Granulocyte-Colony Stimulating Factor (G-CSF)

Why is G-CSF Given?

G-CSF is similar to a hormone naturally produced in the body. G-CSF is used to stimulate the production of white blood cells during chemotherapy treatments. It can be useful to shorten the time you have a low white blood cell (WBC) count, or if your WBC isn’t recovering fast enough on its own.

G-CSF is also used before high-dose chemotherapy to stimulate the bone marrow to make more stem cells. Stem cells are a special type of blood cell from which all other blood cells are made. The stem cells are collected from the blood and stored. They can then be given back to a patient after high-dose chemotherapy treatment to make new blood cells to replace those that have been lost.

Typically, G-CSF is given by injection into the fatty tissue just under the skin (subcutaneous injection).

What to Tell Your Doctor Before You Begin G-CSF

Tell your doctor if you:

• have had an allergic reaction to filgrastim (Neupogen®), Zarxio®, pegfilgrastim (Neulasta™), or to any similar medications
• have ever had an enlarged spleen
• are taking lithium
• have sickle cell disease
• are taking any prescription or over the counter medications, vitamins, herbal or diet supplements
• are breastfeeding
• are pregnant, attempting to get pregnant or father a child

Possible Side Effects

• Flu like symptoms including fever, fatigue, headache, mild nausea, vomiting, and diarrhea
• Bone, joint, or muscle pain
• Swelling or skin irritation at the injection site
• Loss of appetite
• Thinning or loss of hair
• Allergic reactions are rare but have been reported
When to Call Your Doctor

Call your doctor immediately if you have:

• any sign of infection: **fever above 100.4°F (38°C)**, chills, tiredness, weakness, sore throat, painful urination, cough
• any sign of an allergic reaction: itching, hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing
• bone or muscle pain not relieved by prescribed pain medication
• slow or shallow breathing
• an unusual full feeling
• pain in your left side or shoulder
• skin redness, blisters, or sores or white patches on your lips, mouth, or throat
• nausea or vomiting not relieved by prescribed medication or that prevents you from eating
• vomiting more than 3 times in one day
• lightheadedness or fainting
• swelling in hands, ankles or feet

Call your doctor as soon as possible if you believe you have become pregnant while using G-CSF.

What Else Do I Need to Know About G-CSF

• Your first G-CSF injection will be given at the TCT clinic. We will observe you afterwards to watch for any reactions.
• During the time you are being treated with G-CSF, you should not become pregnant or father a child.
• There is a potential risk that G-CSF drugs may be present in breast milk, so women are advised not to breastfeed during this treatment and for a few months afterwards.

*Other Names for G-CSF: Neupogen®, filgrastim, Zarxio® (There may be other names for this medication.*)*