMI 1195, a novel cardiac neuronal PET imaging candidate. These abstracts will be highlighted in a series of poster presentations at the meeting.

"Lantheus is pleased that seven abstracts will be presented at ASNC2010 highlighting important data on our cardiovascular imaging pipeline candidates," said Don Kiepert, President and Chief Executive Officer of Lantheus Medical Imaging, Inc. "These data continue to support the potential of PET technology for the diagnosis and evaluation of coronary artery disease and heart failure. We believe that next generation medical imaging tools like flurpiridaz F 18 and LMI 1195 can ultimately provide physicians with improved non-invasive and cost-effective options to evaluate and help manage cardiovascular diseases."

The schedule and abstract information for the poster presentations are listed below.

Presentations featuring flurpiridaz F 18:

- "Multicenter development of normal perfusion and function limits for stress and rest flurpiridaz F 18 cardiac PET," Piotr J. Slomka, et al., Friday, September 24, 11:45 a.m.-1:15 p.m. (# 9.14)
- "Independence of myocardial functional parameters (LVEF, EDV and ESV) across a large range of acquisition times as measured from a novel F-18 radiotracer, flurpiridaz F 18," James A. Case, et al., Friday, September 24, 11:45 a.m.-1:15 p.m. (# 9.15)
- 'Iterative technique for optimizing injected tracer dosage and acquisition time for F-18 labeled myocardial perfusion tracer flurpiridaz F 18,'' James A. Case, et al., Friday, September 24, 11:45 a.m.-1:15 p.m. (# 9.17)
- "Comparison of myocardial stress perfusion defect assessment using 99mTc sestamibi SPECT vs 18F-BMS747158 PET," Balaji K. Tamarappoo, et al., Saturday, September 25, 12:00-1:30 p.m. (# 31.14)
- "Comparison of 18F-BMS747158 and 82Rb PET vs SPECT for detection of myocardial ischemia," Daniel S. Berman, et al., Saturday, September 25, 12:00-1:30 p.m. (# 31.17)
- "Preliminary results of absolute quantification of rest and stress myocardial blood flow with flurpiridaz F 18 PET in normal and coronary artery disease patients in a single-center study," Jamshid Maddahi, et al., Saturday, September 25, 12:00-1:30 p.m. (# 31.18)

Presentation featuring LMI 1195:

• "Tracer kinetic modeling of [18F]LMI1195, a new PET imaging agent targeting cardiac norepinephrine transporter," Ajay V. Srivastava, et al., Friday, September 24, 11:45 a.m.-1:15 p.m. (# 9.19)

About Flurpiridaz F 18 Injection

Flurpiridaz F 18 injection, a fluorine 18-labeled agent that binds to mitochondrial complex 1 (MC-1)¹, was designed to be a novel myocardial perfusion PET imaging agent for the diagnosis of coronary artery disease (CAD). The agent is currently in Phase 2 clinical development. CAD is the leading cause of death in the United States for both men and women². Each year, more than half a million Americans die from CAD².

In Phase 1 clinical studies, flurpiridaz F 18 injection was well-tolerated and demonstrated radiation dosimetry that suggests that

good quality images may be obtained with patient radiation doses that are within accepted limits. The data also showed high myocardial uptake at rest that significantly increased with pharmacologically induced stress as well as a ratio of myocardial to background uptake that was favorable and improved over time, suggesting potential as a myocardial perfusion PET imaging agent for patients both at rest and under stress.

