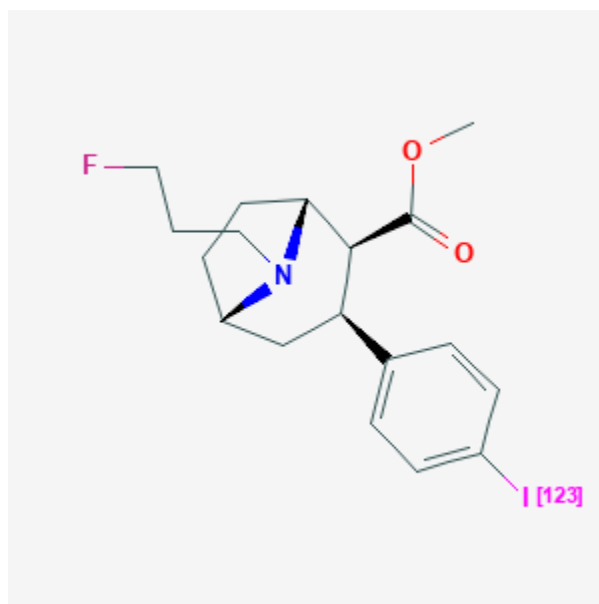




Ioflupane I 123

Revised: June 30, 2019.

CASRN: 155798-07-5



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of ioflupane I 123 as a diagnostic agent. The Society of Nuclear Medicine recommends that breastfeeding be interrupted for at least 1 day and possibly up to 6 days following tracer doses of ioflupane I 123;[1] however, the manufacturer states that breastfeeding should be interrupted for 6 days after administration of ioflupane I 123 to a nursing mother. The International Atomic Energy Agency recommends a cessation period of more than 3 weeks based on the assumption that the product may be contaminated with I 124 and I 125.[2] During the period of interruption, the breasts should be emptied regularly and completely. If the mother has expressed and saved milk prior to the examination, she can feed it to the infant during the period of nursing interruption.[3][4][5] The milk that is pumped by the mother during the time of breastfeeding interruption can either be discarded or stored refrigerated and given to the infant after 10 physical half-lives, or about 5.5 days, have elapsed since pumping.

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 .

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.[6]

Drug Levels

I 123 is a gamma emitter with a photon energy of 159 keV and a physical half-life of 13.2 hours.[6][7]

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. Djang DS, Janssen MJ, Bohnen N et al. SNM practice guideline for dopamine transporter imaging with 123I-ioflupane SPECT 1.0. *J Nucl Med.* 2012;53:154-63. PubMed PMID: 22159160.
2. International Atomic Energy Agency. Radiation Protection and Safety in Medical Uses of Ionizing Radiation, IAEA Safety Standards Series No. SSG-46, IAEA, Vienna. 2018. Available at: <https://www.iaea.org/publications/11102/radiation-protection-and-safety-in-medical-uses-of-ionizing-radiation>
3. Mountford PJ, Coakley AJ. A review of the secretion of radioactivity in human breast milk: data, quantitative analysis and recommendations. *Nucl Med Commun.* 1989;10:15-27. PubMed PMID: 2645546.
4. Early PJ, Sodee DB. Principles and practice of nuclear medicine. 2nd ed. St. Louis. Mosby-Year Book, Inc. 1995:1380-1.
5. National Radiation Protection Board (UK). Administration of radioactive substances advisory committee. Notes for guidance on the clinical administration of radiopharmaceuticals and use of sealed radioactive sources. 2019. Available at: https://assets.publishing.service.gov.uk/government/.../file/.../ARSAC_NfG_2019.pdf
6. Stabin MG, Breitz HB. Breast milk excretion of radiopharmaceuticals: mechanisms, findings, and radiation dosimetry. *J Nucl Med.* 2000;41:863-73. PubMed PMID: 10809203.
7. 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

Ioflupane I 123

CAS Registry Number

155798-07-5

Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Iodine Radioisotopes

Diagnostic Agents