
Prior Authorization DRUG Guidelines

INTRON® A (Interferon alfa-2b)

Effective Date: 7/28/05

Date Developed: 7/14/05 by C. Wilhelmy MD

Last Approval Date: 1/26/16, 1/24/17, 1/23/18

(Archived 1/22/19)

Intron A is an interferon. Following activation of this drug, multiple effects can be detected including induction of gene transcription. It inhibits cellular growth, alters the state of cellular differentiation, interferes with oncogene expression, alters cell surface antigen expression, increases phagocytic activity of macrophages, and augments cytotoxicity of lymphocytes for target cells.

Pre-Authorization Criteria:

Intron A is used to treat chronic hepatitis B in patients age > 1 year and condyloma acuminata, chronic hepatitis C, hairy cell leukemia, malignant melanoma, AIDS-related Kaposi's sarcoma, and follicular non-Hodgkin's lymphoma in patients age > 18 years. Its unlabeled or investigational use is for AIDS-related thrombocytopenia, cutaneous ulcerations of Behcet's disease, carcinoid syndrome, cervical cancer, lymphomatoid granulomatosis, genital herpes, hepatitis D, chronic myelogenous leukemia (CML), non-Hodgkin's lymphomas (other than follicular lymphoma, see approved use), polycythemia vera, medullary thyroid carcinoma, multiple myeloma, renal cell carcinoma, basal and squamous cell skin cancers, and essential thrombocytopenia, thrombocytopenic purpura.

VCHCP requires that Intron A be prescribed by an oncologist, hematologist, dermatologist, endocrinologist, immunologist, gastroenterologist, or Hepatitis C Clinic physician.

MONITORING PARAMETERS — Baseline chest x-ray, ECG, CBC with differential, liver function tests, electrolytes, thyroid function tests, platelets, weight; patients with pre-existing cardiac abnormalities, or in advanced stages of cancer should have ECGs taken before and during treatment.

DOSING: ADULTS — Refer to individual protocols. Consult [Lexi-Comp Online](#)™

DOSING: ELDERLY — Refer to adult dosing.

DOSING: RENAL IMPAIRMENT — Combination therapy with ribavirin (hepatitis C) should not be used in patients with reduced renal function ($\text{ClCr} < 50 \text{ mL/minute}$).

ADMINISTRATION — SubQ: Suggested for those who are at risk for bleeding or are thrombocytopenic. Rotate SubQ injection site. Patient should be well hydrated. Reconstitute with recommended amount of SWFI and agitate gently; do not shake. Note: Different vial strengths require different amounts of diluent.

CONTRAINDICATIONS — Hypersensitivity to interferon alfa or any component of the formulation; decompensated liver disease; autoimmune hepatitis. Combination therapy with interferon alfa-2b and ribavirin is also contraindicated in pregnancy, males with pregnant partners; hemoglobinopathies (eg, thalassemia major, sickle-cell anemia); renal dysfunction ($\text{Cl}_{\text{cr}} < 50 \text{ mL/minute}$)

WARNINGS / PRECAUTIONS — Suicidal ideation or attempts may occur more frequently in pediatric patients when compared to adults. May cause severe psychiatric adverse events (psychosis, mania, depression, suicidal behavior/ideation) in patients with and without previous psychiatric symptoms, avoid use in severe psychiatric disorders or in patients with a history of depression; careful neuropsychiatric monitoring is required during therapy. Use with caution in patients with a history of seizures, brain metastases, multiple sclerosis, cardiac disease (ischemic or thromboembolic), arrhythmias, myelosuppression, hepatic impairment, or renal dysfunction (use is not recommended if $\text{ClCr} < 50 \text{ mL/minute}$). Use caution in patients with a history of pulmonary disease, coagulopathy, thyroid disease (monitor thyroid function), hypertension, or diabetes mellitus (particularly if prone to DKA). Caution in patients receiving drugs that may cause lactic acidosis (eg, nucleoside analogues).

Avoid use in patients with autoimmune disorders; worsening of psoriasis and/or development of autoimmune disorders has been associated with alpha interferons. Higher doses in elderly patients, or diseases other than hairy cell leukemia, may result in increased CNS toxicity. Treatment should be discontinued in patients who develop severe pulmonary symptoms with chest x-ray changes, autoimmune disorders, worsening of hepatic function, psychiatric symptoms (including depression and/or suicidal thoughts/behaviors), ischemic and/or infectious disorders. Ophthalmologic disorders (including retinal hemorrhages, cotton wool spots and retinal artery or vein obstruction) have occurred in patients receiving alpha interferons. Hypertriglyceridemia has been reported (discontinue if severe).

Safety and efficacy in children < 1 year of age have not been established. Do not treat patients with visceral AIDS-related Kaposi's sarcoma associated with rapidly-progressing or life-threatening disease. A transient increase in SGOT ($> 2 \times$ baseline) is common in patients treated with interferon alfa-2b for chronic hepatitis. Therapy generally may continue, however, functional indicators (albumin, prothrombin time, bilirubin) should be

monitored at 2-week intervals. Due to differences in dosage, patients should not change brands of interferons.

Intron® A may cause bone marrow suppression, including very rarely, aplastic anemia. Hemolytic anemia (hemoglobin <10 g/dL) was observed in 10% of treated patients in clinical trials; anemia occurred within 1-2 weeks of initiation of therapy.

DRUG INTERACTIONS — Inhibits CYP1A2 (weak) See [Lexi-Comp Online™](#)

ACE inhibitors: Interferons may increase the adverse/toxic effects of ACE inhibitors, specifically the development of granulocytopenia; monitor.

Clozapine: A case report of agranulocytosis with concurrent use.

Erythropoietin: Case reports of decreased hematopoietic effect

Melphalan: Interferon alfa may decrease the serum concentrations of melphalan; this may or may not decrease the potential toxicity of melphalan; monitor.

Prednisone: Prednisone may decrease the therapeutic effects of interferon alfa; monitor.

Warfarin: Interferons may increase the anticoagulant effects of warfarin; monitor.

Zidovudine: Interferons may decrease the metabolism of zidovudine; monitor.

PREGNANCY RISK FACTOR — C

PREGNANCY IMPLICATIONS — Animal studies have demonstrated abortifacient effects. Disruption of the normal menstrual cycle was also observed in animal studies; therefore, the manufacturer recommends that reliable contraception is used in women of childbearing potential. Alfa interferon is endogenous to normal amniotic fluid. *In vitro* administration studies have reported that when administered to the mother, it does not cross the placenta. Case reports of use in pregnant women are limited. The Perinatal HIV Guidelines Working Group does not recommend that interferon-alfa be used during pregnancy. Interferon alfa-2b monotherapy should only be used in pregnancy when the potential benefit to the mother justifies the possible risk to the fetus. Combination therapy with ribavirin is contraindicated in pregnancy (refer to Ribavirin monograph); two forms of contraception should be used during combination therapy and patients should have monthly pregnancy tests. A pregnancy registry has been established for women inadvertently exposed to ribavirin while pregnant (800-593-2214).

LACTATION — Enters breast milk/not recommended (AAP rates "compatible")

BREAST-FEEDING CONSIDERATIONS — Women with hepatitis C should be instructed that there is a theoretical risk the virus may be transmitted in breast milk. HIV-infected mothers are discouraged from breast-feeding to decrease potential transmission of HIV.

PATIENT EDUCATION — Without the advice of prescriber, do not change brands of interferon as changes in dosage may result; do not operate heavy machinery while on therapy since changes in mental status may occur; report any persistent or severe sore throat, fever, fatigue, unusual bleeding, or bruising. You may experience flu-like syndrome (acetaminophen may help); this syndrome subsides after several weeks of continuous dosing, but usually recurs during each cycle of intermittent therapy.

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