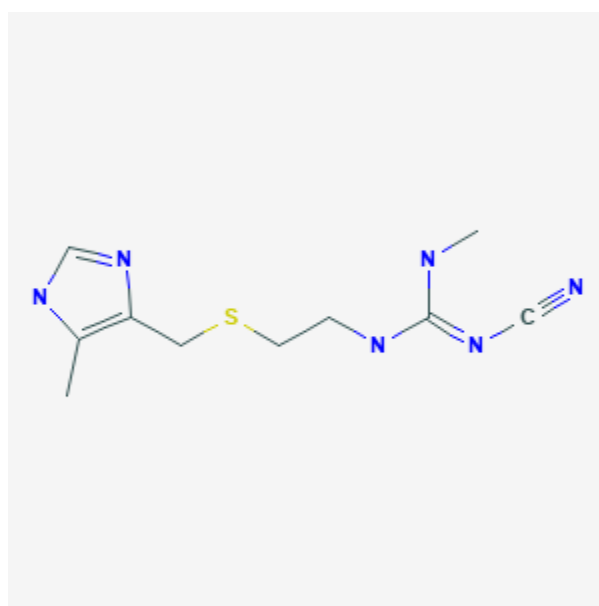




Cimetidine

Revised: October 31, 2018.

CASRN: 51481-61-9



Drug Levels and Effects

Summary of Use during Lactation

Limited information indicates that maternal cimetidine results in infant dosages much less than those given directly to neonates. Cimetidine would not be expected to cause any adverse effects in breastfed infants, especially if the infant is older than 2 months. However, because of its potential for causing hepatic enzyme inhibition, other drugs might be preferred.

Drug Levels

Maternal Levels. After a single oral dose of 400 mg of cimetidine, the peak milk level of 5 mg/L occurred about 3 hours after the dose and was about equal to the peak serum level in a woman who had been breastfeeding for 6 months. Milk levels remained higher than serum levels for the duration of the dosing interval. With a multiple-dose regimen of 200 mg 3 times daily and 400 mg at bedtime, milk levels just prior to the doses were relatively

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 .

constant between 4.9 and 6 mg/L.[1] These levels indicate that a fully breastfed infant would receive between 0.74 and 0.9 mg/kg daily which is much less than reported neonatal dosages of 5 to 10 mg/kg daily.

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

Histamine H₂-receptor blockade is known to stimulate prolactin secretion. In addition, cimetidine may have additional, nonspecific actions that stimulate prolactin secretion.[2] Oral cimetidine doses of 400 mg 4 times daily increased serum prolactin by 50 to 112% in 6 patients. Cimetidine caused dose-related gynecomastia and galactorrhea in men and nonnursing women.[3][4][5] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

Alternate Drugs to Consider

Famotidine, Nizatidine, Omeprazole, Pantoprazole, Ranitidine, Sucralfate

References

1. Somogyi A, Gugler R. Cimetidine excretion into breast milk. *Br J Clin Pharmacol.* 1979;7:627-9. Letter. PubMed PMID: 465286.
2. Knigge UP. Histaminergic regulation of prolactin secretion. *Dan Med Bull.* 1990;37:109-24. PubMed PMID: 2188799.
3. Delle Fave FG, Tamburrano G, De Magistris L et al. Gynaecomastia with cimetidine. *Lancet.* 1977;309:1319. PubMed PMID: 68422.
4. Bateson MC, Browning MCK, Maconnachie A. Galactorrhoea with cimetidine. *Lancet.* 1977;310:247-8. Letter. PubMed PMID: 69853.
5. Garcia Rodriguez LA, Jick H . Risk of gynaecomastia associated with cimetidine, omeprazole, and other antiulcer drugs. *BMJ .* 1994;308:503-6. PubMed PMID: 8136667.

Substance Identification

Substance Name

Cimetidine

CAS Registry Number

51481-61-9

Drug Class

Breast Feeding

Lactation

Anti-Ulcer Agents

Histamine H₂ Antagonists

Gastrointestinal Agents