## Patient Education

### Interferon Alfa (in ter FEER on Al-fa)

**Other Names**
Intron® A® (alpha 2b), Roferon-A (alpha 2a), alpha interferon, IFN-alpha. There may be other names for this medication.

**How is it Administered?**
This medication is given by injection under the skin (subcutaneous), into muscle (intramuscular), or through a vein (IV or intravenous). Generally, therapy lasts about 6 months. You will get an injection every day for the first 10 to 24 weeks. After that, the injections are usually given 3 times a week.

**Why I am Receiving Interferon?**
Interferon alfa is used in the treatment of some types of leukemia and lymphoma, melanoma, kidney (renal cell) cancer, cervical cancer, carcinoid syndrome, medullary thyroid cancer, multiple myeloma, and skin cancers.

**How Does Interferon Work?**
Our immune systems are designed to protect us from foreign or harmful substances that could cause illness. Interferon stimulates your immune system to make it more effective. Interferon alfa belongs to the category of therapies called biologic response modifiers (BRM) or immunotherapy. Specifically, interferon is a cytokine, a protein that signals certain immune system cells to become active and attack cancer cells.

**What Should I Tell My Doctor Before I Begin Receiving Interferon?**
Tell your doctor if you:
- have ever had an allergic reaction to interferon
- have or have ever had heart, kidney, or liver disease; asthma; depression; mental illness; drug or alcohol addiction; or diabetes
- are HIV+ or have hepatitis B or hepatitis C
- are pregnant or breastfeeding

This drug may interact with other medications or cause harmful side effects. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal, or diet supplements that you are taking.

**What Are Some Possible Side Effects I May Experience?**
- Flu-like symptoms: fever, chills, headache, sweating, muscle aches, joint pain
- Fatigue
- Nausea (usually mild), loss of appetite, weight loss, diarrhea
- Low blood counts (decreased numbers of white blood cells, platelets, or red blood cells may increase the risk of infection, bleeding, or fatigue)
• Hair thinning or loss
• Dry mouth
• Dry skin, itchiness, rash, irritation at the injection site
• Mood changes, depression, insomnia
• Changes in your blood pressure
• Confusion, memory loss (at higher doses)

How Can I Manage These Side Effects?

• For flu-like symptoms, stay warm and drink lots of fluids. Acetaminophen (Tylenol®) may help muscle and joint pains and fever. **Always check with your doctor before starting any medications.**
• Spacing out your daily activities may help with fatigue. Accept assistance and delegate responsibilities when possible.
• Drink at least 2-3 quarts of fluid, especially water every day, unless your doctor tells you to limit your fluids.
• Ask your doctor about medication to help prevent or lessen nausea or diarrhea.
• To help avoid infections, stay away from crowds or people with colds, flu, or other infections. Talk to your doctor before you have any vaccinations. Wash your hands often.
• To help prevent bleeding problems, be careful when handling sharp objects. Stay away from rough sports or other situations that could result in bruising or injury. Use an electric razor. Be careful when using a toothbrush or dental floss (your doctor may recommend other ways to clean your teeth and gums).
• Do not put anything on a rash or skin irritation unless your doctor or nurse says you may. Keep the area clean and dry.
• Report mental or mood changes to your doctor.

When Should I Call the Doctor?

**Call your doctor immediately if you experience:**
• unusual bruising or bleeding: bleeding that lasts more than 10-15 minutes or that causes dizziness; blood in your stool, vomit, mucus, or urine (blood in stools or vomit may look black); or bleeding from your nose or gums (when there was no injury)
• thoughts of harming yourself or others
• dizziness

**Call your doctor as soon as possible if you experience:**
• numbness or tingling in the arms, hands, legs, or feet
• diarrhea of 5-6 stools in 1 day or diarrhea with weakness
• nausea, pain, or headache not relieved by prescribed medication or that interferes with eating or drinking
• persistent loss of appetite or weight loss of 5 pounds in 1 week
• extreme tiredness that interferes with normal activities
What Else Should I Know About Interferon?

- Seek help immediately if you have any signs of an allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing, or palpitations.
- Tell all your healthcare providers you are taking interferon including dentists, nurses, and pharmacists.
- Any drugs or supplements that interfere with blood clotting can raise the risk of bleeding. Avoid vitamin E, aspirin, and non-steroidal anti-inflammatory drugs such as ibuprofen (Advil®) and naproxen (Aleve®). Be sure to check the labels of over-the-counter cold or flu products.
- Your doctor will need to check your blood or urine regularly. Be sure to keep all your lab appointments.
- This medication may cause temporary abnormalities in your blood tests such as changes in liver function tests (LFTs), low calcium, high glucose, or high triglyceride levels.
- Do not get pregnant or father a child while receiving interferon. Use of a barrier method of birth control is recommended.
- If you are getting interferon injections at home:
  - Use your medication exactly as directed. Do not change your dosing schedule without talking to your health care provider.
  - Before your injection, always check the solution to make sure it is clear and there is no floating debris.
  - Use a new needle and syringe for each injection.
  - This medicine is given on a fixed schedule. If you miss a dose, call your doctor for instructions.
  - All medications and solutions must be stored in the refrigerator. Do not allow them to freeze.
  - Take your next dose from the refrigerator 1 hour before using it. Put it in a clean, dry area and allow it to warm to room temperature. Do not shake the vial.
  - Do not use the medication if it has been out of the refrigerator for 24 hours or more or if it has been in the refrigerator for more than 30 days.
- If you would like more information about interferon, talk to your doctor or pharmacist.