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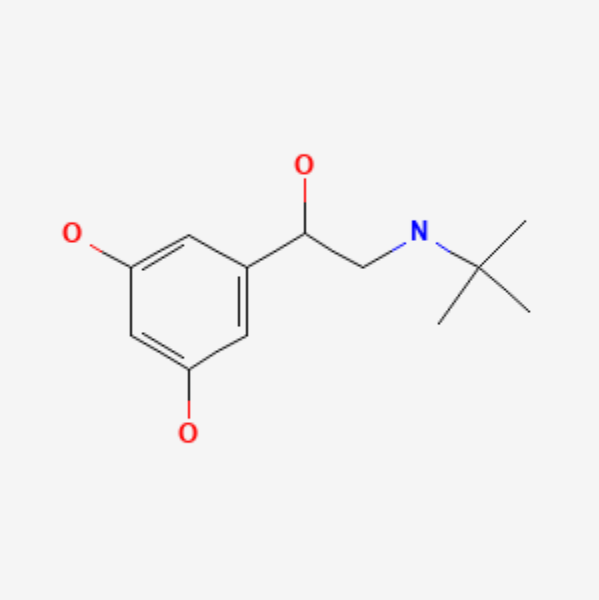
Terbutaline

Revised: July 15, 2024.

CASRN: 23031-25-6



Drug Levels and Effects

Summary of Use during Lactation

Maternal use of oral or inhaled terbutaline is unlikely to affect a breastfed infant. The authors of several reviews and expert guidelines agree that use of inhaled bronchodilators is acceptable during breastfeeding because of the low bioavailability and maternal serum levels after use.[1-4] Terbutaline use as a tocolytic agent might decrease the duration of breastfeeding.

Drug Levels

Maternal Levels. With long-term maternal intake of 2.5 or 5 mg three times daily orally, milk terbutaline levels ranged from 2.5 to 4 mcg/L at various times during the dosing interval. There was little fluctuation of milk levels.

The average dose that an exclusively breastfed infant would receive based on these patients is 1.4% (range 0.7 to 2.2%) of the maternal weight-adjusted dose.[5-7]

Infant Levels. Serum levels were undetectable (<0.1 mcg/L) in one 8-week-old exclusively breastfed infant whose mother was taking oral terbutaline 5 mg three times daily.[5,7]

Effects in Breastfed Infants

Two papers have reported a total of 4 infants aged 3 to 8 weeks who were breastfed during maternal use of oral terbutaline 2.5 or 5 mg three times daily. None of the infants had any signs of sympathetic stimulation and all were developing normally.[6,7] These cases were also summarized in a third publication.[5]

Effects on Lactation and Breastmilk

A small retrospective survey from Serbia found that mothers who received a beta agonist pharmacologically similar to terbutaline (fenoterol or hexoprenaline) as a tocolytic breastfed for a shorter period of time than those who received no tocolytic (4.5 vs 9.5 months).[8] It is not known if terbutaline has a similar effect.

A study in an Australian hospital compared breastfeeding outcomes in women who received a cesarean section during 2 time periods. During the first time period women did not receive terbutaline before a category one or two cesarean section (n = 423). In the second period, all women receiving a category one or two cesarean section received terbutaline 250 mcg subcutaneously as a tocolytic agent unless there was a contraindication at the time a decision was made to perform a cesarean section (n = 253). The breastfeeding rates at the time of discharge were 95% in the first period and 99% in the second period. The difference was statistically significant.[9]

References

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Substance Identification

Substance Name

Terbutaline

CAS Registry Number

23031-25-6

Drug Class

Breast Feeding

Lactation

Milk, Human

Bronchodilator Agents

Beta Adrenergic Agonists