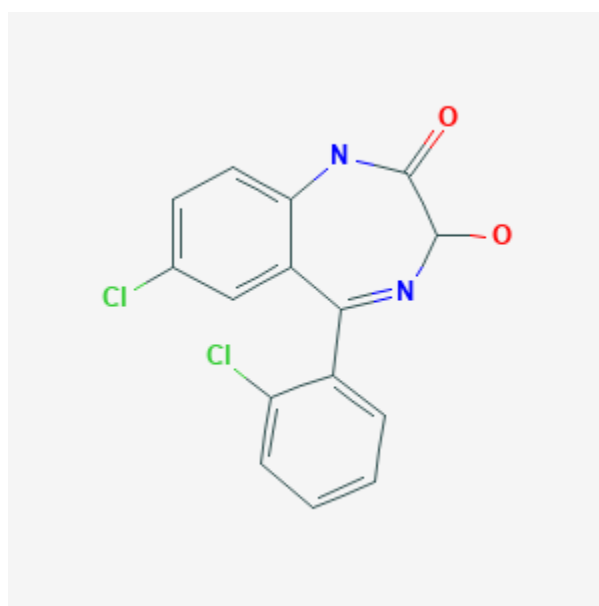




Lorazepam

Revised: October 31, 2018.

CASRN: 846-49-1



Drug Levels and Effects

Summary of Use during Lactation

Lorazepam has low levels in breastmilk, a short half-life relative to many other benzodiazepines, and is safely administered directly to infants. Evidence from nursing mothers indicates that lorazepam does not cause any adverse effects in breastfed infants with usual maternal dosages. No special precautions are required.

Drug Levels

Maternal Levels. Four women were given 3.5 mg of lorazepam orally 2 hours before undergoing cesarean section. Colostrum levels of lorazepam averaged 8.5 mcg/L at 4 hours after the dose; conjugated lorazepam metabolites were not measured.[1]

Another woman taking 2.5 mg orally twice a day for the first 5 days postpartum had milk levels of free and conjugated lorazepam of 12 and 35 mcg/L, respectively, at an unspecified time on day 5.[2] Since infants can deconjugate and absorb glucuronides, the total drug level is probably more important than the free drug alone. Using the total amount excreted, an exclusively breastfed infant would receive about 7 mcg/kg daily with this maternal dosage or about 8.5% of the maternal weight-adjusted dosage.

A woman who was 4 weeks postpartum was taking lorazepam 2.5 mg 1 to 3 times daily and lorazepam, which is partially metabolized to lorazepam, 2 mg once daily. On day 5 of therapy after taking 2 doses of lorazepam in the previous 8 hours, her lorazepam milk level was 123 mcg/L. On day 6 after having taken 3 doses in the previous 24 hours, her milk lorazepam level was 89 mcg/L. On day 7, milk levels were 55 and 40 mcg/L at 14 and 18.5 hours after her last dose, respectively.[3]

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

Effects in Breastfed Infants

The newborn infant of a mother taking 2.5 mg of lorazepam orally twice daily for 5 days after delivery showed no signs of sedation.[2]

In a telephone follow-up study, 124 mothers who took a benzodiazepine while nursing reported whether their infants had any signs of sedation. Sixty-four mothers took lorazepam while breastfeeding and none reported sedation in her infant.[4]

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

Midazolam, Oxazepam

References

1. Summerfield RJ, Nielsen MS. Excretion of lorazepam into breast milk. *Br J Anaesth.* 1985;57:1042-3. Letter. PubMed PMID: 4041315.
2. Whitelaw AGL, Cummings AJ, McFadyen IR. Effect of maternal lorazepam on the neonate. *Br Med J (Clin Res Ed).* 1981;282:1106-8. PubMed PMID: 6113019.
3. Lemmer P, Schneider S, Muhe A, Wennig R. Quantification of lorazepam and lorazepam in human breast milk using GC-MS in the negative chemical ionization mode. *J Anal Toxicol* 2007;31:224-6. PubMed PMID: 17555647.
4. Kelly LE, Poon S, Madadi P, Koren G. Neonatal benzodiazepines exposure during breastfeeding. *J Pediatr.* 2012;161:448-51. PubMed PMID: 22504099.

Substance Identification

Substance Name

Lorazepam

CAS Registry Number

846-49-1

Drug Class

Breast Feeding

Lactation

Hypnotics and Sedatives

Anti-Anxiety Agents

Benzodiazepines