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-. Rho(D) Immune Globulin. [Updated 2020 Feb 17].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Rho(D) Immune Globulin

Revised: February 17, 2020.

CASRN: 887269-77-4

Drug Levels and Effects

Summary of Use during Lactation

Rho(D) immune globulin is a immune globulin (IgG) rich in IgG antibodies against erythrocyte antigen Rho(D). IgG is a normal component of breastmilk. Rho(D) immune globulin is frequently used in nursing mothers and no adverse effects have been reported in breastfed infants. No special precautions are required.

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%.[3] None of the studies measured IgG activity.

Drug Levels

Maternal Levels. Colostrum (3 days postpartum) and milk (7 days postpartum) samples from 2 mothers who were receiving intravenous immunoglobulin (IVIG) for the treatment of common variable immunodeficiency were studied. One mother was receiving 400 to 500 mg/kg of IVIG monthly and the other received 600 to 700 mg/kg of IVIG monthly. The time of the last dose before sample collection was not reported. Immune globulin G (IgG) concentrations were normal in the first mother's colostrum and milk and higher than normal in the colostrum of the second mother. IgM levels were normal in the colostrum and milk first mother and low in the second.[4]

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.
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. 2019;32:3016–9. 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.
4. Palmeira P, Costa-Carvalho BT, Arslanian C, et al. Transfer of antibodies across the placenta and in breast milk from mothers on intravenous immunoglobulin. Pediatr Allergy Immunol. 2009;20:528–35. PubMed PMID: 19220771.

Substance Identification

Substance Name

Rho(D) Immune Globulin

CAS Registry Number

887269-77-4

Drug Class

Breast Feeding

Lactation

Antibodies

Immunoglobulins

Immunoglobulin G