

**Title:**

Should new Nuclear Reactors be considered as an option to solve Technetium shortage problem?

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Abstract:

Worldwide, more than 80% of Nuclear Medicine procedures use a radiotracer produced through a ⁹⁹Mo/^{99m}Tc generator - ^{99m}Tc – Technetium 99metastable.

Most of the radiochemistry and equipments is optimized for this radioisotope characteristics already for more than 35 years, making it very difficult to replace. Worldwide production of ⁹⁹Mo is based essentially with only five Nuclear Reactors that are becoming obsolete and fragile with aging, shutting down more and more frequently as they approach the end of their shelf-life.

Seeking for solutions, some Governments – and the EU – plan to build new dedicated Nuclear Reactor(s). Our work defends another option.

Foi decidido que não será apresentada a versão integral deste documento.



Referência: SC HESD 090

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