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[Home](#) > [Media Room](#) > [Press Releases](#) > Record Levels of Non-HEU-Based Mo-99 Supplied to the United States

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WASHINGTON, D.C. – The National Nuclear Security Administration (NNSA) today recognized the efforts of Lantheus Medical Imaging (LMI), NTP Radioisotopes Ltd. (NTP) – a subsidiary of the South African Nuclear Energy Corporation (Necsa) – and the Australian Nuclear Science and Technology Organization (ANSTO) for delivering record amounts of low-enriched uranium (LEU)-based molybdenum-99 (Mo-99) to the United States.

Mo-99 produced with LEU from those three companies is now supporting about one-third of the 50,000 medical diagnostic procedures that use this important medical radioisotope per day in the United States.

“Producing large-scale quantities of Mo-99 using LEU is a significant milestone for public health, and a critical step toward ending the use of highly enriched uranium in medical isotope production around the world,” said NNSA Administrator Thomas D’Agostino. “It reduces a major hurdle to global threat reduction efforts by helping meet the global demand for critical medical isotopes without undermining nuclear nonproliferation efforts.”

Over the past two years the NNSA's Global Threat Reduction Initiative (GTRI) has allocated nearly \$25 million to South Africa to be used in projects to secure the sustainability of the transition of its Mo-99 production capability from highly-enriched uranium (HEU)-based to LEU-based. Unlike HEU, low-enriched uranium cannot be used for nuclear weapons.

Last December, NNSA and Necsa's NTP Radioisotopes announced that the first shipment of Mo-99 produced with LEU and approved for patient use had arrived in the United States, making South Africa the world's first large-scale producer to supply Mo-99 using LEU.

“This supply of a significant quantity of Mo-99 from LEU-based production clearly shows the technical and economic viability of this method. In the future, we expect that the medical community will be able to procure this isotope entirely from suppliers who use LEU and other non-HEU-based production methods that support nuclear security and

HEU minimization goals” said Gary Samore, Special Assistant to the President and White House Coordinator for Arms Control and Weapons of Mass Destruction, Proliferation, and Terrorism.

“Lantheus is a global leader in securing diversified access to Mo-99 and we have aggressively undertaken several key initiatives to meet the needs of the nuclear medicine community and the patients we serve,” said Don Kiepert, President and Chief Executive Officer of Lantheus Medical Imaging. “We proactively implemented a Mo-99 supply diversification strategy to increase reliable access to this critical medical isotope. Lantheus is the first North American supplier to commercially distribute Tc-99m generators using LEU-based Mo-99. We are honored that the NNSA is recognizing our efforts over the past three years. We will continue to work closely with our supply partners in order to meet the health care needs of customers and patients who benefit from critical imaging tests.”

“I am proud of this achievement that is the culmination of hard work over the past few years and that acknowledges the pro-activity displayed by Necsa/NTP and the value of our involvement with ANSTO,” said Dr. Rob Adam, Necsa’s CEO and Chairman of the NTP board.

Head of ANSTO Health, Shaun Jenkinson said the deliveries of Mo-99 to North America represent an important historical turning point for nuclear medicine production in Australia.

“ANSTO’s OPAL reactor is one of the world’s newest research reactors,” said Jenkinson. “The fact that it operates using LEU is just one of the reasons we believe it is state of the art. We have a long and distinguished record of supplying Australia’s nuclear medicine needs and we are very proud of the role we are now playing to ensure patients around the world have access to timely medical imaging procedures. We are delighted to be working with Lantheus Medical Imaging because of its unparalleled reputation for quality in the nuclear medicine industry.”

While Mo-99 is an important example of a peaceful use of nuclear technology, the use of HEU in its production contributes to global proliferation challenges. The conversion of those production facilities to use LEU helps meet a global demand while promoting nuclear nonproliferation.

For more information on NNSA’s efforts to address the global Mo-99 shortage, [click here](#) [1].

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