Busulfan (Myleran®)
(“byoo-SUL-fan”)

How drug is given: by mouth or by vein (IV)

Purpose: To stop the growth of cancer cells in chronic myelogenous leukemia (CML) and other cancers. High doses may be used in bone marrow transplant.

Things that may occur during treatment
• Some patients may have mild nausea. You may be given medicine to help with this.

Things that may occur days to weeks after treatment

1. Your blood cell counts may drop 7 to 14 days after the drug is given. This is known as bone marrow suppression. This includes a decrease in your:
   • Red blood cells, which carry oxygen in your body to help give you energy
   • White blood cells, which fight infection in your body
   • Platelets, which help clot the blood to stop bleeding

   If you have a fever of 100.5°F (38°C) or higher, chills, a cough, or any bleeding problems call your cancer team right away.

2. You may get mouth sores 7 to 10 days after this drug is given. Be sure to keep your mouth clean. Use only a soft-bristle toothbrush for brushing your teeth. You may have a burning feeling and redness inside the mouth or on the lips. Use a baking soda mouth rinse 4 or 5 times a day.

   Mouth Rinse Recipe:
   Mix: 1 tsp salt or baking soda with 8 oz. glass of water

   Other mouth rinses may be ordered by your doctor. Do not use mouthwashes that have alcohol in them, because they will dry out the mouth. If you cannot eat or swallow because of this, tell your cancer care team. Check with your cancer team before having any dental work done.

3. You may have a fast or unusual heartbeat. If you feel any strange changes in your heartbeat, tell your cancer care team right away.

4. Skin changes, such as dryness or a rash on your body, may occur. Ask your cancer care team what lotions or creams you may use.
5. You may feel very tired, also known as fatigue. Over time, fatigue could worsen and you may feel physically weak or exhausted. This can be unrelated to activity. You may need to rest or take naps more often. Mild to moderate exercise can help you maintain your energy.

6. Your body may not be able to get rid of extra fluid. This is called edema. You may notice some swelling in your arms or legs.

7. Your blood pressure may go up. If this happens, you may be given medication to help with this. If you have headaches or dizziness, tell your cancer care team right away.

8. Mild constipation may occur after treatment begins. Be sure to drink more fluids and get more fiber in your diet by eating fresh fruits and vegetables. A daily stool softener, such as docusate (Colace®), and/or laxatives, such as senna (Senakot®), may be helpful. If these do not help within 48 hours, tell your cancer care team. Do not use bulk forming laxatives such as Metamucil® without first talking with your cancer care team.

9. Loose stools or diarrhea may occur within a few days after the drug is started. You may take loperamide (Imodium A-D®) to help control diarrhea. You can buy this at most drug stores. It is also important to drink more fluids (water, juice, sports drinks). If these do not help, tell your cancer care team.

10. Restlessness, sedation, depression, or confusion can occur. You may notice a change in your mood. Tell your cancer care team if you experience any of these symptoms after starting the drug.

11. Some or all of your hair may fall out around 3 to 4 weeks after treatment starts. You may lose hair on your head, as well as facial and body hair. You may want to buy a wig before hair loss begins. Hair may grow back during treatment.

12. If you develop a new or worsening cough or shortness of breath, tell your cancer care team.

13. Some important minerals called electrolytes are found in your blood and body fluids. They can be affected by this medicine. Your cancer care team will check your blood periodically to monitor your levels.

14. You may have difficulty sleeping. Please talk to your cancer care team if you cannot sleep.

15. This drug may increase your blood sugar levels.

**Things that may occur after treatment ends (even months to years later)**

1. Fertility and Related Precautions:
   - It is still very important to use birth control if you are having sex, because this drug could hurt an unborn baby.
   - Men may become sterile and may want to think about sperm banking prior to chemotherapy.
• For women, your period (menstrual cycle) may not be regular for a while or may stop completely and you may not be able to get pregnant.
• Women should not breastfeed while receiving this drug
• If you are concerned about any of this, please talk with your cancer care team.

