



Busulfan: High Dose for SCT

Other Names: Myleran®

About This Drug

Busulfan is used to treat cancer. It is often included in pre-transplant chemotherapy. In patients with leukemia and lymphoma, busulfan is used to destroy cancer cells and the existing bone marrow. This drug is given by mouth or in the vein (IV).

Possible Side Effects (More Common)

- Nausea and throwing up (vomiting). These symptoms may happen within one to six hours after your treatment and may last up to 48-72 hours. Medicines are available to stop or lessen these side effects.
- Bone marrow depression. This is a decrease in the number of white blood cells, red blood cells, and platelets. Bone marrow depression usually occurs 5 to 7 days after treatment. This may raise your risk of infection, make you tired and weak (fatigue), and raise your risk of bleeding.
- Decreased appetite (decreased hunger)
- Loose bowel movements (diarrhea) that may last for several days
- Soreness of the mouth and throat. You may have red areas, white patches, or sores that hurt.
- Darkening of the skin
- Hair loss. Often hair loss is temporary; your hair should grow back when treatment is done.
- Increased total bilirubin in your blood. This may mean that you have changes in your liver function. Your blood work will be checked by your doctor.

Possible Side Effects (Less Common)

- Seizures. Patients getting higher doses of busulfan that are used in bone marrow transplants are at a slight risk for having seizures. To help prevent seizures, you will be treated with an anti-seizure medicine before, during, and after getting busulfan.
- This drug may raise your risk of developing a second cancer
- You could experience a decrease in the amount of steroids your body makes.

- A rare condition called hepatic veno-occlusive disease (HVOD) or sinusoidal obstruction syndrome (SOS) may occur. This causes changes in your liver function, severe abdominal pain, and weight gain. Your doctor will check for changes in your weight, liver function, and increase in abdominal pain.
- Effects on the bladder. This drug may cause irritation and bleeding in the bladder. You may have blood in your urine. To help stop this, you will get extra fluids to help you pass more urine.
- Changes in lung tissue may happen with large amounts of this drug. These changes may not last forever, and your lung tissue may go back to normal. Sometimes these changes may not be seen for many years. You may get a cough or have trouble catching your breath.
- Changes in your liver function can occur causing yellowing of the skin or eyes or swelling in your abdomen. Your doctor will check your liver function as needed.

Allergic Reactions

Allergic reactions to this drug are rare, but may happen in some patients. Signs of allergic reaction to this drug may be a rash, fever, chills, feeling dizzy, trouble breathing, and/or feeling that your heart is beating in a fast or not normal way. If this happens, do not take another dose of this drug. You should get urgent medical treatment.

Treating Side Effects

- Drink 6-8 cups of fluids each day unless your doctor has told you to limit your fluid intake due to some other health problem. A cup is 8 ounces of fluid. If you throw up or have loose bowel movements, you should drink more fluids so that you do not become dehydrated (lack water in the body from losing too much fluid).
- Ask your doctor or nurse about medicine that is available to help stop or lessen nausea, throwing up, or loose bowel movements (diarrhea).
- Talk with your nurse about getting a wig before you lose your hair. Also, call the American Cancer Society at 800-ACS-2345 to find out information about the “Look Good, Feel Better” program close to where you live. It is a free program where women getting chemotherapy can learn about wigs, turbans and scarves as well as makeup techniques and skin and nail care.
- Do not put anything on a rash unless your doctor or nurse says you may. Keep the area around the rash clean and dry. Ask your doctor for medicine if your rash bothers you.
- Wear dark sunglasses and use sunscreen with SPF 30 or higher when you are outdoors even for a short time. Cover up when you are out in the sun. Wear wide-brimmed hats, long-sleeved shirts, and pants. Keep your neck, chest, and back covered.
- Mouth care is very important. Your mouth care should consist of routine, gentle cleaning of your teeth or dentures and rinsing your mouth with a mixture of 1/2 teaspoon of salt in 8 ounces of water or 1/2 teaspoon of baking soda in 8 ounces of water. This should be done at least after each meal and at bedtime.
- If you have mouth sores, avoid mouthwash that has alcohol. Avoid alcohol and smoking because they can bother your mouth and throat.

- Do not floss.

Important Instructions

It is important that you take all of the capsules. If you drop a capsule, or if you throw up any part of a dose, save the thrown up fluids and call your nurse immediately. All or part of the dose may need to be repeated. You will be getting medication to prevent nausea and throwing up before each dose.

Other Instructions

- Whenever you tell a doctor or nurse your health history, always tell them that you have received busulfan.
- This medicine should be stored in a dry place at room temperature

Food and Drug Interactions

There are no known interactions of busulfan with food. This drug may interact with other medicines. Tell your doctor and pharmacist about all the medicines and dietary supplements (vitamins, minerals, herbs and others) that you are taking at this time. The safety and use of dietary supplements and alternative diets are often not known. Using these might affect your cancer or interfere with your treatment. Until more is known, you should not use dietary supplements or alternative diets without your cancer doctor's help.

When to Call the Doctor

Call your doctor or nurse **right away** if you have any of these symptoms:

- Fever of 100.5 F (38 C) or above; chills
- Bleeding or bruising that is not usual
- Headache that does not go away
- Blurred vision or other changes in eyesight
- Seizures
- Confusion or agitation
- Cough or trouble breathing
- Signs of liver problems: dark urine, pale bowel movements, bad stomach pain, feeling very tired and weak, unusual itching, or yellowing of the eyes or skin
- Weight gain of 5 pounds in one week (fluid retention)
- Blood in urine
- Nausea that stops you from eating and drinking
- Throwing up more than three times a day.

Call your doctor or nurse **as soon as possible** if you have any of these symptoms:

- Pain in your mouth or throat that makes it hard to eat or drink
- Loose bowel movements (diarrhea) 5-6 times a day or diarrhea with weakness or feeling lightheaded
- Heavy menstrual bleeding that lasts longer than normal
- Swelling of legs, ankles, or feet

Sexual Problems and Reproductive Concerns

- Sexual problems and reproduction concerns may happen. In both men and women, this drug may affect your ability to have children. This cannot be determined before your treatment. Talk with your doctor or nurse if you plan to have children. Ask for information on sperm or egg banking.
- In men, this drug may interfere with your ability to make sperm, but it should not change your ability to have sexual relations.
- In women, menstrual bleeding may become irregular or stop while you are getting this drug. Do not assume that you cannot become pregnant if you do not have a menstrual period. Women may go through signs of menopause (change of life) like vaginal dryness or itching. Vaginal lubricants can be used to lessen vaginal dryness, itching, and pain during sexual relations.
- Genetic counseling is available for you to talk about the effects of this drug therapy on future pregnancies. Also, a genetic counselor can look at the possible risk of problems in the unborn baby due to this medicine if an exposure happens during pregnancy.
- **Pregnancy warning:** This drug may have harmful effects on the unborn child, so effective methods of birth control should be used during your cancer treatment.
- **Breast feeding warning:** It is not known if this drug passes into breast milk. For this reason, women should talk to their doctor about the risks and benefits of breast feeding during treatment with this drug because this drug may enter the breast milk and badly harm a breast feeding baby.

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