

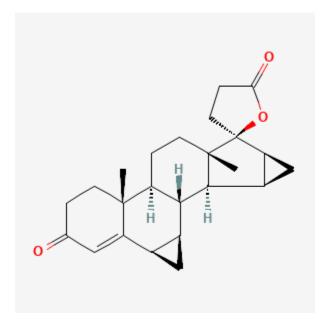
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# **Drospirenone**

Revised: September 15, 2023.

CASRN: 67392-87-4



# **Drug Levels and Effects**

## **Summary of Use during Lactation**

Drospirenone is a progestin that is an analogue of spironolactone. It has antimineralocorticoid and antiandrogenic activities. Amounts in milk are very low and no adverse effects on the breasted infant or milk supply are expected. Based on the available evidence, expert opinion holds that nonhormonal methods are preferred during breastfeeding and progestin-only contraceptives are preferred over combined oral contraceptives in breastfeeding women, especially during the first 4 weeks postpartum. For further information, consult the record entitled, Contraceptives, Oral, Combined.

**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. Six women who were between 1 week and 3 months postpartum received a single dose of drospirenone 3 mg plus ethinyl estradiol 30 mcg. Milk was collected for 72 hours after the dose in 2 of the women in whom half-lives in breastmilk were 8.3 and 15.5 hours. The average peak milk level in the 6 women was 13.5 mcg/L at 2.8 hours after the dose. The average drospirenone milk level in the first 24 hours was 3.7 mcg/L (range 1.4 to 7 mcg/L). The authors estimated that a fully breastfed infant would receive a drospirenone dose of about 3 mcg daily.[1] Using the average milk level of drospirenone, an exclusively breastfed infant would receive 1.1% of the weight-adjusted maternal dosage of drospirenone.

Twelve women who had weaned their infants, but were still lactating were given non-micronized oral drospirenone 4 mg daily (Slinda-Exeltis, Germany). Blood and milk samples were obtained at 12 time points up to 120 hours after at least 7 days of use. The average peak concentration in milk was 10.3 mcg/L at 3 hours after the dose and the average milk concentration over 24 hours would be 5.6 mcg/L. Using the standard milk intake value of 150 mL/kg daily, the infant would receive an average of 0.84 mcg/kg of drospirenone daily, which represent a weight-adjusted relative infant dose of 1.25% of the maternal dose.[2]

*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**

Etonogestrel, Intrauterine Copper Contraceptive, Oral Levonorgestrel, Intrauterine Levonorgestrel, Levonorgestrel Implant, Medroxyprogesterone Acetate, Norethindrone, Progesterone

#### References

- 1. Blode H, Foidart JM, Melka R. Transfer of drospirenone to breast milk after a single oral administration of 3 mg drospirenone + 30 mcg ethinylestradiol to healthy lactating women. Eur J Contracept Reprod Health Care 2001;6:167-71. PubMed PMID: 11763981.
- 2. Melka D, Kask K, Colli E, Regidor PA. A single-arm study to evaluate the transfer of drospirenone to breast milk after reaching steady state, following oral administration of 4 mg drospirenone in healthy lactating female volunteers. Womens Health (Lond) 2020;16:1745506520957192. PubMed PMID: 32903172.

#### **Substance Identification**

#### **Substance Name**

Drospirenone

# **CAS Registry Number**

67392-87-4

### **Drug Class**

**Breast Feeding** 

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Lactation

Milk, Human

Aldosterone Antagonists

Contraceptive Agents, Female

Contraceptives, Oral, Synthetic

Mineralocorticoid Receptor Antagonists