

EXTAVIA (interferon beta-1b) kit

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Date Developed: 1/28/14 by Robert Sterling, MD

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The interferons (IFNs) are produced by cells in response to viral and other infections and act via their interactions with cell surface receptor sites.

IFN beta is one of the four major groups of interferons and has numerous immunomodulatory effects, including enhancement of suppressor T cell activity and reduction of pro-inflammatory cytokine production.

Pre-Authorization Criteria: Multiple Sclerosis (MS): first or relapsing episodes

Dosing: 0.25 mg (1 mL) subcutaneously every other day (start with 0.0625 mg (0.25 mL) and increase over a six week period).

Extavia activity =32 million IU/mg

PRECAUTIONS: “flu-like” syndrome (headache, fever/diaphoresis, chills, malaise and myalgias; frequent: 60%); nausea; isolated headache; rash; local injection reaction/injection site necrosis; increased risk of worsening depression and/or suicide attempts; lymphopenia; liver enzyme abnormalities;

DRUG INTERACTIONS: increased side effects of zidovudine (AZT); decreased metabolism of theophylline derivatives

REFERENCES

Goodin DS, Frohman EM, Garmany GP, et al, "Disease-Modifying Therapies In Multiple Sclerosis: Report Of The Therapeutics And Technology Assessment Subcommittee Of The American Academy Of Neurology And The MS Council For Clinical Practice Guidelines," *Neurology*, 2002, 58:169-78.

Kappos L, Polman CH, Freedman MS, et al, "Treatment With Interferon Beta-1b Delays Conversion to Clinically Definite and McDonald MS in Patients With Clinically Isolated Syndromes," *Neurology*, 2006, 67(7):1242-9.

Lu E, Wang BW, Guimond C, et al, "Disease-Modifying Drugs for Multiple Sclerosis in Pregnancy: A Systematic Review," *Neurology*, 2012, 79(11):1130-5.

Sheremata WA, Taylor JR, and Elgart GW, "Severe Necrotizing Cutaneous Lesions Complicating Treatment With Interferon Beta-1b," *N Engl J Med*, 1995, 332(23):1584.

Interferon-beta-1b effects on the re-enhancing lesions in patients with Multiple sclerosis. *Mult Scler* 2005 Dec;11(6):658-68

Long-term experience with interferon beta-1b in multiple sclerosis *J Neurol* 2005 Sep; 252 Suppl 3:iii28-iii33

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