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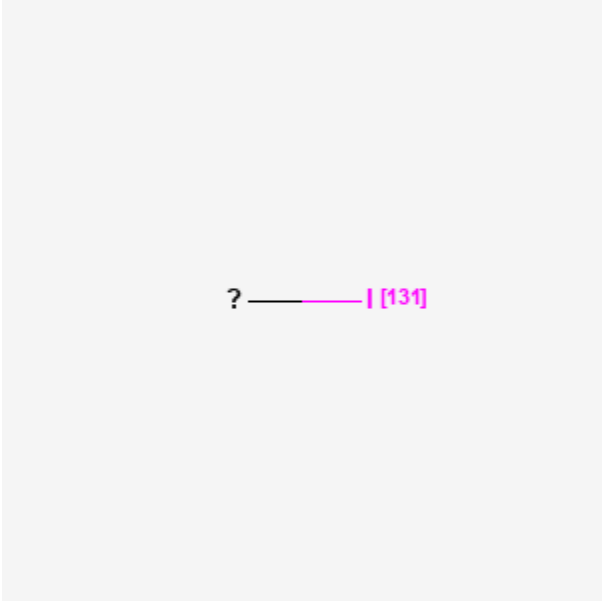
Tositumomab I 131

Revised: December 3, 2018.

CASRN: 192391-48-3



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of tositumomab I 131 as a therapeutic agent. No information is available on the use of tositumomab I 131 during breastfeeding. Because of the potential for serious adverse reactions in nursing infants, the manufacturer and expert opinion recommend not administering the drug in women who wish to continue breastfeeding.[1] If the drug is given, breastfeeding should be discontinued. Parents should limit close contact with their infants and small children after therapeutic tositumomab I 131 administration. Suggested contact times by one group are 30 minutes per day or less of contact at a distance of 2 meters or less for a period of 6 to 23 days.[2] Another group suggests avoiding contact with small children at a distance of 10 cm for an average of 8.1 days (range 3.5 to 12.9 days).[3] Additionally, nursing mothers may have excessive I 131 uptake by the breasts, so they should receive potassium iodide or Lugol's solution before receiving tositumomab I 131 to block uptake by the breasts and thyroid.

Nursing mothers should not work with substances containing I 131 in their workplace.[4]

Drug Levels

I 131 is a beta and high-energy gamma emitter with a main gamma emission energy of 364 keV and a physical half-life of 8.04 days.[5] The effective half-life of sodium iodide I 131 averages 9.2 hours (range 7.3 to 11.1 hours). Iodide is actively secreted into breastmilk and actively taken up by the mother's and infant's thyroid glands. From 25 to 46% of administered radioactivity is excreted into breastmilk after administration of sodium iodide I 131.[6]

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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4. Almen A, Mattsson S. Radiological protection of foetuses and breast-fed children of occupationally exposed women in nuclear medicine - Challenges for hospitals. Phys Med. 2017;43:172-7. PubMed PMID: 28882410.
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Substance Identification

Substance Name

Tositumomab I 131

CAS Registry Number

192391-48-3

Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Iodine Radioisotopes