



## I 123-Labeled Human Serum Albumin

Revised: June 30, 2019.

### Drug Levels and Effects

#### Summary of Use during Lactation

Information in this record refers to the use of 123-labeled human serum albumin (I 123 HSA) 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 HSA. 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

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## Substance Identification

### Substance Name

I 123-Labeled Human Serum Albumin

### Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Iodine Radioisotopes

Serum Albumin, Radio-Iodinated

Diagnostic Agents