About PET and MPI

Positron emission tomography, also called PET imaging or a PET scan, is a type of nuclear medicine imaging procedure³ that provides information about the function and metabolism of the body's organs, unlike computed tomography (CT) or magnetic resonance imaging (MRI), which primarily show anatomy and structure⁴. Myocardial perfusion imaging (MPI) is a non-invasive test that utilizes a small amount of radioactive material (radiopharmaceutical) injected into the body. The distribution of the radiopharmaceutical is imaged using a scanner, and the resulting images reveal the distribution of blood flow (perfusion) to the heart⁵. The test is typically conducted under both rest and stress conditions, after which physicians examine and compare the two scans and predict whether the patient has significant coronary artery disease⁵. Although single-photon emission computer tomography (SPECT) is most commonly used for MPI⁶, PET imaging has gained considerable support and use in the field of cardiovascular imaging, as it offers many advantages to SPECT, including higher spatial and contrast resolution, which results in higher image quality and improved diagnostic accuracy, accurate attenuation correction and risk stratification information⁷.

About LMI 1195

LMI 1195 is a novel F-18 tracer designed to use positron emission tomography to improve imaging of cardiac neuronal function. LMI 1195 has completed Phase 1 clinical trials. In preclinical studies, LMI 1195 showed promise as a heart failure imaging agent with high cardiac sympathetic nervous system uptake⁸.

About Lantheus Medical Imaging, Inc.

Lantheus Medical Imaging, Inc., a worldwide leader in diagnostic medicine for more than 50 years, is dedicated to creating and providing pioneering medical imaging solutions to improve the treatment of human disease. The company's proven success in discovering, developing and marketing innovative medical imaging agents provides a strong platform from which to bring forward breakthrough new tools for the diagnosis and management of disease. Lantheus imaging products include the echocardiography contrast agent DEFINITY® Vial for (Perflutren Lipid Microsphere) Injectable Suspension, ABLAVAR® (gadofosveset trisodium), a first-in-class magnetic resonance agent indicated for the evaluation of aortoiliac occlusive disease in adults with known or suspected peripheral vascular disease, TechneLite® (Technetium Tc99m Generator), Cardiolite® (Kit for the Preparation of Technetium Tc99m Sestamibi for Injection), and Thallium 201 (Thallous Chloride Tl 201 Injection). Lantheus has more than 600 employees worldwide with headquarters in North Billerica, Massachusetts, and offices in Puerto Rico, Canada and Australia. For more information, visit www.lantheus.com.

1. Yalamanchili, P, Wexler, E, Hayes, M, Yu, M, MD, Bozek J, Radeke, H, Azure, M, Purohit, A, Casebier, DS, and Robinson, SP. Mechanism of uptake and retention of 18F BMS-747158-02 in cardiomyocytes: A novel PET myocardial imaging agent. *Journal Nuclear Cardiology* 2007 Nov-Dec;14(6):782-8.

2. National Institutes of Health, National Heart, Lung, and Blood Institute. Coronary Artery Disease: Who Is At Risk. http://www.nhlbi.nih.gov/health/dci/Diseases/Cad/CAD_WhoIsAtRisk.html. Accessed on June 4, 2010.

3. Radiology Info. What is Positron Emission Tomography – Computed Tomography (PET/CT) Scanning. http://www.radiologyinfo.org/en/info.cfm?pg=PET. Accessed on June 4, 2010.

4. National Institutes of Health. NIH Clinical Center. Positron Emission Tomography Department Overview. http://clinicalcenter.nih.gov/pet/. Accessed on June 4, 2010.

5. Society of Nuclear Medicine. Procedure Guidelines for Myocardial Perfusion Imaging. Version 3.0 June 2002. http://interactive.snm.org/docs/pg_ch02_0403.pdf.

6. Salerno, M and Beller, GA, Noninvasive Assessment of Myocardial Perfusion. Circ Cardiovasc Imaging. 2009; 2:412-424.

7. Heller, G, Calnon, D and Dorbala, S. Recent Advances in Cardiac PET and PET/CT Myocardial Perfusion Imaging. *J Nucl Cardiol* 2009; 16:962-9.

8. Bozek, J, Silva, P, Lamoy, M, Azure, M, Radeke, H, Robinson, S, and Yu, M. Heart Failure Imaging in the Rat with

LMI1195, a New PET Cardiac Neuronal Imaging Agent. Circulation 2009;120(S18) S362.