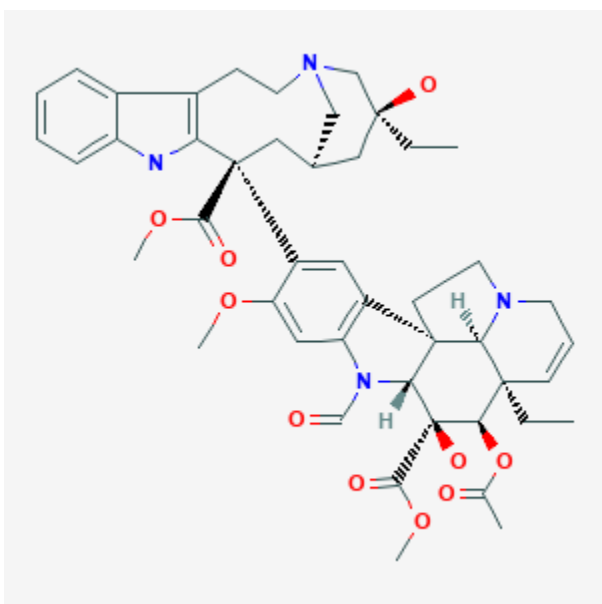




Vincristine

Revised: March 16, 2020.

CASRN: 57-22-7



Drug Levels and Effects

Summary of Use during Lactation

Most sources consider breastfeeding to be contraindicated during maternal antineoplastic drug therapy.[1] It is probably impractical to resume breastfeeding after vincristine therapy because of the drug's long half-life. Chemotherapy may adversely affect the normal microbiome and chemical makeup of breastmilk.[2]

Drug Levels

Maternal Levels. A woman was diagnosed with B-cell non-Hodgkins lymphoma at 4 months postpartum. She received R-CHOP therapy every 21 days for 6 cycles. It consisted of rituximab 375 mg/sq. m, cyclophosphamide 750 mg/sq. m, doxorubicin 50 mg/sq. m, vincristine 1.4 mg/sq. m (capped at 2 mg) plus prednisone 40 mg/sq. m daily. She also received oral 300 mg of allopurinol daily during the whole therapy course. Milk samples were collected twice daily during the first 3 cycles then once daily for the remaining cycles for a total of 290 samples.

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 .

Vincristine was not detectable in any samples. However, the assay method was relatively insensitive, so low levels of the drug might be present in breastmilk.[3]

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

Effects in Breastfed Infants

In a 4-month-old, neutropenia was probably caused by cyclophosphamide in a mother 9 days after the last of 6 weekly doses of 800 mg cyclophosphamide intravenously, 2 mg vincristine intravenously and daily doses of 30 mg of prednisolone orally. Neutropenia persisted at least 12 days and was accompanied by a brief episode of diarrhea.[4] The contribution of vincristine to the neutropenia cannot be determined.

Effects on Lactation and Breastmilk

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

References

1. Pistilli B, Bellettini G, Giovannetti E, et al. Chemotherapy, targeted agents, antiemetics and growth-factors in human milk: How should we counsel cancer patients about breastfeeding? *Cancer Treat Rev.* 2013;39:207–11. PubMed PMID: 23199900.
2. Urbaniak C, McMillan A, Angelini M, et al. Effect of chemotherapy on the microbiota and metabolome of human milk, a case report. *Microbiome.* 2014;2:24. PubMed PMID: 25061513.
3. Codacci-Pisanelli G, Honeywell RJ, Asselin N, et al. Breastfeeding during R-CHOP chemotherapy: Please abstain! *Eur J Cancer.* 2019;119:107–11. PubMed PMID: 31437753.
4. Amato D, Niblett JS. Neutropenia from cyclophosphamide in breast milk. *Med J Aust.* 1977;1:383–4. PubMed PMID: 859486.

Substance Identification

Substance Name

Vincristine

CAS Registry Number

57-22-7

Drug Class

Breast Feeding

Lactation

Antineoplastic Agents