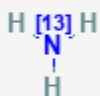




Ammonia N 13

Revised: October 15, 2023.

CASRN: 34819-78-8



Drug Levels and Effects

Summary of Use during Lactation

Information in this record refers to the use of ammonia N 13 as a diagnostic agent in PET scans. No information is available on the use of ammonia N 13 during breastfeeding. The Society for Nuclear Medicine and the International Commission on Radiological Protection states that breastfeeding need not be interrupted after administration of ammonia N 13,[1-3] although the manufacturer recommends withholding breastfeeding for 2 hours. This length of time is greater than 10 half-lives of the radioisotope, so the nursing infant should not be exposed to radiation if this the 2-hour time period is used. The mother can nurse just before administration of the radiopharmaceutical. 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.[4,5] Milk that is pumped by the mother during the time of

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breastfeeding interruption can either be discarded or stored and given to the infant after 10 physical half-lives, or about 2 hours, have elapsed.

Nursing mothers should not work with radioactive substances used in PET scans in their workplace.[6]

Drug Levels

Nitrogen N 13 decays by positron emission, emitting gamma photon with an energy of 511 keV. It has a physical half-life of 9.97 minutes.[3]

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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3. Dilsizian V, Metter D, Palestro C, Zanzonico P. Advisory Committee on Medical Uses of Isotopes (ACMUI) Sub-Committee on Nursing Mother Guidelines for the Medical Administration of Radioactive Material. Final report submitted: January 31, 2019. 2019. Available at: <https://www.nrc.gov/docs/ML1903/ML19038A498.pdf>
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Substance Identification

Substance Name

Ammonia N 13

CAS Registry Number

34819-78-8

Drug Class

Breast Feeding

Lactation

Milk, Human

Radiopharmaceuticals

Nitrogen Radioisotopes

Diagnostic Agents