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# **Gemifloxacin**

Revised: May 17, 2021.

CASRN: 175463-14-6

# **Drug Levels and Effects**

# **Summary of Use during Lactation**

No information is available on the clinical use of gemifloxacin during breastfeeding; however, amounts in breastmilk appear to be low. Fluoroquinolones have traditionally not been used in infants because of concern about adverse effects on the infants' developing joints. However, recent studies indicate little risk.[1,2] The calcium in milk might prevent absorption of the small amounts of fluoroquinolones in milk,[3] but insufficient data exist to prove or disprove this assertion. Use of gemifloxacin is acceptable in nursing mothers. However, it is preferable to use an alternate drug for which safety information is available.

**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.* A nursing mother took one tablet of gemifloxacin 320 mg orally. A single breastmilk sample obtained 3 hours after the dose contained approximately 0.9 mg/L.[4]

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**

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

### **Alternate Drugs to Consider**

Ciprofloxacin, Levofloxacin

#### References

- 1. Gürpinar AN, Balkan E, Kiliç N, et al. The effects of a fluoroquinolone on the growth and development of infants. J Int Med Res. 1997;25:302–6. PubMed PMID: 9364293.
- 2. van den Oever HL, Versteegh FG, Thewessen EA, et al. Ciprofloxacin in preterm neonates: Case report and review of the literature. Eur J Pediatr. 1998;157:843–5. PubMed PMID: 9809826.
- 3. Fleiss PM. The effect of maternal medications on breast-feeding infants. J Hum Lact 1992;8:7. Letter. PMID: 1558663
- 4. Sagirli O, Demirci S, Onal A. A very simple high-performance liquid chromatographic method with fluorescence detection for the determination of gemifloxacin in human breast milk. Luminescence. 2015;30:1326–9. PubMed PMID: 25808579.

### **Substance Identification**

#### Substance Name

Gemifloxacin

# **CAS Registry Number**

175463-14-6

### **Drug Class**

**Breast Feeding** 

Lactation

Fluoroquinolones

Quinolones