



For the Patient: Interferon alfa-2b for injection

Other names: INTRON-A®, interferon alfa, alpha interferon, interferon, IFN

BC Cancer Agency

- Interferon (in-ter-FEER-on) is a drug that is used to treat many types of cancers. It is a man-made version of a substance your body produces naturally to fight infections and tumours. Interferon is a clear to light yellow liquid that is injected into a vein, muscle, or under the skin.
- Injections into a vein will be given by a nurse. Injections into a muscle or under the skin may be done at home. A nurse will teach you how to give these injections.
- **Store** interferon injections in the refrigerator, out of the reach of children. Do not shake interferon vigorously, as it may be damaged. Do not freeze.
- It is important to **use** interferon exactly as directed. Always use the same brand of interferon. Make sure you understand the directions.
 - Use a different site for each injection.
 - Inject at bedtime to lessen side effects.
 - Take the interferon out of the refrigerator and allow it to warm to room temperature for 30 minutes before injection. Do not use heat to warm the injection.
 - Return remaining interferon to the refrigerator immediately after your injection.
 - Use each needle only once to avoid infection. Place used needles in a rigid plastic container with a lid. Discard container as instructed by your treatment centre. Keep out of reach of children.
- Tell your doctor if you have ever had an unusual or **allergic reaction** to interferon.
- A **blood test** may be taken periodically. The dose and timing of your interferon injections may be changed based on the test results and/or other side effects.
- Your doctor may tell you to **drink** plenty of liquids e.g., 8-12 cups (2000-3000 mL or 70-100 oz) a day. This helps prevent low blood pressure.
- Other drugs such as captopril (CAPOTEN®), enalapril (VASOTEC®), phenobarbital, erythropoietin (EPREX®), melphalan (ALKERAN®), prednisone (DELTASONE®), theophylline (UNIPHYL®), warfarin (COUMADIN®), zidovudine (RETROVIR®, AZT), and some vaccines may **interact** with interferon. Tell your doctor if you are taking these or any other drugs as you may need extra blood tests or your dose may need

to be changed. Check with your doctor or pharmacist before you start taking any new drugs.

- The herbal remedy Sho-saiko-to (Chinese name: Xiao Chai Hu Tang) **interacts** with interferon to cause serious side effects. Do not use this product at any time while using interferon.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of interferon.
- Interferon may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with interferon. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- **Tell** doctors or dentists that you are being treated with interferon before you receive any treatment from them.

Changes in blood counts

This drug may cause temporary changes in your blood counts. Your doctor will be following these changes carefully by performing blood tests. Adjustment of your treatment may be needed in certain circumstances.

| BLOOD COUNTS | MANAGEMENT |
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| <p>Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, you are at greater risk of having an infection.</p> | <p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Take care of your skin and mouth. • Avoid crowds and people who are sick. • Interferon may cause fever (over 100°F or 38°C by an oral thermometer) even though you do not have an infection (see page 3). If you have fever plus another sign of infection, call your doctor immediately. These other signs include chills, cough, or burning when you pass urine. |

| BLOOD COUNTS | MANAGEMENT |
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| <p>Normal platelets help your blood to clot normally after an injury (e.g., cut). When the platelet count is low you may be more likely to bruise or bleed.</p> | <p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> • Try not to bruise, cut, or burn yourself. • Clean your nose by blowing gently. Do not pick your nose. • Avoid constipation. • Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. <p>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> • Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart). • For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable. |

Side effects are listed in the following table in the order in which they may occur. Tips to help manage the side effects are included.

