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Peginterferon Alfa

Revised: September 15, 2023.

CASRN: 198153-51-4; 215647-85-1

Drug Levels and Effects

Summary of Use during Lactation

Although no information is available on peginterferon alfa in breastmilk, the levels of conventional interferon alfa in breastmilk are minuscule. In addition, because interferon is poorly absorbed orally, it is not likely to reach the bloodstream of the infant. Polyethylene glycol is not excreted into breastmilk.[1] It is unlikely that peginterferon alfa use by a nursing mother presents any serious risk to the breastfed infant.

For use in treating maternal hepatitis B, no differences exist in infection rates between breast-fed and formula-fed infants born to hepatitis B-infected women, as long as the infant receives hepatitis B immune globulin and hepatitis B vaccine at birth. Mothers with hepatitis B are encouraged to breastfeed their infants after their infants receive these preventative measures. [2,3]

Hepatitis C is not transmitted through breastmilk and breastmilk has been shown to inactivate hepatitis C virus (HCV).[4-7] However, the Centers for Disease Control recommends that mothers with HCV infection should consider abstaining from breastfeeding if their nipples are cracked or bleeding. It is not clear if this warning would apply to mothers who are being treated for hepatitis C.

Infants born to mothers with HCV infection should be tested for HCV infection; because maternal antibody is present for the first 18 months of life and before the infant mounts an immunologic response, nucleic acid testing is recommended.[4,7]

Drug Levels

No information is available specifically on peginterferon alfa. However, data are available on non-pegylated interferon alfa.

Maternal Levels. Two mothers taking interferon alfa had milk levels measured. One mother taking 8 million units three times a week had a milk level of 1400 units/L and another taking 8 million units daily had a milk level of 6000 units/L. Both levels were apparently measured immediately postpartum (in colostrum), but the time since the previous dose was not stated.[8]

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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An intravenous dose of 30 million units of interferon alfa-2B in one woman resulted in a peak milk level of 1551 International Units/L which was a slight increase over two baseline levels prior to the dose which averaged 1072 International Units/L. By 12 hours after the dose, milk interferon levels were lower than baseline.[9]

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

Effects in Breastfed Infants

One infant was born to a mother who received 3 million units of interferon alfa-2a subcutaneously 3 times weekly during pregnancy and postpartum for essential thrombocytopenia. Her infant was breastfed for 2 weeks postpartum before bilateral mastitis caused the mother to terminate nursing. The infant reportedly thrived, although specific measures were not mentioned.[10]

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

(Hepatitis B) Lamivudine, Tenofovir; (Hepatitis C) Interferon Alfa, Interferon Alfacon-1

References

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Peginterferon Alfa 3

Substance Identification

Substance Name

Peginterferon Alfa

CAS Registry Number

198153-51-4; 215647-85-1

Drug Class

Breast Feeding

Lactation

Milk, Human

Antiviral Agents

Biological Response Modifiers

Antineoplastic Agents