UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **October 30, 2012**

LANTHEUS MEDICAL IMAGING, INC.

(Exact name of registrant as specified in its charter)

Delaware	**333-169785**	**51-0396366**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

331 Treble Cove Road, North Billerica, MA 01862
(Address of principal executive offices) (Zip code)

Registrant's telephone number, including area code: **(978) 671-8001**

Not Applicable
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

NTP Amendment No. 3

On October 30, 2012, the registrant, Lantheus Medical Imaging, Inc. (the "Company"), entered into Amendment No. 3 to Sales Agreement (the "Amendment"), effective as of October 1, 2012, to the Sales Agreement, dated as of April 1, 2009 (as amended, the "Agreement"), by and between the Company and NTP Radioisotopes (Pty) Ltd. ("NTP"). The Amendment extends the term of the Agreement from December 31, 2013 to December 31, 2017 and modifies the Company's purchase requirements and unit pricing. The Amendment also provides for the increased supply of molybdenum-99 ("Mo-99") derived from low enriched uranium (LEU) from NTP and the Australian Nuclear Science and Technology Organisation (ANSTO), as well as a separate supply of Mo-99 from the Institute for Radioelements (IRE). The Agreement allows for termination upon the occurrence of certain events, including, but not limited to, failure by NTP and its subcontractor to provide the Company with the amount of Mo-99 required by the Agreement, material breach of any provision by either party, bankruptcy by either party, and force majeure events. Additionally, the Company has the ability to terminate the Agreement by giving six months written notice prior to the expiration of the term of the Agreement.

A copy of the press release announcing the Amendment is filed herewith as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description of Exhibit
99.1	Press Release, dated October 31, 2012, announcing the Amendment of the Agreement between the Company and NTP

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

LANTHEUS MEDICAL IMAGING, INC.

By: Name: /s/ Michael P. Duffy
Michael P. Duffy
Title: Vice President and General Counsel

Date: October 31, 2012

EXHIBIT LIST

Exhibit Number	Description of Exhibit
99.1	Press Release, dated October 31, 2012, announcing the Amendment of the Agreement between the Company and NTP

Exhibit 99.1

331 Treble Cove Road
North Billerica, MA 01862

800.362.2668
www.lantheus.com

FOR IMMEDIATE RELEASE

Lantheus Medical Imaging Extends Contract with NTP Radioisotopes to Ensure Robust Supply of LEU-Produced Molybdenum-99

Agreement Demonstrates Company's Long-Term Commitment to Eliminate Use of HEU-produced Products

No. BILLERICA, Mass. (October 31, 2012) — Lantheus Medical Imaging, Inc. (Lantheus or the Company) and two world leaders in producing medical isotopes have agreed to work together to help ensure supplies of potentially life-saving nuclear medicine using molybdenum-99 (Mo-99) sourced from Low Enriched Uranium (LEU).

Lantheus, a global leader in developing, manufacturing and distributing innovative diagnostic imaging agents, today announced that the Company has extended its contract with NTP Radioisotopes (Pty) Ltd., a subsidiary of the South African Nuclear Energy Corporation Ltd (Necsa), to receive a significant and increasing supply of Mo-99 produced from LEU targets through December 31, 2017. Under the terms of the five-year agreement, NTP and the Australian Nuclear Science and Technology Organisation (ANSTO) will become the largest suppliers of LEU Mo-99 to Lantheus in the future. Lantheus actively supports the U.S. Government initiative to encourage the use of LEU in the manufacture of medical isotopes.

The extended agreement also provides for a separate supply of Mo-99 from the Institute for Radioelements (IRE), giving Lantheus access to a reliable and globally diversified supply of Mo-99 for the duration of the extended term. The ongoing supply relationships with NTP, ANSTO and IRE provide Lantheus with access to Mo-99 from three processing facilities and six research reactors in Africa, Australia and Europe. Additionally, Lantheus continues to receive Mo-99 from its Canadian supplier, which agreement has also recently been extended.

"This agreement, combined with our recent agreement with our Canadian supplier, achieves our goal of securing a globally diversified and balanced Mo-99 supply chain to meet the needs of the nuclear medicine community now and well into the future," said Don Kiepert, Lantheus President and CEO. "Additionally, we are committed to promoting global nuclear safety by continuing to increase our use of LEU-sourced Mo-99. This agreement with NTP further demonstrates that commitment. In 2010, we

were the first company in North America to gain FDA approval for the commercial sale and distribution of a technetium generator using Mo-99 produced from LEU targets."

"A global milestone was achieved in June 2009 when the SAFARI-1 reactor started up its core without any highly-enriched uranium (HEU) fuel", said Mr. Phumzile Tshelane, CEO of the South African Nuclear Energy Corporation (Necsa) and Chairperson of the NTP Radioisotopes Board of Directors. This accomplishment marked the beginning of the first-ever LEU-based production process of Mo-99, which resulted in the successful delivery of the first commercial scale shipment of this product into the U.S. in July 2010.

Mr. Tshelane drew attention to the announcement made by Necsa/NTP during the "Next Generation Nuclear Security Summit" held in Washington in 2010, where Necsa/NTP committed to supply LEU-based medical isotopes to the United States. "We are proud that a purely South African technological advancement has contributed so significantly to nuclear non-proliferation efforts, while simultaneously enhancing the lives of millions using nuclear medicine. This firmly illustrates both South Africa and Necsa/NTP's commitment to the utilization of nuclear technology for peaceful purposes," said Mr. Tshelane.

