



IRE supplies a first commercial batch of LEU-based Mo-99

Fleurus, Belgium – April 30th, 2020 - The Institute for radioelements (IRE), one of the leaders in the production of Molybdenum-99 (Mo-99), the most widely used radio-isotope in nuclear medicine for diagnosis, announced today that the company produced its first commercial Mo-99 Low Enriched Uranium (LEU) batch for the US market.

This conversion to LEU represents a key milestone for IRE in the global commitment to end the civil use of High Enriched Uranium (HEU) for the production of Mo-99 medical isotopes. This demonstrates its unique capacity to carry out advanced R&D activities while maintaining during the last two years its highest production output to serve the global market during temporary or unplanned outages of some alternative suppliers of medical radioisotopes. It achieves the first step of the complex development of an entirely new industrial process to supply healthcare professionals with Mo-99. This conversion will include very soon the production process for Iodine -131 (I-131), essential and irreplaceable radionuclide for thyroid cancer treatments, based on LEU. Despite the additional burden induced by the lockdown caused by the COVID-19 crisis, our teams could maintain and complete their planning to receive the authorization from the FANC, the Federal Agency for Nuclear Control in Belgium. Conversion to LEU will positively impact Safety and Security on site, two components inseparable of our IRE activity, since this new LEU production flow takes place in refurbished installations that bring many advantages in terms of nuclear safety and nuclear security for our teams.

This first production was completed with uranium targets irradiated in the BR-2, the Belgian research reactor located at SCK CEN in Mol, a key partner of IRE in the production of radioisotopes.

IRE will conduct this conversion in progressive steps, in the coming months with a dedicated part of the produced volumes of Mo-99 to supply the US market, and will later increase its volume to allow the supply of LEU-based Mo-99 to all regions, until the full conversion is achieved, at the latest by 2022. IRE will do its best to maintain until then a sufficient level of HEU-based production to validate its final industrial process for the purification of I-131 LEU and at the same time allows all its clients to convert their regulatory files for I-131 based products.

Mrs. Marie-Christine Marghem, Minister of Energy, Environment and Sustainable Development and Minister responsible for IRE, stated: "Despite the restrictions related to the health crisis, IRE has continued its efforts and has made it possible to collaborate in the implementation of our national strategy for the production of medical radioisotopes. I intend to maintain Belgian expertise in this area while respecting our international commitments to fight proliferation. Moreover, the completion of this project underlines the importance of funding research dedicated to medical solutions. »



About IRE

IRE, the Institut National des Radioéléments, is a public utility foundation whose main activity is the production of medical radioisotopes for diagnostic and therapeutic applications in nuclear medicine. It is a global leader in the production of Molybdenum-99, the "parent" isotope of metastable Technetium-99 and the most widely used in nuclear medicine for numerous examinations (heart, bones, lungs, thyroid, brain, kidneys, etc.).

Besides its production activities, IRE contributes to protecting and monitoring the environment thanks to its many services proposed in its unit IRE Lab: measurement of radioactivity in various samples, radiological characterization of contaminated waste and elements, technical consultancy and support in the radiological and nuclear fields.

IRE ELIT is the innovation subsidiary of IRE which was created in 2010 in order to develop radiopharmaceuticals used in imaging and treatment of some cancers as well as for palliative care. In 2018, IRE ELIT main product, the Ge68/Ga68 generator GalliAd/GalliEo has been granted its marketing authorization in 13 European countries and in the US. IRE and IRE ELIT currently employ 230 people. More info: www.ire.eu

Media contacts

IRE – Bérénice Pignol +32 471 70 62 44 – Berenice.pignol@ire-elit.eu