

Busulfan

Names	The generic drug name is busulfan (byoo-SUL-fan) Busulfex® and Myleran® are brand names. There may be other names for this medication.
How is it Given?	Busulfan can be taken by mouth in tablet form or it can be given as an infused into a vein (intravenous or IV). Take the tablet(s) around the same time every day. Do not take more or less than prescribed.
Why am I Taking Busulfan?	This drug is used to treat chronic myelogenous leukemia (CML), certain blood disorders such as polycythemia vera, and to prepare the body for stem cell/bone marrow transplants.
How Does it Work?	<p>Cancer is a group of diseases in which abnormal cells reproduce uncontrollably. Your chemo schedule is based upon the type of cancer you have, how fast the cancer cells reproduce, and the times when each drug is the most likely to be effective. This is why we typically give chemotherapy in cycles.</p> <p>Traditional chemotherapy agents, like busulfan, identify and attack cancer cells by how quickly they reproduce. Unfortunately, normal cells that reproduce quickly are also affected, which can result in side effects. These normal cells will eventually grow back and be healthy.</p> <p>Busulfan is in a class of drugs known as alkylating agents. It attacks cells in the resting phase of the cell cycle. The cell cycle includes resting, active growing, and division (reproduction) phases.</p>
What Should I Tell My Doctor Before I Begin?	<p>Tell your doctor if you:</p> <ul style="list-style-type: none">• have had an allergic reaction to busulfan or have any allergies• have had seizures, a head injury, radiation treatments, or chemotherapy• have taken busulfan before but your cancer did not respond to it• are pregnant or breastfeeding <p>This drug may interact with other medications or cause harmful side effects. Tell your doctor and pharmacist about <u>all</u> prescription or over-the-counter medications, vitamins, and supplements that you are taking.</p>

What Are Some Possible Side Effects?

- Low blood counts (decreased red blood cells, white blood cells, and platelets) can increase your risk of fatigue, infections, and bleeding problems.
- Loss of appetite, nausea, vomiting, and/or weight loss
- Diarrhea
- Dry mouth, sores in mouth or throat
- Dry skin, itching, rash, darkened skin and nail beds
- Hair loss, thinning hair
- Fatigue and/or muscle pain
- Menstrual irregularity and/or vaginal dryness or itching in women
- Feeling anxious and/or depressed, problems sleeping
- Decreased fertility in both men and women

How Can I Manage These Side Effects?

- Drink 2-3 quarts of fluid, especially water, every day unless your doctor limits your fluids.
- To help prevent infections, particularly if your white blood cell count is low, stay away from crowds or people with colds, flu, or other infections. Wash your hands often, and talk to your doctor before you have any vaccinations (immunizations), such as a flu shot.
- If you are fatigued, take rests during the day, and limit your activities to the time of day when you have the most energy. Learn to accept help.
- Ask your doctor about medication to help prevent or lessen nausea, vomiting, or diarrhea. Talk to your doctor before using over-the-counter antidiarrheal medicine.
- Small, frequent meals may help with nausea. Avoid spicy and fried foods.
- Mouth care is very important while taking this drug. Rinse your mouth with a mixture of ½ tsp of baking soda in 8 ounces of water after every meal and at bedtime. Brush your teeth and gums often with a soft toothbrush. (Soften it further by running it under warm water before brushing.) Avoid tobacco products, alcohol, and mouthwashes that contain alcohol.
- Wear a hat, protective clothing, and sunblock with SPF of 30 or higher if you will be in the sun. Do not put anything on your rash unless your doctor or nurse says you may. Keep the area around the rash clean and dry.

- Wigs and head coverings are available in the Resource Center, located inside the cafeteria on the first floor. Some people choose to cut their hair before it falls out. Hair usually grow back after chemo ends, but the color and texture may be different.
- Vaginal lubricants can be used to lessen vaginal dryness, itching, and pain during intercourse.
- Talk to your doctor if you are depressed or having trouble sleeping.
- Speak with your doctor or nurse if you plan to have children. Ask for information on sperm or egg banking.

When Should I
Call the
Doctor?

Call 911 or go to the nearest hospital emergency department if you have life threatening situation such as symptoms of a severe allergic reaction (anaphylaxis): chest tightness, trouble breathing, swelling in your face or tongue, feeling your throat is closing up, tingling throat or mouth, dizziness, fast/pounding heartbeat (palpitations), nausea and vomiting, skin that looks gray or blue

Call your doctor immediately if you have:

- any sign of infection: fever of 100.4°F (38°C) or higher, chills, cough, sore throat, pain or burning upon urination; or redness or tenderness at an IV site or at a wound of any kind
- unusual bruising or bleeding: bleeding lasts more than 10-15 minutes or that causes dizziness; bloody stools, vomit (may look like coffee grounds), urine, or mucus; unusually heavy menstrual bleeding; spontaneous nose or gum bleeds; or a rash of pinpoint-sized reddish-purple spots (petechiae) under the skin
- headache with changes in vision, confusion and/or seizures

Call your doctor as soon as possible if you experience:

- nausea or mouth that are not responding to prescribed medication or that makes it difficult to eat or drink
- four or more episodes of vomiting or diarrhea in 1 day
- yellowing of your skin or eyes
- dry mouth, nose, or eyes or bothersome rash
- trouble sleeping and/or feelings of anxiety

What Else
Should I Know
About
Busulfan?

- In rare cases, busulfan can damage lungs. The damage may appear anywhere from a few months to 10 years after treatment ends. **Call your doctor right away if you have a cough, low-grade fever, or shortness of breath.**
- Busulfan may interfere with the normal menstrual cycle in women and may stop sperm production in men. However, **do not** assume that you cannot get pregnant or father a child while on busulfan. Both men and women should use birth control, as busulfan may harm the fetus.
- Do not breastfeed while receiving busulfan.
- Your doctor will need to check your blood at regular times during your treatment. Be sure to keep all your appointments.
- Swallow tablets whole. Do not crush, break, or chew it. If you miss a dose, take it as soon as you can. If it is almost time for your next dose, wait and take it at the regular time. Do not take extra medicine to make up for a missed dose.
- Chemotherapy may increase the risk that you will develop other cancers. Talk to your doctor about the risks of using this medication.
- If you would like more information about busulfan, talk to your doctor.