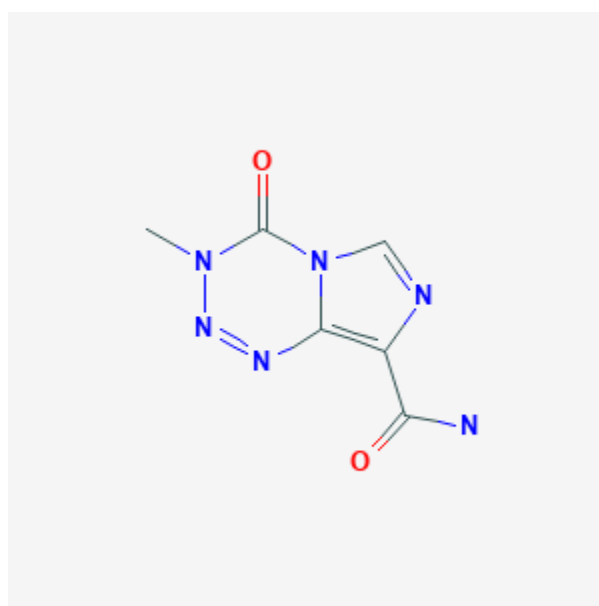




Temozolamide

Revised: December 3, 2018.

CASRN: 85622-93-1



Drug Levels and Effects

Summary of Use during Lactation

Most sources consider breastfeeding to be contraindicated during maternal antineoplastic drug therapy, especially alkylating agents such as temozolamide.[1] It might be possible to breastfeed safely during intermittent therapy with an appropriate period of breastfeeding abstinence; however, no data are available to determine an appropriate period to withhold breastfeeding. Chemotherapy may adversely affect the normal microbiome and chemical makeup of breastmilk.

Drug Levels

Temozolamide is metabolized to the same active metabolite as dacarbazine.

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

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

A woman diagnosed with Hodgkin's lymphoma during the second trimester of pregnancy received 3 rounds of chemotherapy during the third trimester of pregnancy and resumed chemotherapy 4 weeks postpartum. Milk samples were collected 15 to 30 minutes before and after chemotherapy for 16 weeks after restarting. The regimen consisted of doxorubicin 40 mg, bleomycin 16 units, vinblastine 9.6 mg and dacarbazine 600 mg, all given over a 2-hour period every 2 weeks. The microbial population and metabolic profile of her milk were compared to those of 8 healthy women who were not receiving chemotherapy. The breastmilk microbial population in the patient was markedly different from that of the healthy women, with increases in *Acinetobacter* sp., *Xanthomonadaceae* and *Stenotrophomonas* sp. and decreases in *Bifidobacterium* sp. and *Eubacterium* sp. Marked differences were also found among numerous chemical components in the breastmilk of the treated woman, most notably DHA and inositol were decreased.[2]

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.

Substance Identification

Substance Name

Temozolamide

CAS Registry Number

85622-93-1

Drug Class

Breast Feeding

Lactation

Antineoplastic Agents

Antineoplastic Agents, Alkylating