"The importance of our collaborative efforts to provide medical isotopes derived from LEU has been described by the United States National Nuclear Security Administration as a critical step toward moving away from the use of HEU in medical isotope production around the world," said Dr. Adi Paterson, ANSTO CEO. "These efforts led ANSTO, NTP and Lantheus to be named runners up in a poll of "2011 Arms Control Persons of the Year" for our groundbreaking work to produce medical isotopes using LEU instead of HEU. We believe that demand for LEU moly will increase on a global basis as more customers embrace nuclear non-proliferation goals."

"We support this agreement between Lantheus and our colleagues and are willing to actively contribute to the global security of supply of medical radioisotopes, particularly in the U.S.," said Jean-Michel Vanderhofstadt, Director General of IRE. "Also paramount is our full commitment for the fastest possible conversion of our process and facility to a unique solution for the secure manufacturing of medical radioisotopes based on non-HEU derived processes. Our technical cooperation with NTP and ANSTO is a valuable asset in that respect. This conversion program is currently running full steam ahead in our Belgian plant, with the most appreciated support of the DoE and our authorities in Europe."

About Molybdenum-99 and Technetium-99m

Mo-99 is the parent isotope of technetium-99m (Tc-99m), which is the radioisotope most widely used for nuclear medicine diagnostic imaging tests. Tc-99m is a critical component of many medical tests, including scans of the heart, brain, kidneys and some types of tumors. Tc-99m is used in Lantheus Medical Imaging's TechneLite® generators, which are distributed to hospitals and radiopharmacies as a source of Tc-99m for diagnostic imaging procedures. Tc-99m is also used with Cardiolite® (Kit for the Preparation of Technetium Tc 99m Sestamibi for Injection), the most successful radiopharmaceutical agent, which has been used to image more than 40 million patients.(1) In diagnostic use, Tc-99m is attached to a specific molecule and injected into the patient, where it emits gamma radiation that can be used to produce an image of the region.

About Lantheus Medical Imaging, Inc.

Lantheus Medical Imaging, Inc., a global leader in developing, manufacturing and distributing innovative diagnostic imaging agents, is dedicated to creating and providing pioneering medical imaging solutions to improve the treatment of human disease. The Company's proven success in the field of diagnostic imaging 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, an ultrasound contrast agent for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border, 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 Tc 99m Generator), Cardiolite® (Kit for the Preparation of Technetium Tc 99m Sestamibi for Injection), and Thallium 201 (Thallous Chloride Tl 201 Injection). Lantheus has approximately 600 employees worldwide with headquarters in North Billerica, Massachusetts, and offices in Puerto Rico, Canada and Australia. For more information, visit www.lantheus.com.

About NTP Radioisotopes

NTP Radioisotopes is a major player in the highly competitive radioisotopes industry. This proud South African corporate citizen is situated at the sophisticated nuclear facility site in Pelindaba, west of Pretoria. A subsidiary of the South African Nuclear Energy Corporation (Necsa), the organisation routinely serves customers in 60 countries on six continents with its range of radiation-based products and services. NTP established a collaborative association with ANSTO which will position the companies at the forefront of LEU-based Mo-99 processes, i.e. reactor fuel and irradiation targets. For over 15 years, NTP and IRE of Belgium have maintained a Consortium arrangement whereby they provide Mo-99 supply back-up for each other during reactor outage periods and also jointly supply several major customers who require, for risk mitigation purposes, a dual source of Mo-99. The conversion of customers to LEU Mo-99 continues. The conversion process is expected to be completed by end of 2014/15. For more information visit: www.ntp.co.za

About ANSTO

ANSTO is an agency within the portfolio of the Commonwealth Department of Industry, Innovation, Science, Research and Tertiary Education. ANSTO is responsible for delivering specialised advice, scientific services and products to government, industry, academia and other research organisations. It does so through the development of new knowledge, delivery of quality services and support for business opportunities.

About the IRE

Located in Fleurus, Belgium, the Institute for Radioelements (IRE) is a public utility foundation that was created in 1971 to use nuclear technologies to improve public health and environmental control. The IRE is one of the largest producers worldwide of radionuclides for the use in nuclear medicine and exports its products throughout the world. The Institute produces radionuclides used both for imaging (early screening for malignant tumors, analysis of organ malfunction) and therapies (cancer treatment). It is also responsible for taking ongoing measurements of the presence of radioactivity in

the environment. The IRE helps to improve the health of millions of individuals throughout the world every year. For more information, please visit www.ire.eu.

Safe Harbor for Forward-Looking and Cautionary Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to risks and uncertainties that may be described from time to time in our filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on the forward-looking statements contained herein, which speak only as of the date hereof. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

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References

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CONTACTS:

Lantheus Medical Imaging
Linda Lennox
978-671-8854

Meara Murphy
978-671-8508

Pure Communications
Michele Rozen
617-730-8284

South African Nuclear Energy Corporation Limited (Necsa)
Chantal Janneker
+27 12 305 5750

Elliot Mulane
+27 12 305 5006

NTP Radioisotopes SOC limited
Piet Louw
+27 12 305 5961