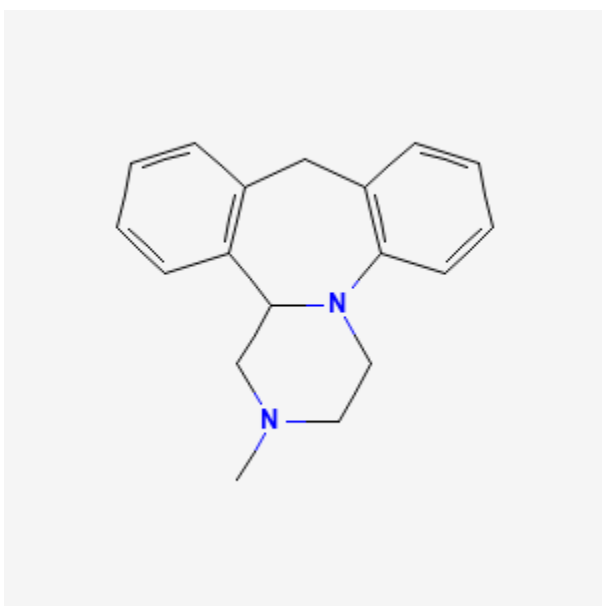




## Mianserin

Revised: April 18, 2022.

CASRN: 24219-97-4



## Drug Levels and Effects

### Summary of Use during Lactation

Mianserin is not approved for marketing in the United States by the U.S. Food and Drug Administration, but is available in other countries. Limited information indicates that maternal doses up to 60 mg daily produce low levels in milk and would not be expected to cause any adverse effects in breastfed infants, especially if the infant is older than 2 months. Until more data are available, mianserin should be used with careful monitoring during breastfeeding.

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## Drug Levels

*Maternal Levels.* One woman with major depression was taking mianserin 60 mg daily for 9 days. Another woman was taking mianserin 40 mg daily for 14 days. A single milk sample was collected 15 hours after the previous dose in each woman. The first woman had breastmilk levels of 80 mcg/L of mianserin and 10 mcg/L of desmethylmianserin. The second woman had breastmilk levels of 20 mcg/L of mianserin and 20 mcg/L of desmethylmianserin. The authors estimated that the daily dosages were 0.012 mg/kg for the first infant, and 0.003 mg/kg for the second. These correspond to 1.4% and 0.5% of their respective mothers' weight-adjusted maternal dosages.[1]

*Infant Levels.* One woman with major depression was taking mianserin 60 mg daily for 9 days. Her 3-month-old breastfed (extent not stated) infant's plasma had no detectable (<10 mcg/L) mianserin or desmethylmianserin. Another 5-month-old breastfed (extent not stated) infant whose mother was taking mianserin 40 mg daily for 14 days had mianserin 12 mcg/L and desmethylmianserin 14 mcg/L detected in his urine.[1]

## Effects in Breastfed Infants

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

## Effects on Lactation and Breastmilk

An observational study looked at outcomes of 2859 women who took an antidepressant during the 2 years prior to pregnancy. Compared to women who did not take an antidepressant during pregnancy, mothers who took an antidepressant during all 3 trimesters of pregnancy were 37% less likely to be breastfeeding upon hospital discharge. Mothers who took an antidepressant only during the third trimester were 75% less likely to be breastfeeding at discharge. Those who took an antidepressant only during the first and second trimesters did not have a reduced likelihood of breastfeeding at discharge.[2] The antidepressants used by the mothers were not specified.

A retrospective cohort study of hospital electronic medical records from 2001 to 2008 compared women who had been dispensed an antidepressant during late gestation (n = 575) to those who had a psychiatric illness but did not receive an antidepressant (n = 1552) and mothers who did not have a psychiatric diagnosis (n = 30,535). Women who received an antidepressant were 37% less likely to be breastfeeding at discharge than women without a psychiatric diagnosis, but no less likely to be breastfeeding than untreated mothers with a psychiatric diagnosis.[3] None of the mothers were taking mianserin.

In a study of 80,882 Norwegian mother-infant pairs from 1999 to 2008, new postpartum antidepressant use was reported by 392 women and 201 reported that they continued antidepressants from pregnancy. Compared with the unexposed comparison group, late pregnancy antidepressant use was associated with a 7% reduced likelihood of breastfeeding initiation, but with no effect on breastfeeding duration or exclusivity. Compared with the unexposed comparison group, new or restarted antidepressant use was associated with a 63% reduced likelihood of predominant, and a 51% reduced likelihood of any breastfeeding at 6 months, as well as a 2.6-fold increased risk of abrupt breastfeeding discontinuation. Specific antidepressants were not mentioned.[4]

## References

1. Buist A, Norman TR, Dennerstein L. Mianserin in breast milk. *Br J Clin Pharmacol* 1993;36:133-4. Letter. PMID: 8398582
2. Venkatesh KK, Castro VM, Perlis RH, et al. Impact of antidepressant treatment during pregnancy on obstetric outcomes among women previously treated for depression: An observational cohort study. *J Perinatol*. 2017;37:1003-9. PubMed PMID: 28682318.

3. Leggett C, Costi L, Morrison JL, et al. Antidepressant use in late gestation and breastfeeding rates at discharge from hospital. *J Hum Lact.* 2017;33:701–9. PubMed PMID: 28984528.
4. Grzeskowiak LE, Saha MR, Nordeng H, et al. Perinatal antidepressant use and breastfeeding outcomes: Findings from the Norwegian Mother, Father and Child Cohort Study. *Acta Obstet Gynecol Scand.* 2022;101:344–54. PubMed PMID: 35170756.

## Substance Identification

### Substance Name

Mianserin

### CAS Registry Number

24219-97-4

### Drug Class

Breast Feeding

Lactation

Milk, Human

Antidepressive Agents

Antidepressive Agents, Second-Generation

Serotonin Antagonists