



BC Cancer Agency

For the Patient: Busulfan injection

Other names: BUSULFEX®, Busulphan

- **Busulfan** (byoo-SUL-fan) is a drug, which is used to treat blood cancers. It reduces the number of blood cells. It is a clear liquid that is injected slowly into a vein.
- A **blood test** may be taken before each treatment. The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects.
- Your doctor may tell you to **drink** plenty of liquids (8-12 cups a day). This helps prevent kidney problems in some kinds of cancer.
- Other drugs such as acetaminophen (TYLENOL®, itraconazole, phenytoin (DILANTIN®) and thioguanine may **interact** with busulfan. Tell your doctor if you are taking any other drugs as your dose may need to be changed. Check with your doctor or pharmacist before you start taking any new drugs.
- The **drinking of alcohol** (in small amounts) will not affect the safety or usefulness of busulfan.
- Busulfan may damage sperm and may be harmful to the baby if used during pregnancy. It is best to use **birth control** while taking busulfan and for at least four months after you stop taking busulfan. Tell your doctor right away if you or your partner becomes pregnant. Do not **breast feed** during treatment.
- Busulfan may cause **sterility** in men and **menopause** in women which may be permanent. If you plan to have children, discuss this with your doctor before being treated with busulfan.
- **Tell** doctors or dentists that you are taking busulfan before you receive any treatment from them.

Changes in blood counts

This drug may cause temporary changes in your blood counts. Your doctor will be following these changes carefully by performing blood tests. Adjustment of your treatment may be needed in certain circumstances. If you are receiving an oral chemotherapy pill, do not stop the drug unless advised to do so by a doctor (preferably your cancer specialist).

BLOOD COUNTS	MANAGEMENT
<p>Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, you are at greater risk of having an infection.</p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Take care of your skin and mouth. • Avoid crowds and people who are sick. • Call your doctor <i>immediately</i> at the first sign of an infection such as fever (over 100°F or 38°C), chills, cough, sore throat, or burning when you pass urine.
<p>Normal platelets help your blood to clot normally after an injury (e.g., cut). When the platelet count is low you may be more likely to bruise or bleed.</p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> • Try not to bruise, cut, or burn yourself. • Clean your nose by blowing gently. Do not pick your nose. • Avoid constipation. • Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. <p>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> • Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart). • For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable.

Side effects are listed in the following table in the order in which they may occur. Tips

to help manage the side effects are included.

SIDE EFFECTS	MANAGEMENT
<p>Hair loss is rare with busulfan. Your hair will grow back once you stop treatment with busulfan. Colour and texture may change.</p>	<ul style="list-style-type: none"> • Use a gentle shampoo and soft brush. • Care should be taken with use of hair spray, bleaches, dyes and perms.
<p>Your skin may darken after you have taken busulfan for a while. This occurs most often in pressure areas such as elbows, knees and skin creases.</p>	<ul style="list-style-type: none"> • This will slowly fade when you stop taking busulfan.

STOP TAKING YOUR BUSULFAN AND SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer); chills; cough; sore throat; pain or burning when you pass urine; redness, pain or swelling of any area of your body; sores forming anywhere on your body.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin, extensive bruising.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **breathing problems** such as shortness of breath, difficulty breathing or dry, hacking cough.
- Signs of **kidney problems** such as lower back or side pain swelling of feet or lower legs.
- Signs of **gout** such as joint pain.
- Changes in eyesight.

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:

- Uncontrolled nausea, vomiting, loss of appetite or diarrhea.
- Sores in mouth or on lips.
- Dizziness or confusion.
- Unusual tiredness or weakness.
- Sudden weight loss.
- Skin rash.

REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR
