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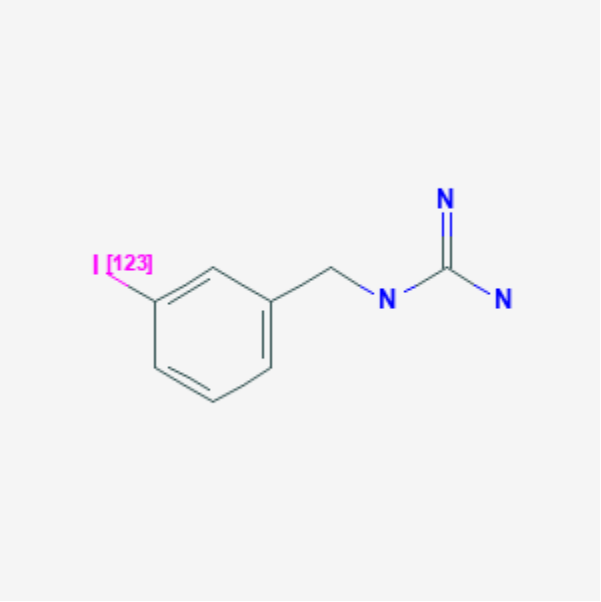
Iobenguane I 123

Revised: October 23, 2019.

CASRN: 76924-93-1



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of iobenguane I 123 (I 123 meta-iodobenzylguanidine; I 123 MIBG) as a diagnostic agent. The United States Nuclear Regulatory Commission states that breastfeeding should be interrupted after administration of I 123 MIBG to a nursing mother. The duration of breastfeeding interruption depends on the dose administered (see table).[1][2] These values apparently refer to uncontaminated I 123. With contamination of I 124 or I 125, the interruption period is longer. Some international agencies recommend that breastfeeding should be interrupted for more than 3 weeks following diagnostic use of sodium iodide I 123.[3] [4] This long period usually will result in permanent discontinuation of breastfeeding for this infant. 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.[5][6]

[7] 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.

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.[8]

Dose	Duration of Interruption
400 MBq (10.8 mCi)	40-72 hours[2][7][9]
370 MBq (10 mCi)	24 hours[1]
150 MBq (4 mCi)	12 hours[1]

Drug Levels

I 123 is a gamma emitter with a photon energy of 159 keV and a physical half-life of 13.2 hours.[1] The effective half-life of I 123 MIBG averages 11.4 hours.[8]

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.

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Substance Identification

Substance Name

Iobenguane I 123

CAS Registry Number

76924-93-1

Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Iodine Radioisotopes

Diagnostic Agents