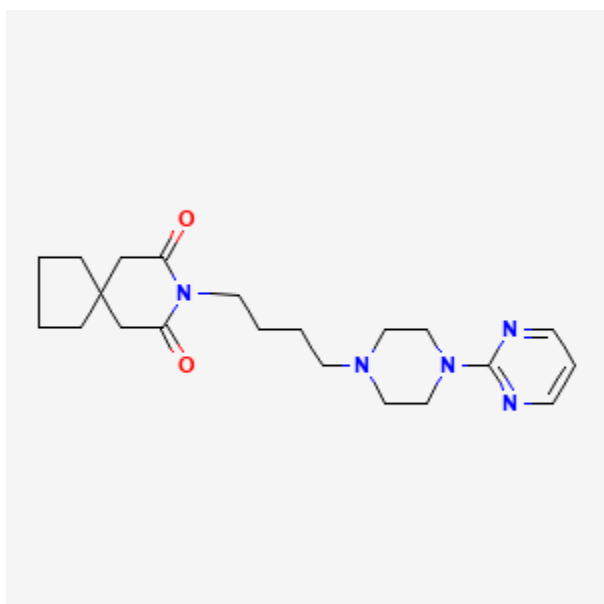




Bupirone

Revised: April 15, 2024.

CASRN: 36505-84-7



Drug Levels and Effects

Summary of Use during Lactation

Limited information indicates that maternal doses of bupirone up to 45 mg daily produce low levels in milk. Because no information is available on the long-term use of bupirone during breastfeeding, an alternate drug may be preferred, especially while nursing a newborn or preterm infant.

Drug Levels

Maternal Levels. A woman was taking bupirone 15 mg 3 times daily during pregnancy and postpartum. On day 13 postpartum, bupirone was undetectable in breastmilk by HPLC assay (limit of detection and time of sample not stated).[1]

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Nine women taking buspirone 7.5 to 30 mg twice daily donated milk samples collected at 1, 2, 4, 6, 8, 10, and 12 hours after a dose to a human milk repository. Levels of buspirone and its active metabolite 1-(2-pyrimidinyl) piperazine were measured. Buspirone was not detected (<1.5 mcg/L) in any samples, but the metabolite was found in all samples. The relative infant dose was estimated to average 0.91% (range 0.21 to 2.17%).[2]

Infant Levels. In the exclusively breastfed infant of a mother who was taking buspirone 15 mg 3 times daily, buspirone was undetectable in the infant's serum by HPLC assay (limit of detection and time of sample not stated) on days 13 and 21 postpartum.[1]

Effects in Breastfed Infants

Possible drug-induced seizure-like activity and cyanosis occurred in a breastfed 3-week-old whose mother was taking buspirone 15 mg 3 times daily as well as fluoxetine and carbamazepine during pregnancy and breastfeeding. The authors thought that this reaction, if drug induced, was most likely caused by fluoxetine.[1]

One exclusively breastfed 11-week-old infant was breastfed during maternal therapy with buspirone 10 mg daily and venlafaxine 300 mg daily. No adverse reactions were reported by the mother or in the medical records.[3]

Effects on Lactation and Breastmilk

Buspirone increases serum prolactin.[4-7] Galactorrhea was reported in a woman taking venlafaxine after buspirone was added to her regimen. However, when buspirone was discontinued, galactorrhea persisted.[8] The prolactin level in a mother with established lactation may not affect her ability to breastfeed.

Alternate Drugs to Consider

Lorazepam, Oxazepam

References

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Substance Identification

Substance Name

Buspirone

CAS Registry Number

36505-84-7

Drug Class

Breast Feeding

Lactation

Milk, Human

Anti-Anxiety Agents

Serotonin Agonists