

U.S. National Library of Medicine National Center for Biotechnology Information **NLM Citation:** Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006-. Ivermectin. [Updated 2023 Sep 15]. **Bookshelf URL:** https://www.ncbi.nlm.nih.gov/books/



lvermectin

Revised: September 15, 2023.

CASRN: 70288-86-7



Drug Levels and Effects

Summary of Use during Lactation

Limited data indicate that ivermectin is poorly excreted into breastmilk after oral administration. Amounts ingested by the infant are small and would not be expected to cause any adverse effects in breastfed infants over 7 days of age.[1] No data are available on ivermectin excretion into breastmilk after topical administration, but amounts should be less than after oral administration. Avoid application to the breast area where the infant might directly ingest the drug.

Disclaimer: Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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Drug Levels

Maternal Levels. Four mothers who had lost their infants at term were given a single 150 mcg/kg dose of oral ivermectin. Ivermectin was detected in milk within 1 hour after the dose and for 72 hours after the dose. The average peak milk level was 15 mcg/L (range 11 to 21 mcg/L) and occurred 4 hours after the dose in 2 women, 6 hours in another and 12 hours after the dose in the fourth. The mean milk level was 9.85 mcg/L.[2,3] Using the mean milk level data from this study, an exclusively breastfed infant would receive an average dose of 1.47 mcg/kg after a maternal dose of 150 mcg/kg, or 0.98% of the weight-adjusted maternal dose.

A woman was treated for *Strongyloides stercoralis* with a single oral dose of 200 mcg/kg of ivermectin. She collected milk samples before the dose and at 1, 3, 6, 9, 12 and 24 hours after the dose. A peak level in milk of 20.8 mcg/L occurred 6 hours after the dose. The average concentration over the 24-hour period was 9.26 mcg/L. Using the average milk level data from this study, an exclusively breastfed infant would receive an average dose of 1.39 mcg/kg after a maternal dose of 200 mcg/kg, or 0.7% of the weight-adjusted maternal dose.[4]

Infant Levels. Relevant published information was not found as of the revision date.

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.

Alternate Drugs to Consider

(Scabies, Pediculosis) Permethrin, Pyrethrins

References

- 1. Thomas C, Coates SJ, Engelman D, et al. Ectoparasites: Scabies. J Am Acad Dermatol 2020;82:533-48. PubMed PMID: 31310840.
- 2. Ogbuokiri JE, Ozumba BC, Okonkwo PO. Ivermectin levels in human breastmilk. Eur J Clin Pharmacol 1993;45:389-90. PubMed PMID: 8299677.
- 3. Ogbuokiri JE, Ozumba BC, Okonkwo PO. Ivermectin levels in human breast milk. Eur J Clin Pharmacol 1994;46:89-90. PubMed PMID: 8005194.
- 4. Rodari P, Buonfrate D, Pomari E, et al. Ivermectin concentration in breastmilk of a woman with Strongyloides stercoralis and human T-lymphotropic virus-I co-infection. Acta Trop 2020;202:105249. PubMed PMID: 31678122.

Substance Identification

Substance Name

Ivermectin

CAS Registry Number

70288-86-7

Drug Class

Breast Feeding

- Lactation
- Milk, Human
- Anti-Infective Agents
- Antiparasitic Agents
- Insecticides
- Macrolides