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Indium In 111 White Blood Cells

Revised: June 30, 2019.

Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of indium In 111 white blood cells (In 111 leukocytes) as a diagnostic agent. Breastfeeding should be interrupted temporarily after administration of high doses of In 111 leukocytes to a nursing mother. The duration of breastfeeding interruption depends on the dose administered (see table). 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.[1][2][3] The milk that is pumped by the mother during the time of breastfeeding interruption can either be discarded or stored frozen and given to the infant after 10 physical half-lives, or about 28 days, have elapsed. After doses greater than 10 MBq, consideration of temporarily limiting close contact between the mother and infant.[3]

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.[4]

Drug Levels

Indium 111 decays by electron capture with 171 keV and 245 keV gamma emissions and a physical half-life of 2.83 days.[5] The effective half-life of In 111 white blood cells averages 108 hours (range 82 to 134 hours).[1]

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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Substance Identification

Substance Name

Indium In 111 White Blood Cells

Drug Class

Breast Feeding

Lactation

Radiopharmaceuticals

Indium Radioisotopes

Diagnostic Agents