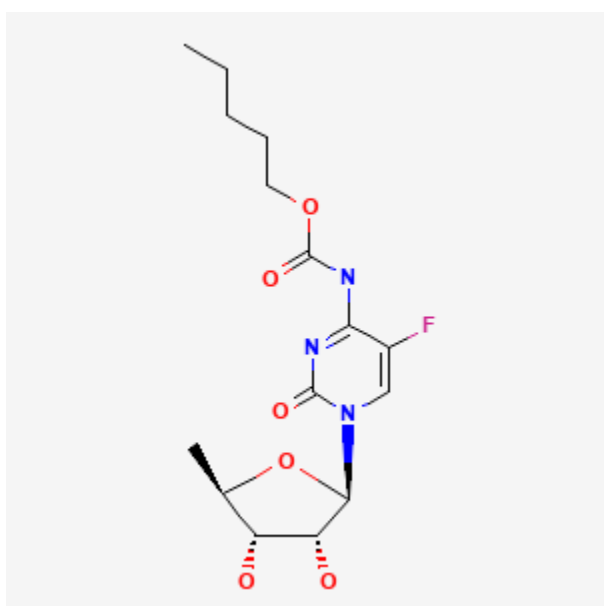




## Capecitabine

Revised: August 16, 2021.

CASRN: 154361-50-9



## Drug Levels and Effects

### Summary of Use during Lactation

Most sources consider breastfeeding to be contraindicated during maternal antineoplastic drug therapy.[1] It might be possible to breastfeed safely during intermittent therapy with an appropriate period of breastfeeding abstinence. Some have suggested a period of 24 hours before resuming nursing,[2] although the manufacturer recommends an abstinence period of 2 weeks. Capecitabine is metabolized to fluorouracil. Limited information indicates that a maternal continuous intravenous fluorouracil infusion at a dose of 200 mg/square meter daily produces undetectable levels in milk. If capecitabine use is undertaken, monitoring of the infant's complete blood count and differential is advisable. Chemotherapy may adversely affect the normal microbiome and chemical makeup of breastmilk.[3] Women who receive chemotherapy during pregnancy are more likely to have difficulty nursing their infant.[4]

**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

Capecitabine is a prodrug that is metabolized to fluorouracil.

*Maternal Levels.* A mother who was 9 months postpartum was diagnosed with rectal cancer and began treatment with pelvic radiotherapy and a continuous intravenous infusion of fluorouracil 200 mg/square meter daily. Her plasma fluorouracil concentration was constant at about 110 micromoles/L (14.3 mg/L) from weeks 2 to 5 of therapy. She discontinued nursing her infant and pumped her breasts twice daily and collected 36 breastmilk samples before, during and for 10 days following fluorouracil therapy (exact times not specified). Fluorouracil was undetectable (<0.5 micromole/L [ $<65$  mcg/L]) in all of the milk samples.[5]

*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.

## 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. Johnson HM, Mitchell KB. ABM clinical protocol #34: Breast cancer and breastfeeding. *Breastfeed Med.* 2020;15:429–34. PubMed PMID: 32516007.
3. 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.
4. Stopenski S, Aslam A, Zhang X, et al. After chemotherapy treatment for maternal cancer during pregnancy, is breastfeeding possible? *Breastfeed Med.* 2017;12:91–7. PubMed PMID: 28170295.
5. Peccatori FA, Giovannetti E, Pistilli B, et al. "The only thing I know is that I know nothing": 5-fluorouracil in human milk. *Ann Oncol.* 2012;23:543–4. PubMed PMID: 22275286.

## Substance Identification

### Substance Name

Capecitabine

### CAS Registry Number

154361-50-9

### Drug Class

Breast Feeding

Lactation

Antimetabolites

Antimetabolites, Antineoplastic

## Antineoplastic Agents