2. In rare cases, scarring of the lungs may occur. This lung damage may not get better. You will have tests to watch how your lungs are working. Report any shortness of breath or cough. If you have surgery at any time in the future, tell your anesthesiologist and surgeon that you received this drug.

3. In very rare cases, you could get second cancer years after taking busulfan.

This document includes some but not necessarily all of the possible side effects of this medication. The side effects listed in this teaching sheet may not be the same ones you experience. Your side effects may be different depending on how often you receive treatment (your schedule) and how much you receive each time (your dosage). Side effects may also vary if you are taking other medications. Please speak with your doctor or nurse if you have questions about possible side effects you may experience. This document should not take the place of conversations with members of your health care team.

If you experience any significant change in your health during or after treatment, contact a member of your health care team right away.

THIS SPACE RESERVED FOR WRITTEN COMMENTS OR NOTES FOR THE PATIENT AND FAMILY:
Oral chemotherapy medicines are given by mouth in the form of capsules, tablets, or liquid. These safety tips will help you understand what to do when you are taking oral chemotherapy.

**Please note:** If you are on a clinical trial, you may be given special instructions.

**How to take this drug**

- Swallow each tablet or capsule whole. Do not break, crush, or chew.
- Prepare your drug away from food and food prep areas.
- If you miss a dose, take it as soon as possible. However, if it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule.
- Do not double the dose.
- If you are on a clinical trial, you will be given special instructions if you miss a dose.
- If you are unable to swallow the pill, speak with your nurse or pharmacist about other ways to take your medication.
- If you vomit or throw up your medication, call your physician for further instructions.
- Wash your hands after taking the medication. Avoid handling crushed or broken pills (tablets or capsules).

**Storage**

- Most oral chemotherapy medicine is stored at room temperature, away from excess heat and moisture. You will be told if the medication you are taking needs special storage or handling.
- Keep this medicine in its original container, in a safe place, away from other family medications. All medications need to be kept out of the reach of children and pets.
Disposal

- If you have unused oral chemotherapy pills (tablets or capsules), please return them to the pharmacy where the prescription was filled. Do not flush down the toilet, dump in the sink, or throw away in the trash.

Safe handling of body waste in the home after chemotherapy

- Chemotherapy stays in the body for hours or even days, and is found in vomit, urine, stool, and sweat (body wastes). Special care must be taken to prevent the patient's body waste from coming into accidental contact with the patient or caregiver.

Body wastes

Patient and caregiver:

- You can use the toilet (septic tank or city sewage) as usual. There is no research to support double flushing to prevent accidental contact (although this may be suggested for certain medications). Ask your doctor or nurse what they suggest for your medication.

- Wash your hands well with soap and water after using the toilet. If urine, vomit, or stool gets on your body, wash with soap and water. Always wear gloves when cleaning equipment or disposing waste from a urinal or commode.

- Pregnant caregivers should not handle patient body waste.

- It is safe for family and friends to use the same toilet, as long as all body waste is cleaned from the toilet.

- To absorb urine or stool, use a disposable, plastic-backed pad, diaper, or sheet. Change it immediately when soiled. Then wash skin with soap and water.

- If you have an ostomy, you or your caregiver may want to wear gloves when emptying or changing appliances.

Laundry

- Always wear disposable gloves when handling sheets or clothes that have been soiled with body waste.

- Soiled items should be kept and washed separately from the other laundry.

Oral chemotherapy is a serious drug that requires extra caution. If you have questions or concerns about your oral chemotherapy, do not hesitate to call your clinician. For more tips, tools and short videos to help you manage oral chemotherapy visit our web page at [http://www.dana-farber.org/oralchemo](http://www.dana-farber.org/oralchemo)
Managing your oral chemotherapy schedule at home can be challenging. To help you with this, consider using tools to help you keep track of your schedule and any side effects you may have. You can find these tools online at www.dana-farber.org/OralChemoDiary.

The materials included on this page are for informational purposes only. The content is not intended as a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

This space reserved for written comments or notes for the patient and family: