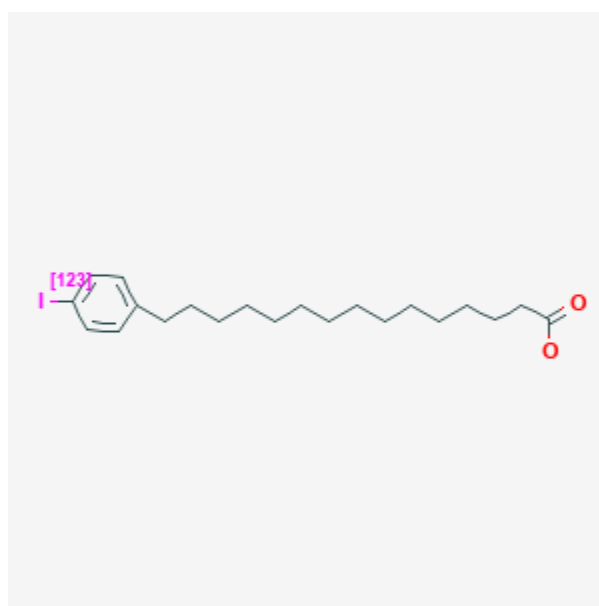




Iocanlidic Acid I 123

Revised: June 30, 2019.

CASRN: 74855-17-7



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of iocanlidic acid I 123 (123I iodophenylpentadecanoic acid; I 123 IPPA) as a diagnostic agent. The International Commission on Radiological Protection states that breastfeeding should be interrupted for more than 3 weeks following diagnostic use of I 123 IPPA. This usually will result in permanent discontinuation of breastfeeding for this infant.[1]

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.[2]

Drug Levels

I 123 is a gamma emitter with a principal photon energy of 159 keV and a physical half-life of 13.2 hours.[3] Iodide is actively secreted into breastmilk and actively taken up by the mother's and infant's thyroid glands.

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

1. Mattsson S, Johansson L, Leide Svegborn S et al. Radiation dose to patients from radiopharmaceuticals: A compendium of current information related to frequently used substances. Annex D. Recommendations on breast-feeding interruptions. Ann ICRP. 2015;44 (2 Suppl):319-21. PubMed PMID: 26069086.
2. Stabin MG, Breitz HB. Breast milk excretion of radiopharmaceuticals: mechanisms, findings, and radiation dosimetry. J Nucl Med. 2000;41:863-73. PubMed PMID: 10809203.
3. Howe DB, Beardsley M, Bakhsh S. Appendix U. Model procedure for release of patients or human research subjects administered radioactive materials. In, NUREG-1556. Consolidated guidance about materials licenses. Program-specific guidance about medical use licenses. Final report. U.S. Nuclear Regulatory Commission Office of Nuclear Material Safety and Safeguards. 2008;9, Rev. 2. Available at: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/v9/r2/>

Substance Identification

Substance Name

Iocanlidic Acid I 123

CAS Registry Number

74855-17-7

Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Iodine Radioisotopes

Diagnostic Agents