

The following information was generated from the Drug and Lactation Database (LACTMED), a database of the National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov>) on May 31, 2018.

LACTMED: ARSENIC TRIOXIDE

Query: The chemical name arsenic trioxide was identified.

The following terms were added from ChemIDplus:

diarsenic trioxide

arsenous anhydride

trisenox

arsenous oxide

white arsenic

trixenox

crude arsenic

claudetite

claudelite

arsodent

arsenolite

arsenious trioxide

arsenious oxide

arsenious acid

arsenicum album

arsenic sesquioxide

arsenic oxide

CAS Registry Number: 1327-53-3

1 - LACTMED

DRUG LEVELS AND EFFECTS:

SUMMARY OF USE DURING LACTATION:

Most sources consider breastfeeding to be contraindicated during maternal antineoplastic drug therapy. It might be possible to breastfeed safely during intermittent therapy with an appropriate period of breastfeeding abstinence; the manufacturer recommends an abstinence period of 1 week after the last dose. Chemotherapy may adversely affect the normal microbiome and chemical makeup of breastmilk.[1] Women who receive chemotherapy during pregnancy are more likely to have difficulty nursing their infant.[2]

DRUG LEVELS:

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 telephone follow-up study was conducted on 74 women who received cancer chemotherapy at one center during the second or third trimester of pregnancy to determine if they were successful at breastfeeding postpartum. Only 34% of the women were able to exclusively breastfeed their infants, and 66% of the women reported experiencing breastfeeding difficulties. This was in comparison to a 91% breastfeeding success rate in 22 other mothers diagnosed during pregnancy, but not treated with chemotherapy. Other statistically significant correlations included: 1. mothers with breastfeeding difficulties had an average of 5.5 cycles of chemotherapy compared with 3.8 cycles among mothers who had no difficulties; and 2. mothers with breastfeeding difficulties received their first cycle of chemotherapy on average 3.4 weeks earlier in pregnancy. Of the 9 women who received a fluorouracil-containing regimen, 8 had breastfeeding difficulties.[2]

REFERENCES:

1. 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. PMID: [http://www.ncbi.nlm.nih.gov/pubmed/25061513](http://www.ncbi.nlm.nih.gov/pubmed/25061513?dopt=Abstract)

2. 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. PMID: [http://www.ncbi.nlm.nih.gov/pubmed/28170295](http://www.ncbi.nlm.nih.gov/pubmed/28170295?dopt=Abstract)

SUBSTANCE IDENTIFICATION:

SUBSTANCE NAME: Arsenic Trioxide

CAS REGISTRY NUMBER: 1327-53-3

DRUG CLASS: Antineoplastic Agents

ADMINISTRATIVE INFORMATION:

LACTMED RECORD NUMBER: 1368

LAST REVISION DATE:

20180130

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