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Medical radioisotopes – what are they?

Nuclear medicine is a branch of medicine which uses radiation to provide diagnostics and treatment. This is done by utilising a range of medical radioisotopes, the key ones being:

- **Technetium-99m**: used in medical imaging. This is produced from **Molybdenum-99** and accounts for around 80% of procedures.
- **Caesium-137**: used for low-intensity sterilisation of blood.
- **Cobalt-60**: used in sterilisation and high activity Co-60 is used in treatment of brain cancer.

Does leaving Euratom affect our ability to import medical radioisotopes?

The Euratom Treaty refers to medical radioisotopes in the context of promoting research (Annex I of the Treaty) and prohibition of customs duties and quantitative restrictions on imports and exports between EU member states (Annex IV). These references do not set any restrictions or limitations on trade in such materials with countries outside the EU. Hence there is nothing in the Euratom Treaty impeding the UK's ability to continue to access medical radioisotopes from the EU when the UK is no longer a member state. The UK's ability to import medical radioisotopes from Europe and the rest of the world will not be affected by our withdrawal from Euratom.

Safeguards and medical radioisotopes

Nuclear safeguards are measures to verify that certain civil nuclear ('special fissile'¹) materials are properly accounted for and are not diverted from their declared uses. Medical radioisotopes do not fall into this category and are, therefore, not covered by the International Atomic Energy Agency (IAEA) safeguards arrangements. Medical radioisotopes likewise do not fall under Euratom's nuclear safeguards regime nor are they subject to the approval of the Euratom Supply Agency which governs the supply of special fissile materials.

Regulatory framework and customs arrangements

At present, Euratom have put in place notification requirements² that apply to shipments of sealed sources, and other relevant sources, between Euratom member states to inform authorities that these goods are being transported. The EU Withdrawal Bill will convert any relevant and directly applicable laws into domestic legislation, outside Euratom. This will ensure the UK exits the EU and Euratom with certainty and control.

¹ These are: Plutonium-239; uranium-233; uranium enriched in the isotopes 235 or 233 and any material containing one or more of these.

² Council Regulation (Euratom) No 1493/93 on shipments of radioactive substances between Member States (<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:31993R1493>)

There are currently no customs duties or restrictions on movement of goods such as medical radioisotopes between the UK and other EU member states as we are all part of the EU Single Market. When we leave the EU, the UK government will have control over what customs arrangements will be in place at the UK border. It is in the interest of both the UK and EU to avoid disruption in the timely access of treatment to patients; and to ensure that cross-border trade, especially on medical products such as medical radioisotopes, is frictionless as possible. This will be part of the broader negotiations of the UK's future relationship with the EU.