

# 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.)*