

U.S. National Library of Medicine National Center for Biotechnology Information **NLM Citation:** Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. Panitumumab. [Updated 2018 Dec 3]. **Bookshelf URL:** https://www.ncbi.nlm.nih.gov/books/



# Panitumumab

Revised: December 3, 2018.

CASRN: 339177-26-3

# **Drug Levels and Effects**

### Summary of Use during Lactation

No information is available on the clinical use of panitumumab during breastfeeding. Because panitumumab is a large protein molecule with a molecular weight of about 147,000, the amount in milk is likely to be very low and absorption is unlikely because it is probably destroyed in the infant's gastrointestinal tract. Until more data become available, panitumumab should be used with caution during breastfeeding, especially while nursing a newborn or preterm infant. The manufacturer recommends that breastfeeding be discontinued during panitumumab therapy and for 2 months after the final dose.

Panitumumab is a human immunoglobulin G2 (IgG2) kappa antibody. Holder pasteurization (62.5 degrees C for 30 minutes) decreases the concentration of endogenous immunoglobulin G by up to 79%.[1][2] A study of 67 colostrum samples that underwent Holder pasteurization found that IgG amounts decreased by 34 to 40%. Specific IgG subclasses decreased by different amounts, with IgG2 activity decreasing by about 50%.[3] None of the studies measured IgG activity.

#### **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. Koenig A, de Albuquerque Diniz EM, Barbosa SF et al. Immunologic factors in human milk: The effects of gestational age and pasteurization. J Hum Lact. 2005;21:439-43. PubMed PMID: 16280560.

**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 .

- 2. Adhisivam B, Vishnu Bhat B, Rao K et al. Effect of Holder pasteurization on macronutrients and immunoglobulin profile of pooled donor human milk. J Matern Fetal Neonatal Med. 2018;1-4. PubMed PMID: 29587541.
- 3. Rodriguez-Camejo C, Puyol A, Fazio L et al. Antibody profile of colostrum and the effect of processing in human milk banks: Implications in immunoregulatory properties. J Hum Lact. 2018;34:137-47. PubMed PMID: 28586632.

# **Substance Identification**

#### **Substance Name**

Panitumumab

#### **CAS Registry Number**

339177-26-3

#### **Drug Class**

Breast Feeding

Lactation

Antibodies, Monoclonal