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

Purpose: To kill 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 drug is given

1. Your blood cell counts may drop. 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

   This may happen 7 to 14 days after the drug is given and then blood counts should return to normal. If you have a fever of 100.5°F (38°C) or higher, chills, a cough, or any bleeding problems **tell your doctor or nurse right away**.

2. You may get mouth sores 7 to 10 days after this drug is given. It is important to keep your mouth clean. A soft-bristle toothbrush should be used 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 mouth washes that have alcohol in them because they will dry out the mouth. If you cannot eat or swallow because of this, let your doctor or nurse know. Check with your doctor 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 doctor or nurse right away**.
4. Skin changes, such as skin turning a darker color, can happen.

5. Some patients may feel very tired, also known as fatigue. You may need to rest or take naps more often. Mild to moderate exercise can also be helpful in maintaining 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, let your doctor or nurse know right away.

8. Mild constipation may occur after treatment begins. Please increase your fluid intake and increase 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 doctor or nurse. Do not use bulk forming laxatives such as Metamucil® without talking with your doctor or nurse.

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 may 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 doctor or nurse.

10. Restlessness, sedation, depression or confusion can occur. You may notice a change in your mood. Notify your doctor or nurse 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, report this to your doctor or nurse.

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 breast-feed while receiving this drug.
   - If you are concerned about any of this, please talk with your doctor or nurse.
2. Rarely, 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, at any time in the future, you have surgery, let your anesthesiologist/surgeon know that you have gotten this drug.

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

The above information includes some, but not necessarily all, of the possible side effects of this medication. The side effects 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 take other medications. Please talk 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.