



Alteplase

Revised: June 21, 2021.

CASRN: 105857-23-6

Drug Levels and Effects

Summary of Use during Lactation

Tissue plasminogen activator (tPA), which is identical to alteplase, is a normal component of human colostrum and breastmilk.[1-3] Levels in milk are highest in colostrum and decrease rapidly during the first week, followed by a slower decrease over time.[2,3] Because alteplase is a large protein molecule with a molecular weight of about 59,000 Da, absorption is unlikely because it is probably destroyed in the infant's gastrointestinal tract. No information is available on the clinical use of alteplase during breastfeeding. Until more data become available, alteplase should be used with caution during breastfeeding, especially while nursing a newborn or preterm infant.

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

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

References

1. Heegaard CW, Larsen LB, Rasmussen LK, et al. Plasminogen activation system in human milk. *J Pediatr Gastroenterol Nutr.* 1997;25:159–66. PubMed PMID: 9252902.
2. Marshall JM, Rees MC, Cederholm-Williams SA. Identification of t-PA as the major active plasminogen activator in human milk. *Thromb Haemost.* 1986;55:279–81. PubMed PMID: 3087004.

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.

- Ishii A, Yamada S, Yamada R, et al. Determination of t-PA activity and t-PA antigen in human milk. J Perinat Med. 1992;20:203-7. PubMed PMID: 1453294.

Substance Identification

Substance Name

Alteplase

CAS Registry Number

105857-23-6

Drug Class

Breast Feeding

Lactation

Enzymes

Blood Coagulation Factors

Plasminogen Activators