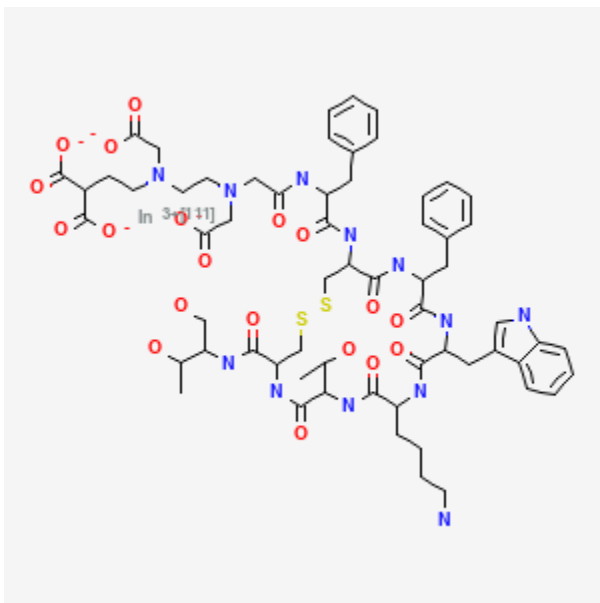




Indium In 111 Pentetreotide

Revised: October 15, 2023.

CASRN: 139096-04-1



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of indium In 111 pentetreotide as a diagnostic agent. Recommendations for use in breastfeeding mothers range from no withholding of breastfeeding necessary[1] to 60 hours after a dose of 100 to 220 MBq.[2,3]

In some cases, imaging with indium In 111 pentetreotide is followed shortly by a therapy (peptide receptor radiotherapy; PRRT) that uses yttrium 90 or lutetium 177 compounds to selectively irradiate tumors. These agents may pose additional radiation risk to the nursing infant.[1]

Disclaimer: Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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Mothers concerned about the level of radioactivity in their milk could ask to have it tested at a nuclear medicine facility at their hospital. When the radioactivity is at a safe level, she may resume breastfeeding. A method for measuring milk radioactivity and determining the time when a mother can safely resume breastfeeding has been published.[4]

Drug Levels

Indium 111 decays by electron capture with 173 keV and 245 keV gamma emissions and a physical half-life of 2.8 days.[5] The maximum effective half-life of indium In 111 pentetretotide is 10 hours.[3]

Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

References

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3. ARSAC notes for guidance: Good clinical practice in nuclear medicine. Notes for guidance on the clinical administration of radiopharmaceuticals and use of sealed radioactive sources. 2020. Available at: <https://www.gov.uk/government/publications/arsac-notes-for-guidance>
4. Stabin MG, Breitz HB. Breast milk excretion of radiopharmaceuticals: Mechanisms, findings, and radiation dosimetry. *J Nucl Med* 2000;41:863-73. PubMed PMID: 10809203.
5. Dilsizian V, Metter D, Palestro C, Zanzonico P. Advisory Committee on Medical Uses of Isotopes (ACMUI) Sub-Committee on Nursing Mother Guidelines for the Medical Administration of Radioactive Material. Final report submitted: January 31, 2019. 2019. Available at: <https://www.nrc.gov/docs/ML1903/ML19038A498.pdf>

Substance Identification

Substance Name

Indium In 111 Pentetretotide

CAS Registry Number

139096-04-1

Drug Class

Breast Feeding

Lactation

Milk, Human

Radiopharmaceuticals

Indium Radioisotopes

Diagnostic Agents