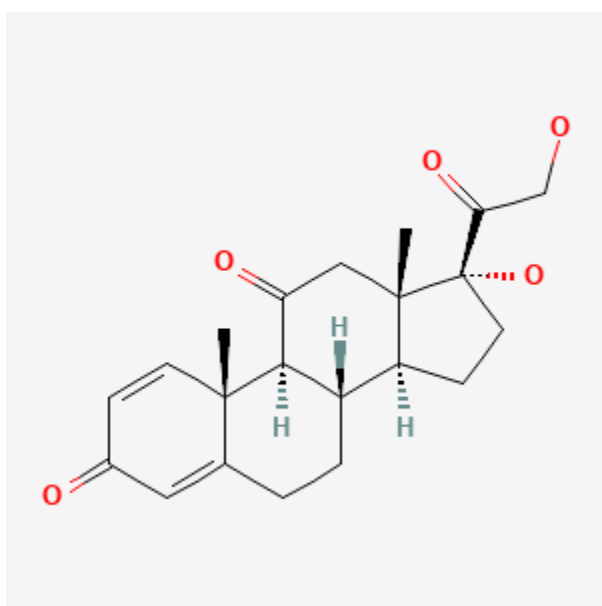




Prednisone

Revised: April 15, 2024.

CASRN: 53-03-2



Drug Levels and Effects

Summary of Use during Lactation

Amounts of prednisone in breastmilk are very low. No adverse effect have been reported in breastfed infants with maternal use of any corticosteroid during breastfeeding. Although it is often recommended to avoid breastfeeding for 4 hours after a dose this maneuver is not necessary because prednisone milk levels are very low. Medium to large doses of corticosteroids given systemically or injected into joints or the breast have been reported to cause temporary reduction of lactation.

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. After oral prednisone, peak milk levels of total prednisone plus prednisolone were 28.3 mcg/L after a 10 mg oral dose in one woman;[1] 102 mcg/L after a 20 mg dose in a second;[2] and 627 mcg/L after a 120 mg dose in another.[3] Peak milk steroid levels occur about 2 hours after a dose of prednisone.

Two women taking oral prednisone provided milk by complete breast emptying using a breast pump every 2 to 3 hours over one dosage interval. One subject was taking a dose of 2 mg every 12 hours and the other was taking 15 mg every 24 hours. The respective infant weight-adjusted dosages were 0.58% and 0.35% of the maternal dose for prednisone and 0.18% and 0.09% for prednisolone. Drug concentrations in milk were undetectable (<4 mcg/L) after 12 hours for prednisone and 6 hours for prednisolone.[4]

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

Effects in Breastfed Infants

None reported with prednisone or any other corticosteroid. In a prospective follow-up study, six nursing mothers reported taking prednisone (dosage unspecified) with no adverse infant effects.[5]

There are several reports of mothers breastfeeding during long-term use of corticosteroids with no adverse infant effects: prednisone 10 mg daily (2 infants) and prednisolone 5 to 7.5 mg daily (14 infants).[6-8]

A woman with Crohn's disease used prednisone 60 mg daily in a tapering schedule immediately postpartum during breastfeeding (extent not stated). She also received sulfasalazine 4 grams daily and infliximab 5 mg/kg every 8 weeks during pregnancy and postpartum. At 6 months of age, the infant was asymptomatic with regular weight gain.[9]

The National Transplantation Pregnancy Registry reports that as of December 2013, 124 women with transplants have taken prednisone while breastfeeding 169 infants for periods as long as 48 months, with no apparent infant harm.[10]

Effects on Lactation and Breastmilk

Published information on the effects of prednisone on serum prolactin or on lactation in nursing mothers was not found as of the revision date. Medium to large doses of corticosteroids given systemically or injected into joints or the breast have been reported to cause temporary reduction of lactation.[11-15]

A study of 46 women who delivered an infant before 34 weeks of gestation found that a course of another corticosteroid (betamethasone, 2 intramuscular injections of 11.4 mg of betamethasone 24 hours apart) given between 3 and 9 days before delivery resulted in delayed lactogenesis II and lower average milk volumes during the 10 days after delivery. Milk volume was not affected if the infant was delivered less than 3 days or more than 10 days after the mother received the corticosteroid.[16] An equivalent dosage regimen of prednisone might have the same effect.

A study of 87 pregnant women found that betamethasone given as above during pregnancy caused a premature stimulation of lactose secretion during pregnancy. Although the increase was statistically significant, the clinical importance appears to be minimal.[17] An equivalent dosage regimen of prednisone might have the same effect.

Alternate Drugs to Consider

Methylprednisolone, Prednisolone

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Substance Identification

Substance Name

Prednisone

CAS Registry Number

53-03-2

Drug Class

Breast Feeding

Lactation

Milk, Human

Corticosteroids, Systemic

Glucocorticoids

Anti-Inflammatory Agents