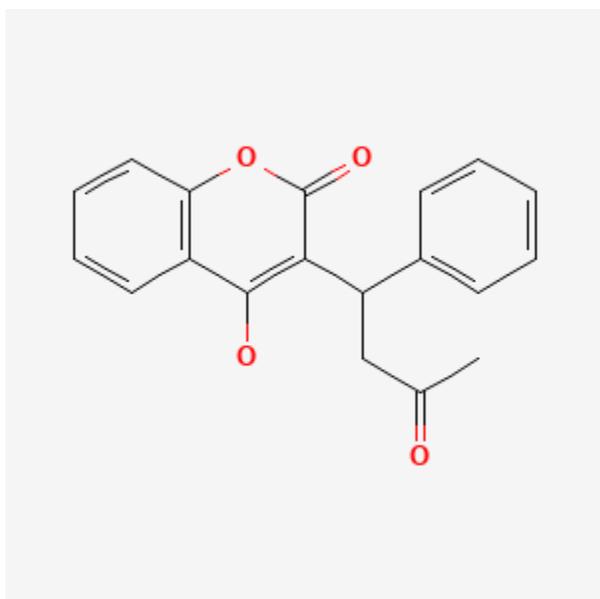




## Warfarin

Revised: May 15, 2024.

CASRN: 81-81-2



## Drug Levels and Effects

### Summary of Use during Lactation

Because of the very low milk levels with warfarin doses up to at least 12 mg daily, amounts ingested by the infant are small. No adverse reactions in breastfed infants have been reported from maternal warfarin use during lactation, even with a dose of 25 mg daily for 7 days. There is a consensus that maternal warfarin therapy during breastfeeding poses little risk to the breastfed infant.[1,2] No special precautions are necessary.

Women's postpartum warfarin dosage requirements may be increased by as much as two-fold compared to prepregnancy requirements. Whether breastfeeding contributes to the increased requirement is unclear.[3]

**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.

**Attribution Statement:** LactMed is a registered trademark of the U.S. Department of Health and Human Services.

## Drug Levels

*Maternal Levels.* Warfarin was not detected (<25 mcg/L) at 4 hours after a dose in the breastmilk of 13 mothers who were 3 to 12 days postpartum and anticoagulated with warfarin in doses of 2 to 12 mg daily in one study.[4]

Warfarin activity was also not detected in the milk of 2 anticoagulated women (warfarin dose unspecified).[5]

*Infant Levels.* No warfarin activity was detected in the plasma of any of 7 infants in whom it was measured. Measures of anticoagulation were within normal limits in all infants tested.[5]

## Effects in Breastfed Infants

No decreases in vitamin K-dependent clotting factors or bleeding occurred in 2 infants who were breastfed for 56 and 131 days, respectively, during maternal anticoagulation with warfarin.[4]

In one telephone follow-up study, mothers taking warfarin reported no adverse effects among 5 breastfed infants.[6]

A mother had been taking warfarin 5 mg daily for the first 7 weeks postpartum for a pulmonary embolism. At this time, she began taking 25 mg daily by mistake and took this dose for 7 days. Upon presentation to the emergency room, her INR was greater than 10 (usual therapeutic maximum 3.5), her prothrombin time was greater than 100 seconds (normal up to 11.2 seconds), and her aPTT was 62.5 seconds (normal up to 32.7 seconds). She had been nearly exclusively breastfeeding her infant since birth. Her 8-week-old infant was healthy with an INR of 1.0, prothrombin time of 10.3 seconds, and a slightly elevated aPTT 33.8 seconds. However, 3 weeks previously, the infant's aPTT was 38.9 seconds, so the elevated aPTT was judged not to be caused by warfarin.[7]

## Effects on Lactation and Breastmilk

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

## Alternate Drugs to Consider

Acenocoumarol, Dalteparin, Enoxaparin, Heparin, Rivaroxaban, Warfarin

## References

1. Clark SL, Porter TF, West FG. Coumarin derivatives and breast-feeding. *Obstet Gynecol* 2000;95 (6 pt 1):938-40. PubMed PMID: 10831996.
2. Bates SM, Rajasekhar A, Middeldorp S, et al. American Society of Hematology 2018 guidelines for management of venous thromboembolism: Venous thromboembolism in the context of pregnancy. *Blood Adv* 2018;2:3317-59. PubMed PMID: 30482767.
3. Uppuluri E, Idrees N, Shapiro N. Warfarin dosage in a postpartum woman while breastfeeding: A case report. *Pharmacotherapy* 2024;44:343-7. PubMed PMID: 38634189.
4. Orme ML, Lewis PJ, De Swiet M, et al. May mothers given warfarin breast-feed their infants? *Br Med J* 1977;1:1564-5. PubMed PMID: 871666.
5. McKenna R, Cole ER, Vasan U. Is warfarin sodium contraindicated in the lactating mother? *J Pediatr* 1983;103:325-7. PubMed PMID: 6410034.
6. Ito S, Blajchman A, Stephenson M, et al. Prospective follow-up of adverse reactions in breast-fed infants exposed to maternal medication. *Am J Obstet Gynecol* 1993;168:1393-9. PubMed PMID: 8498418.
7. Schindler D, Graham TP. Warfarin overdose in a breast-feeding woman. *West J Emerg Med* 2011;12:216-7. PubMed PMID: 21691530.

## **Substance Identification**

### **Substance Name**

Warfarin

### **CAS Registry Number**

81-81-2

### **Drug Class**

Breast Feeding

Lactation

Milk, Human

Anticoagulants