| SIDE EFFECTS | MANAGEMENT |
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| <p>Pain or tenderness may occur where the needle was placed.</p> | <ul style="list-style-type: none"> • Apply cool compresses or soak in cool water for 15-20 minutes several times a day. |
| <p>A flu-like illness may occur shortly after your treatment. You may have fever, chills, headache, muscle aches and joint aches. Flu-like symptoms usually disappear on their own.</p> | <ul style="list-style-type: none"> • Take acetaminophen (eg, TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day. • More than 48 hours after treatment, if you have fever plus another sign of infection, call your doctor immediately. These other signs include chills, cough, or burning when you pass urine. |
| <p>Nausea and vomiting may occur during treatment.</p> | <p>You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.</p> <ul style="list-style-type: none"> • Drink plenty of liquids. • Eat and drink often in small amounts. • Try the ideas in <i>Food Choices to Control Nausea</i>. |

| SIDE EFFECTS | MANAGEMENT |
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| Skin rashes may occur. | To help itching: <ul style="list-style-type: none"> • You can use calamine lotion • If very irritating, call your doctor during office hours • Otherwise make sure to mention it at your next visit |
| Diarrhea may occur. | To help diarrhea: <ul style="list-style-type: none"> • Drink plenty of liquids. • Eat and drink often in small amounts. • Avoid high fibre foods as outlined in <i>Food Ideas to Help with Diarrhea During Chemotherapy</i>. |
| Sugar control may be affected in diabetics. | <ul style="list-style-type: none"> • Check your blood sugar regularly if you are diabetic. |
| You may have trouble sleeping . | <ul style="list-style-type: none"> • Talk to your doctor if your trouble in sleeping continues to bother you. • This will return to normal when you stop taking interferon. |
| Taste alteration may occur. | To help reduce the impact of taste changes on your ability to get good nutrition and avoid weight loss: <ul style="list-style-type: none"> • Rinse mouth with water before eating. • Eat small, frequent meals and healthy snacks. • Eat meals when hungry rather than at set mealtimes. • Have others prepare the meal. • Substitute poultry, fish, eggs and cheese for red meat. • Eat meat with a marinade or sauce; try something sweet. • Use plastic utensils if food tastes like metal. • Use mints, lemon drops or chewing gum to mask the bitter or metallic taste. • Chilled or frozen food may be more acceptable than warm or hot food. • Try tart foods, such as citrus fruits or lemonade, unless you have mouth sores. • Avoid bad odours, as these may affect your appetite. |

| SIDE EFFECTS | MANAGEMENT |
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| Tiredness and lack of energy may occur. | <ul style="list-style-type: none"> • Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in <i>Your Bank of Energy Savings: How People with Cancer Can Handle Fatigue</i>. |
| Hair loss sometimes occurs with interferon. Your hair will grow back once you stop treatment with interferon. Colour and texture may change. | <ul style="list-style-type: none"> • Use a gentle shampoo and soft brush. • Care should be taken with use of hair spray, bleaches, dyes and perms. |
| Loss of appetite and weight loss are common and may persist long after discontinuation of interferon. | <ul style="list-style-type: none"> • Try ideas in <i>High Energy High Protein Ideas</i> and in <i>Healthy Eating Using High Energy, High Protein Foods</i>. |
| Increase in cholesterol or triglycerides may occur. | <p>Discuss this with your doctor if you have:</p> <ul style="list-style-type: none"> • A history of heart disease. • High blood pressure. • Elevated triglycerides. <p>You may need to have your cholesterol level checked a few months after starting interferon.</p> |
| Emotional changes (e.g., feelings of depression) may sometimes occur. | <ul style="list-style-type: none"> • Discuss these symptoms with your doctor if they occur. |

STOP USING INTERFERON AND SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer); chills; cough; pain or burning when you pass urine.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin, extensive bruising.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling or breathing problems.
- Signs of **heart problems** such as fast or uneven heartbeat.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Numbness or tingling in feet or hands.
- **Changes in eyesight.**
- Ringing in your ears or **hearing problems.**
- Trouble in walking.
- **Skin rash or itching.**

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:

- Uncontrolled nausea, vomiting or diarrhea.
- For diabetics: uncontrolled blood sugars.
- Headache not controlled with acetaminophen.
- Easy bruising or minor bleeding.
- Redness, swelling, pain or sores where the needle was placed.
- Redness, swelling, pain or sores on your lips, tongue, mouth or throat.
- Skin rash or itching.

REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR
