



Patient Care Services
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Interferon Alfa-2B Patient Education Stanford Cancer Center

What is Interferon alfa-2B?

Interferon alfa-2b (brand name Intron® A) is a type of medical therapy that can be used to treat patients with cutaneous lymphoma—in particular mycosis fungoides. It is used to treat widespread patches, plaques, or tumorous skin lesions, and it is commonly used in combination with other therapies. Interferon alfa-2b is a water-soluble protein that is normally produced by the body but can synthetically be produced by recombinant DNA techniques (bacterial fermentation of an Escherichia coli strain containing an interferon alfa-2b gene from human white blood cells).

How does Interferon alfa-2b work?

Interferon alfa 2-b is a specific interferon protein. Interferons are usually released by the body in response to a viral infection. Interferon alfa-2b works by stimulating the immune system to fight against the cancer cells. It also helps to regulate the reproduction of cancerous cells.

How is Interferon alfa-2b used and stored?

Interferon alfa-2b is administered subcutaneously (under the skin) using a needle. Because of the frequency of injection, patients are instructed how to administer the medicine at home by their doctor. Please make sure that all the instructions are completely understood before using the medication. Do not use more medicine or use it more often than the doctor instructs. It may also be given by a home health caregiver. The patient should use a new needle and syringe each time he or she injects the medicine. Used needles and syringes should be thrown away in a hard, closed container so that the needle cannot poke through. Keep this container out of reach of children and pets. Follow any special instructions about how to throw away empty medicine bottles, tubes, or bags.

Interferon alfa-2b should be stored in a refrigerator (about 36 to 46 degrees Fahrenheit). This medication should not be shaken or frozen. It can be stored inside the syringe for 42 days. Patients with cutaneous lymphoma are usually prescribed a dose of 3 million units three times

a week which can be increased up to 9 million units three times a week. Patients should rotate the site of injection at each administration. This medication needs to be given on a fixed schedule, and if a dose is missed, patients should contact their doctor, home health caregiver, or treatment clinic for instructions. If a dose is missed, then skip the dose that was missed and continue with regular dose. Do not use a double dosage to make up for the missed dose.

Are there any drugs and foods that should be avoided while patients are taking interferon alfa-2b?

Patients should ask their doctor or pharmacist before using any other medicine (including any over-the-counter medications, vitamins, and herbal products) as there can be adverse effects amongst some drugs in interaction with interferon alfa-2b. Patients should make sure that the doctor knows if they are taking any other medicines (such as steroids, chemotherapy, or radiation), or any medications as a sleeping aid. Patients should drink 6 to 8 full glasses of water to ensure adequate hydration, especially at the beginning of the treatment. Patients should avoid drinking alcohol while taking this medication. Patients should discuss with their doctors before receiving any vaccinations, such as the flu shot, while receiving interferon alfa-2b treatment. Vaccines may not work as well while using this medication. Before using this medication, patients should notify their doctor if they are taking theophylline which could have a dangerous interaction with interferon alfa-2b.

Are there any risks in using interferon alfa-2b?

Patients should notify their doctor if they are pregnant or breastfeeding, or if they have heart disease, liver disease, kidney disease, seizures, diabetes, lung disease (such as COPD), lupus, blood clots, thyroid problems, a weakened immune system, a history of depression or mental illness, a head injury, or an organ transplant. To foresee any complications, doctors should take a urine sample on a regular basis while using this medicine, and so patients should be prepared to schedule appointments. Periodic monitoring of the blood may be required to follow blood counts and thyroid function as well. Because this medication could make patients dizzy or drowsy, they should avoid driving, using machines, or doing anything dangerous if they are not alert. Patients may be at risk of a lowered white blood cell count, and thus may be more prone to illnesses and infections.

What are the side effects of using interferon alfa-2b?

All of the following side effects are just possible side effects and are severely variable depending on each patient. The most common side effects are flu-like symptoms such as chills, fever, cough, sore throat, stuff or runny nose, headache, or fatigue (muscle pain or weakness). Patients may experience reduced blood pressure, fast or irregular heartbeat. These cardiovascular effects are usually reversible after discontinuation of the medication. Patients may also experience neurological side effects (especially after high doses) such as depression and other psychological disorders, confusion/concentration difficulties, memory loss, and insomnia. Patients with a long history of depression and life-threatening neuropsychiatric disorders should be closely monitored while taking interferon alfa-2b.

On some occasions, patients have experienced an alteration of thyroid status (over-active or under-active) which are reversible with discontinuation of medication. Patients may also

experience gastrointestinal effects, though not severe, such as diarrhea, anorexia, nausea, or abdominal pain. Darkening of urine or pale stools is also a side effect patients may be subjected to. Side effects of the skin include potential balding, rash, dry skin, or irritation at the site of injection. Patients may also experience numbness, tingling, or cold feelings in their hands or feet as well as their skin or eyes becoming yellowish. All patients who use interferon alfa-2b will experience neutralizing of antibodies (which weakens their immune system) and are thus more prone to disease and infections.

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