INTERFERON BETA 1A

CLASS: Interferon

INDICATIONS: Treatment of relapsing forms of multiple sclerosis (MS)

Canadian labeling: Additional uses (not in U.S. labeling): Avonex®: To decrease the number and volume of active brain lesions, decrease overall disease burden, and delay onset of clinically definite MS in patients who have experienced a single demyelinating event.

AVAILABLE DOSAGE FROM THE HOSPITAL:

INTERFERON BETA-1A 30MCG [6 M.I.U.] VIAL

INTERFERON BETA-1A 44 MCG PFS

TRADE NAMES:

DOSAGE:

- **Dosing: Adult**

  Multiple sclerosis (MS): Note: Analgesics and/or antipyretics may help decrease flu-like symptoms on treatment days:

  I.M. (Avonex®):

  U.S. labeling: 30 mcg once weekly; to decrease flu-like symptoms, may initiate once-weekly dosing with 7.5 mcg (week 1) then increase dose in increments of 7.5 mcg once weekly (weeks 2-4) up to recommended dose (30 mcg once weekly)

  Canadian labeling: 30 mcg once weekly; may consider increasing to 60 mcg once weekly in progressive relapsing MS or secondary progressive MS with recurrent neurologic dysfunction

  SubQ (Rebif®, Rebif® Rebidose®): Doses should be separated by at least 48 hours:

  Target dose 44 mcg 3 times weekly:

  Initial: 8.8 mcg (20 % of final dose) 3 times weekly for 2 weeks

  Titration: 22 mcg (50% of final dose) 3 times weekly for 2 weeks

  Final dose: 44 mcg 3 times weekly

  Target dose 22 mcg 3 times weekly:

Initial: 4.4 mcg (20 % of final dose) 3 times weekly for 2 weeks

Titration: 11 mcg (50% of final dose) 3 times weekly for 2 weeks

Final dose: 22 mcg 3 times weekly

Single demyelinating event (Canadian labeling [Rebif®]; not in U.S. labeling): SubQ:

Target dose 44 mcg 3 times weekly: Note: Analgesics and/or antipyretics prior to and for 24 hours after dosing may help decrease flu-like symptoms:

Initial: 8.8 mcg (20 % of final dose) 3 times weekly for 2 weeks

Titration: 22 mcg (50% of final dose) 3 times weekly for 2 weeks

Final dose: 44 mcg 3 times weekly

- **Dosing: Geriatric**
  Refer to adult dosing.

- **Dosing: Renal Impairment**

  No dosage adjustment provided in the manufacturer's labeling (has not been studied).

- **Dosing: Hepatic Impairment**

  Initial: No dosage adjustment provided in the manufacturer's labeling; use with caution in patients with a past or present history of active liver disease or ALT >2.5 x ULN.

- **Dosing: Adjustment for Toxicity**

  Autoimmune disorder development: Consider discontinuing treatment.

  Depression or other psychiatric symptoms: Consider discontinuing treatment.

  Hepatotoxicity:

  ALT >5 x ULN: Temporarily discontinue therapy or consider dose reduction until ALT normalizes, then may consider retitration of dose.

  Symptomatic (eg, jaundice): Discontinue immediately.

  Leukopenia: May require temporary discontinuation or dose reduction until resolution.

COMMON SIDE EFFECT:

Note: Adverse reactions reported as a composite of both commercially-available products. Spectrum and incidence of reactions is generally similar between products, but consult individual product labels for specific incidence.

>10%:

Central nervous system: Headache (58% to 70%), fatigue (33% to 41%), fever (20% to 28%), pain (23%), chills (19%), depression (18% to 25%), dizziness (14%)

Gastrointestinal: Nausea (23%), abdominal pain (8% to 22%)

Genitourinary: Urinary tract infection (17%)

Hematologic: Leukopenia (28% to 36%)

Hepatic: ALT increased (20% to 27%), AST increased (10% to 17%)

Local: Injection site reaction (3% to 92%)

Neuromuscular & skeletal: Myalgia (25% to 29%), back pain (23% to 25%), weakness (24%), skeletal pain (10% to 15%), rigors (6% to 13%)

Ocular: Vision abnormal (7% to 13%)

Respiratory: Sinusitis (14%), upper respiratory tract infection (14%)

Miscellaneous: Flu-like syndrome (49% to 59%), neutralizing antibodies (significance not known; Avonex® 5%; Rebif® 24%), lymphadenopathy (11% to 12%)

PREGNANCY RISK FACTORS: C