Epoetin Alfa (Procrit®, Epogen®)

**Pronounced:** e-POE-e-tin AL-fa

**Classification:** Colony Stimulating Factor

**About Epoetin Alfa (Procrit®, Epogen®)**

Epoetin alfa works by stimulating red blood cell production in the bone marrow. In our bodies, a decrease in the number of red blood cells or hemoglobin level causes the kidneys to release a protein called erythropoietin, which in turn stimulates the bone marrow to make more red blood cells. Darbepoetin alfa is a man-made version of erythropoietin, which can also stimulate red blood cell production.

Epoetin alfa is **not** a cancer treatment, but a supportive care medicine. This means it is used to counteract the effects of cancer and its treatments. This medication can also be used to treat anemia caused by chronic kidney disease.

**How to Take Epoetin Alfa**

Epoetin alfa is most often given as a subcutaneous injection (given under the skin), but can also be given intravenously (into a vein, or IV). The actual dose is based on your body size and will be determined by your healthcare provider. You may receive epoetin alfa at your treatment site or self-administer at home.

**Storage and Handling**

Do not shake or freeze darbepoetin alfa. Store vials in the refrigerator and protect them from light. Keep the vials out of the reach of children. Do not reuse single dose vials, syringes or needles. Do not throw the vials, syringes, or needles in the household trash. Dispose of all used needles and syringes in a puncture-proof disposable container with a lid. The FDA provides further information about the disposal of vials, syringes and needles.

**Where do I get this medication?**

Depending on your insurance coverage, this medication may be supplied by a home infusion company or through a specialty pharmacy. If covered through your pharmacy plan, your oncology team will work with your prescription drug plan to identify an in-network specialty pharmacy for distribution of this medication and shipment directly to your home.

**Insurance Information**

Depending on your insurance coverage, this medication may be covered under your major medical plan OR your prescription plan. Your oncology team will work with your insurance company and pharmacy plan to determine who will supply the drug. Patient assistance may be available to qualifying individuals without prescription drug coverage. Your care team can help you find these resources, if they are available.

**Possible Side Effects of Epoetin Alfa**

There are a number of things you can do to manage the side effects of epoetin alfa. Talk to your care team about these recommendations. They can help you decide what will work best for you. These are some of the most common or important side effects:

*Blood Clots, Heart Attack and Stroke*
This medication can increase the risk of blood clots, stroke and heart attack. If you experience symptoms of these problems, you should contact your healthcare provider immediately or go to an emergency room. Symptoms can include: swelling, redness or pain in an extremity, a cool or pale arm or leg, chest pain or pressure, pain in your arm, back, neck or jaw, shortness of breath, numbness or weakness on one side of the body, trouble talking, confusion or mental status changes.

**Risk of Tumor Progression**

Studies of this medication have found that it may make some tumors grow faster, or result in people dying sooner from their cancer. Because of this, the lowest dose possible will be administered to avoid a red blood cell transfusion. This medication should only be given to patients whose cancer treatment is causing anemia. It should be discontinued following the completion of the course of chemotherapy. You will be monitored for tumor progression during treatment.

**Nausea and/or Vomiting**

Talk to your oncology care team so they can prescribe medications to help you manage nausea and vomiting. In addition, dietary changes may help. Avoid things that may worsen the symptoms, such as heavy or greasy/fatty, spicy or acidic foods (lemons, tomatoes, oranges). Try saltines, or ginger ale to lessen symptoms.

Call your oncology care team if you are unable to keep fluids down for more than 12 hours or if you feel lightheaded or dizzy at any time.

**High Blood Pressure**

This medication can cause high blood pressure (hypertension). Patients should have their blood pressure checked regularly during therapy. Any hypertension should be treated appropriately. If hypertension cannot be controlled, the medication may be stopped. Report any headache or dizziness to your provider.

**Allergic Reactions**

In some cases, patients can have an allergic reaction to this medication. Signs of a reaction can include: shortness of breath or difficulty breathing, chest pain, rash, flushing or itching or a decrease in blood pressure. If you notice any changes in how you feel during the injection/infusion, let your nurse know immediately.

**Development of Antibodies**

A very rare side effect is the possibility that your body may make antibodies against erythropoietin. These antibodies can block or reduce your body's ability to make red blood cells, causing severe anemia. Symptoms of severe anemia include worsening tiredness, lack of energy, and/or shortness of breath. If you experience these symptoms, call your healthcare provider.

**Seizures**

There is an increased risk of seizures in patients receiving this medication for kidney disease. Notify your healthcare provider if you have any symptoms of seizures including confusion, uncontrollable muscle movements, rapid eye movement, loss of consciousness, and strange taste in the mouth.

**Stevens Johnson Syndrome**

This is a rare, but serious, allergic reaction that affects the skin and mucous membranes. It typically starts as a rash or painful blisters and can progress to serious damage to the skin and in some cases, death. It is important that you report any rash to your healthcare providers immediately.

**Reproductive Concerns**

Exposure of an unborn child to this medication could cause birth defects, so you should not become pregnant or father a child while on this medication. Effective birth control is necessary during treatment. Even if your menstrual cycle stops or you believe you are not producing sperm, you could still be fertile and conceive. You should consult with your healthcare team before breastfeeding while receiving this medication.

**Current Biosimilars**

There are biosimilar versions of epoetin alfa. A biosimilar is a medication that has been approved by the FDA because it is very similar to an FDA-approved medication (called a reference product, or the medication it is being compared to), and that there...
are no meaningful differences between the biosimilar product and the reference product. These medications may be used interchangeably.

The current biosimilar for this medication is epoetin-epbx.