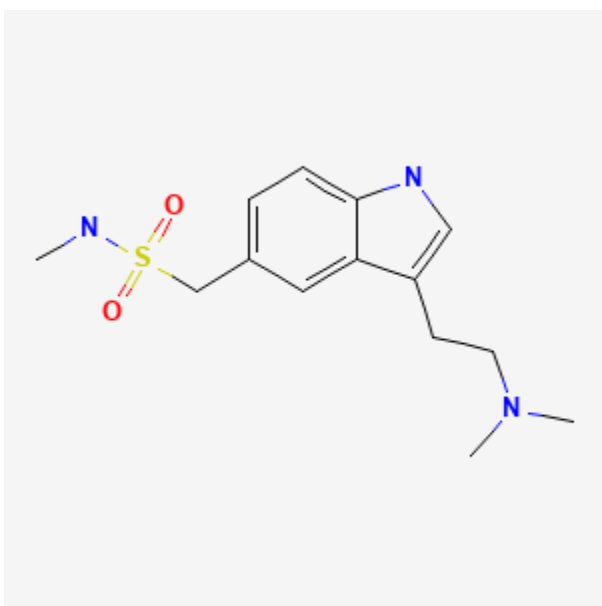




Sumatriptan

Revised: April 15, 2024.

CASRN: 103628-46-2



Drug Levels and Effects

Summary of Use during Lactation

Because of the low levels of sumatriptan in breastmilk, amounts ingested by the infant are small. It also has poor oral bioavailability, further decreasing infant exposure to the drug. Some authors have suggested that withholding breastfeeding for 8 hours after a single subcutaneous injection would virtually eliminate infant exposure to the drug.[1] The manufacturer recommends withholding breastfeeding for 12 hours after a dose. Withholding breastfeeding might be helpful in extreme cases, such as in the mother of a preterm infant, but sumatriptan would not be expected to cause any adverse effects in most breastfed infants. Painful, burning nipples and breast pain have been reported after doses of sumatriptan and other triptans. This has occasionally been accompanied by a decrease in milk production.

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. Five women who had been breastfeeding for 11 to 28 weeks received a single dose of sumatriptan 6 mg by subcutaneous injection. The peak milk level averaged 87.2 mcg/L (range 62 to 113 mcg/L) and it occurred 2.5 hours (range 1.7 to 3.5 hours) after the dose. The mean half-life in milk was 2.2 hours (range 1.2 to 3.1 hours). The authors calculated that an exclusively breastfed infant would receive 14.4 mcg in breastmilk with this dose, which is 3.5% of the weight-adjusted dosage.[1]

Seven women who were at least 1 month postpartum and used sumatriptan to treat migraine provided one milk sample before the dose, then additional milk samples at 1, 2, 4, 8, 12 and 24 hours after the dose. One mother took a 6 mg dose subcutaneously, two took 20 mg by nasal spray, four took a 50 mg oral dose (including one who used the nasal spray separately), and one mother took 100 mg orally. Peak milk levels did not correlate well with dosage, averaged 59.3 mcg/L (range 24.6 to 112.8 mcg/L) and occurred at 2 to 4 hours after the dose. The average milk level was 23.2 mcg/L (range 7.7 to 50.6 mcg/L) and the half-life in milk averaged 4.9 hours (range 3.6 to 5.9 hours). The average infant's daily dosage of sumatriptan was 3.5 mcg/kg (range 1.2 to 7.6 mcg/kg) and the weight-adjusted infant dosage averaged 0.7% (range 0.2 to 1.8%) of the maternal dose. [2]

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

Effects in Breastfed Infants

One author reported correspondence with the drug's manufacturer stating that of 3 women known to the manufacturer who used sumatriptan (dose and route unspecified) during breastfeeding none reported adverse effects on the infants.[3]

Effects on Lactation and Breastmilk

One author reported correspondence with the drug's manufacturer stating that 1 woman who used a single injection of sumatriptan (dose unspecified) during breastfeeding had a cessation of lactation.[3]

A review of four European adverse reaction databases found 26 reported cases of, painful, burning nipples, painful breasts, breast engorgement and/or painful milk ejection in women who took a triptan while nursing. Pain was sometimes intense and occasionally led to decreased milk production. Pain generally subsided with time as the drug was eliminated. The authors proposed that triptans may cause vasoconstriction of the arteries in the breast, nipples, and the arteries surrounding the alveoli and milk ducts, causing a painful sensation and a painful milk ejection reflex.[4]

Alternate Drugs to Consider

Eletriptan, Rizatriptan, Zolmitriptan

References

1. Wojnar-Horton RE, Hackett LP, Yapp P, et al. Distribution and excretion of sumatriptan in human milk. *Br J Clin Pharmacol* 1996;41:217-21. PubMed PMID: 8866921.
2. Amundsen S, Nordeng H, Fuskevåg OM, et al. Transfer of triptans into human breast milk and estimation of infant drug exposure through breastfeeding. *Basic Clin Pharmacol Toxicol* 2021;128:795-804. PubMed PMID: 33730376.
3. Kristensen J. Sumatriptan and breastfeeding. *Aust J Hosp Pharm* 1996;26:460. Letter.
4. Conijn M, Maas V, van Tuyl M, et al. Breastfeeding-related adverse drug reactions of triptans: A descriptive analysis using four pharmacovigilance databases. *Breastfeed Med* 2024. PubMed PMID: 38563407.

Substance Identification

Substance Name

Sumatriptan

CAS Registry Number

103628-46-2

Drug Class

Breast Feeding

Lactation

Milk, Human

Serotonin Receptor Agonists

Serotonin 5-HT₁ Receptor Agonists

Triptans

Vasoconstrictor Agents