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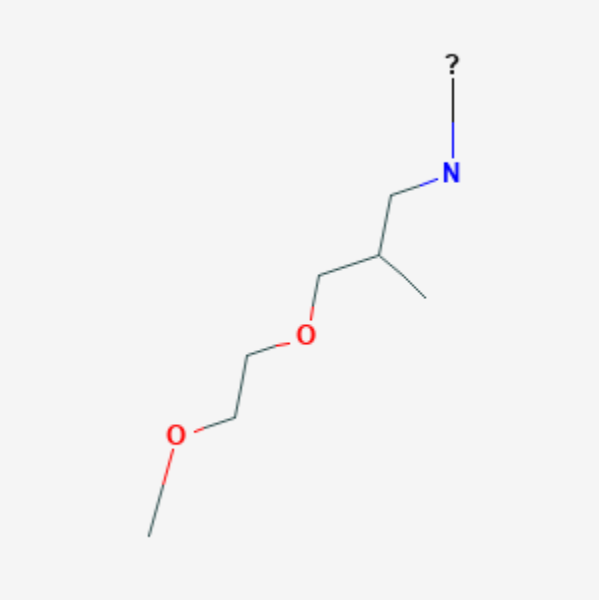
Peginterferon Beta

Revised: January 20, 2020.

CASRN: 1211327-92-2



Drug Levels and Effects

Summary of Use during Lactation

Although no information is available on peginterferon beta-1a in breastmilk, the levels of conventional interferon beta-1a in breastmilk are minuscule. In addition, because interferon is poorly absorbed orally, it is not likely to reach the bloodstream of the infant. A small number of nursing mothers receiving interferon beta-1a while partially breastfeeding their infants and one woman exclusively breastfed her infant while taking interferon beta-1b and reported no adverse effects. The Multiple Sclerosis Centre of Excellence on Reproduction and Child Health considers interferon beta to be "moderately safe" to use during breastfeeding,[1] and a French consensus group of neurologists concluded that interferon beta can be used during breastfeeding.[2] No special precautions appear to be required during breastfeeding while using interferon beta. Holder pasteurization (62.5 degrees C for 30 minutes) decreases the concentration of endogenous interferon-gamma by an average about 10%.[3]

Drug Levels

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

Maternal Levels. Six women were receiving interferon beta-1a (Avonex, Biogen) 30 mcg intramuscularly once weekly for multiple sclerosis. Milk samples from both breasts were collected after pumping with an electric breast pump at 8 times after a dose at baseline and at 7 other times during the first 72 hours after a dose. Samples were combined and analyzed for interferon beta-1a. About half of the samples had undetectable (<20 ng/L) amounts of drug. The highest concentrations were found at 1 or 4 hours after the dose in all women. The highest concentration found was 171 ng/L in one woman. Using this value, the authors estimated that the maximum weight-adjusted dosage that an infant would receive is 0.006% of the maternal dose.[4]

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

Effects in Breastfed Infants

Six women had been receiving interferon beta-1a (Avonex, Biogen) 30 mcg intramuscularly once weekly for multiple sclerosis for months to years. None of the mothers noticed any adverse effects in their breastfed infants.[4]

A woman received interferon beta-1b (Betaferon, BayerHealthCare; dosage unspecified) for multiple sclerosis throughout pregnancy. She continued the drug while she exclusively breastfed her infant. At 5 months of age, the infant was monitored regularly by a physician and was developing well with no abnormalities.[5]

One mother received interferon beta-1a for multiple sclerosis during pregnancy and postpartum. All of their infants were exclusively breastfed for 6 months and no noticeable problems were reported in any of them.[6]

In data collected from 4 countries, 17 women received interferon and 41 women received glatiramer during pregnancy and postpartum for treatment of multiple sclerosis. Of these, 63% breastfed (extent not stated) their infants for a mean of 8.8 months. No mention was made of adverse reactions in breastfed infants.[7]

Effects on Lactation and Breastmilk

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

Alternate Drugs to Consider

Glatiramer, Immune Globulin, Interferon Beta, Methylprednisolone

References

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Substance Identification

Substance Name

Peginterferon Beta

CAS Registry Number

1211327-92-2

Drug Class

Breast Feeding

Lactation

Immunologic Adjuvants

Biological Response Modifiers