



Busulfan

Other Names: Myleran®

About This Drug

Busulfan is a drug used to treat cancer. This drug can be given in the vein (IV) or by mouth.

Possible Side Effects

- Bone marrow depression. This is a decrease in the number of white blood cells, red blood cells, and platelets. This may raise your risk of infection, make you tired and weak (fatigue), and raise your risk of bleeding.
- Nausea and throwing up (vomiting)
- Soreness of the mouth and throat. You may have red areas, white patches, or sores that hurt.
- Loose Bowel Movements (diarrhea)
- Decreased appetite
- Fever
- Pain in your abdomen
- Trouble sleeping (insomnia)
- Headache
- Blood sugar levels may change. If you have diabetes, changes may need to be made to your diabetes medications.
- Electrolyte changes, especially potassium and magnesium
- Feeling nervous or worried (anxiety)

Note: *Each of the side effects listed above was reported in 60% or greater of patients treated with busulfan. Not all possible side effects are included above.*

Warnings and Precautions

- Severe bone marrow depression, which can be life-threatening. Most often, a stem cell transplant is needed after therapy to prevent complications from severe bone marrow depression.

- Seizure. Common symptoms of a seizure can include confusion, blacking out, passing out, loss of hearing or vision, blurred vision, unusual smells or tastes (such as burning rubber), trouble talking, tremors or shaking in parts or all of the body, repeated body movements, tense muscles that do not relax, and loss of control of urine and bowels. There are other less common symptoms of seizures. **If you or your family member suspects you are having a seizure, call 911 right away.** Medication may be given to decrease prevent and decrease your risk of seizures.
- Changes in your liver function and blockage of small veins in the liver, which can cause liver failure and be life-threatening
- Fluid accumulating around your heart, which can be life-threatening
- Changes and scarring of your lung tissues which may cause trouble breathing and be life-threatening. Sometimes these changes may not be seen for many years.
- Changes in your cells which may raise your risk of getting a second cancer

Note: Some of the side effects above are very rare. These side effects may be more severe if you are receiving high doses of this medication included in pre-transplant chemotherapy. If you have concerns and/or other questions, please discuss them with your medical team.

How to Take Your Medication

- **For oral busulfan:** Swallow the medicine whole with or without food.
- **Missed doses:** If you vomit or miss a dose of busulfan, take your next dose at the regular time, and contact your physician. Do not take 2 doses at the same time and do not double up on the next dose.
- **Handling:** Wash your hands after handling your medicine, your caretakers should not handle your medicine with bare hands and should wear latex gloves.
- This drug may be present in the saliva, tears, sweat, urine, stool, vomit, semen, and vaginal secretions. Talk to your doctor and/or your nurse about the necessary precautions to take during this time.
- **Storage: Store this medicine in the original container at room temperature. Discuss with your nurse or your doctor how to dispose of unused medicine.**

Treating Side Effects

- Manage tiredness by pacing your activities for the day.
- Be sure to include periods of rest between energy-draining activities.
- To decrease infection, wash your hands regularly.
- Avoid close contact with people who have a cold, the flu, or other infections.
- Take your temperature as your doctor or nurse tells you, and whenever you feel like you may have a fever.
- To decrease bleeding, use a soft toothbrush. Check with your nurse before using dental floss.
- Be very careful when using knives or tools.
- Use an electric shaver instead of a razor.
- Drink plenty of fluids (a minimum of eight glasses per day is recommended).

- 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).
- If you get diarrhea, eat low-fiber foods that are high in protein and calories and avoid foods that can irritate your digestive tracts or lead to cramping.
- Ask your nurse or doctor about medicine that can lessen or stop your diarrhea.
- To help with nausea and vomiting, eat small, frequent meals instead of three large meals a day. Choose foods and drinks that are at room temperature. Ask your nurse or doctor about other helpful tips and medicine that is available to help or stop lessen these symptoms.
- 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. Also avoid alcohol and smoking because they can bother your mouth and throat.
- To help with decreased appetite, eat high caloric food such as pudding, ice cream, yogurt and milkshakes.
- If you have diabetes, keep good control of your blood sugar level. Tell your nurse or your doctor if your glucose levels are higher or lower than normal.
- If you are feeling anxious, talk to your nurse or doctor about it and they may be able to offer you some stress-relief techniques and/or support groups that may help relieve your anxiety.
- If you are having trouble sleeping, talk to your nurse or doctor on tips to help you sleep better.
- Keeping your pain under control is important to your well-being. Please tell your doctor or nurse if you are experiencing pain.

Food and Drug Interaction

- There are no known interactions of busulfan with food.
- Check with your doctor or pharmacist about all other prescription medicines and dietary supplements you are taking before starting this medicine as there are known drug interactions with busulfan. Also, check with your doctor or pharmacist before starting and new prescription or over-the-counter medicines, or dietary supplements to make sure that there are no interactions.

When to Call the Doctor

Call your doctor or nurse if you have any of these symptoms and/or any new or unusual symptoms:

- Fever of 100.5 F (38 C) or higher
- Chills
- Feeling dizzy or lightheaded
- Chest pain, especially when you lean forward or take deep breaths

- Easy bleeding or bruising
- Loose bowel movements (diarrhea) 4 times a day or loose bowel movements with lack of strength or a feeling of being dizzy
- Pain in your abdomen that does not go away
- Nausea that stops you from eating or drinking and/or is not relieved by prescribed medicines
- Throwing up more than 3 times a day
- Pain in your mouth or throat that makes it hard to eat or drink
- Lasting loss of appetite or rapid weight loss of five pounds in a week
- Signs of possible liver problems: dark urine, pale bowel movements, bad stomach pain, feeling very tired and weak, unusual itching, or yellowing of the eyes or skin
- Fatigue that interferes with your daily activities
- Pain that does not go away or is not relieved by prescribed medicine
- Symptoms of a seizure such as confusion, blacking out, passing out, loss of hearing or vision, blurred vision, unusual smells or tastes (such as burning rubber), trouble talking, tremors or shaking in parts or all of the body, repeated body movements, tense muscles that do not relax, and loss of control of urine and bowels. **If you or your family member suspects you are having a seizure, call 911 right away.**
- If you have diabetes, keep good control of your blood sugar level. Tell your nurse or your doctor if your glucose levels are higher or lower than normal
- If you think you may be pregnant or may have impregnated your partner

Reproduction Warnings

- **Pregnancy warning:** This drug can have harmful effects on the unborn baby. Women of child bearing potential should use effective methods of birth control during your cancer treatment and for 6 months after treatment. Men with female partners of child bearing potential should use effective methods of birth control during your cancer treatment and for 3 months after your cancer treatment. Let your doctor know right away if you think you may be pregnant or may have impregnated your partner.
- **Breastfeeding warning:** It is not known if this drug passes into breast milk. Women should not breast feed during treatment this drug could enter the breast milk and cause harm to a breast feeding baby.
- **Fertility warning:** In men and women both, this drug may affect your ability to have children in the future. Talk with your doctor or nurse if you plan to have children. Ask for information on sperm or egg banking.
- 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.

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This information is intended to provide helpful health information to the general public and is not to be used in place of any medical, health, psychological, or any other kind of personal professional services. The information herein does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned, nor is the information intended as medical advice for individual problems or for making an evaluation as to the risks and benefits of taking a

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