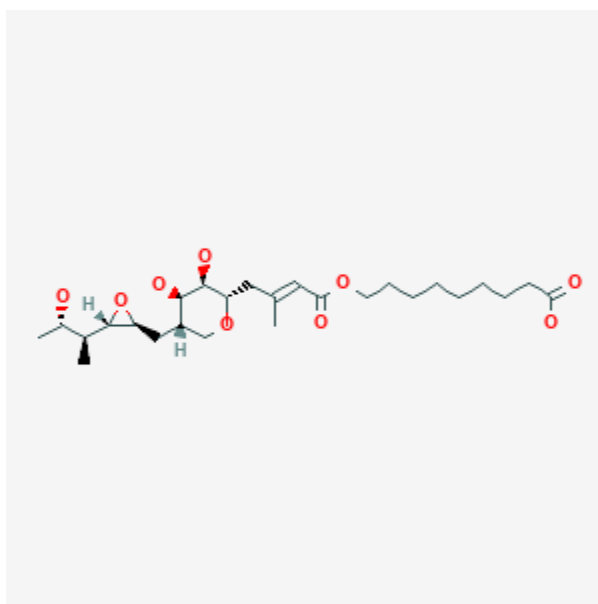




## Mupirocin

Revised: October 31, 2018.

CASRN: 12650-69-0



## Drug Levels and Effects

### Summary of Use during Lactation

Because less than 1% is absorbed after topical application, mupirocin is considered a low risk to the nursing infant.[1] Ensure that the infant's skin does not come into direct contact with the areas of skin that have been treated. Only water-miscible cream or gel products should be applied to the breast because ointments may expose the infant to high levels of mineral paraffins via licking.[2] Mupirocin applied topically to the nipples appears to be relatively ineffective as a treatment for sore, cracked nipples.

### Drug Levels

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

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

## Effects in Breastfed Infants

A mother who was exclusively nursing her 52-day-old infant developed a soft-tissue infection. She was treated with intravenous teicoplanin 400 mg every 12 hours for 3 doses, then 400 mg daily for 5 days total, intravenous ceftriaxone 1 gram daily, topical mupirocin cream twice daily. A careful follow-up indicated that her infant had no adverse effects.[3]

## Effects on Lactation and Breastmilk

A small, randomized, unblinded trial of mothers with sore, cracked nipples was performed. Mupirocin 2% applied to the nipples after each feeding was much less effective (16% vs 79%) than an oral antibiotic (cloxacillin or erythromycin for 10 days) in resolving the problem. Additionally, more patients' condition worsened (28% vs 5%) with mupirocin than with an oral antibiotic.[4]

In a randomized, double-blind trial, lanolin was compared to an all-purpose nipple ointment containing mupirocin 1%, betamethasone 0.05%, and miconazole 2% for painful nipples while nursing in the first 2 weeks postpartum. The two treatments were equally effective in reducing nipple pain, nipple healing time, breastfeeding duration, breastfeeding exclusivity rate, mastitis and nipple symptoms, side effects or maternal satisfaction with treatment.[5]

## Alternate Drugs to Consider

Bacitracin

## References

1. Leachman SA, Reed BR. The use of dermatologic drugs in pregnancy and lactation. *Dermatol Clin*. 2006;24:167-97. PubMed PMID: 16677965.
2. Noti A, Grob K, Biedermann M et al. Exposure of babies to C(15)-C(45) mineral paraffins from human milk and breast salves. *Regul Toxicol Pharmacol*. 2003;38:317-25. PubMed PMID: 14623482.
3. Kaplan YC, Keskin-Arslan E, Acar S et al. Teicoplanin use during breastfeeding. *Breastfeed Med*. 2017. PubMed PMID: 28051878.
4. Livingstone V, Stringer LJ. The treatment of *Staphylococcus aureus* infected sore nipples: a randomized comparative study. *J Hum Lact*. 1999;15:241-6. PubMed PMID: 10578803.
5. Dennis CL, Schottle N, Hodnett E, McQueen K. An all-purpose nipple ointment versus lanolin in treating painful damaged nipples in breastfeeding women: A randomized controlled trial. *Breastfeed Med*. 2012. PubMed PMID: 22428572.

## Substance Identification

### Substance Name

Mupirocin

### CAS Registry Number

12650-69-0

### Drug Class

Breast Feeding

Lactation

Anti-Infective Agents, Local

Antibacterial Agents