

For the Patient: Mitoxantrone Other names:

#### BC Cancer Agency

- **Mitoxantrone** (mite-oh-ZAN-trone) is a drug that is used to treat many types of cancer. It is a blue liquid that is injected into a vein.
- Tell your doctor if you have ever had an unusual or **allergic reaction** to doxorubicin, daunorubicin, epirubicin, idarubicin, or mitoxantrone before receiving mitoxantrone.
- A **blood test** may be taken before each treatment. The dose and timing of your chemotherapy may be changed based on the test results and/or other side effects.
- Other drugs may **interact** with mitoxantrone. Check with your doctor or pharmacist before you start or stop taking any other drugs.
- The **drinking of alcohol** (in small amounts) does not appear to affect the safety or usefulness of mitoxantrone.
- Mitoxantrone may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with mitoxantrone.
- Mitoxantrone may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with mitoxantrone. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- **Tell** doctors, dentists, and other health professionals that you are being treated with mitoxantrone before you receive any treatment from them.

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
Mitoxantrone <b>burns</b> if it leaks under the skin.	<ul> <li>Tell your nurse or doctor <i>immediately</i> if you feel burning, stinging, or any other change while the drug is being given.</li> <li>If mitoxantrone leaks under the skin, your skin may turn blue. Your skin will return to its usual colour.</li> </ul>

SIDE EFFECTS	MANAGEMENT
Pain or tenderness may occur where the needle was placed.	Apply cool compresses or soak in cool water for 15-20 minutes several times a day.
<b>Nausea</b> and <b>vomiting</b> may occur after your treatment and may last for 24-48 hours. Most people have little or no nausea.	<ul> <li>You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home.</li> <li>It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.</li> <li>Drink plenty of fluids.</li> <li>Eat and drink often in small amounts.</li> <li>Try the ideas in <i>Food Choices to Help Control Nausea.</i>*</li> </ul>
Your <b>urine may be blue-green</b> for 24 hours after your treatment.	<ul> <li>This is expected as mitoxantrone is blue and is passed in your urine.</li> <li>Rarely the whites of your eyes may turn a slight blue colour during treatment</li> </ul>
<b>Fever</b> may commonly occur shortly after treatment with mitoxantrone. Fever should last no longer than 24 hours.	<ul> <li>Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day.</li> <li>Fever (over 100°F or 38°C by an oral thermometer) which occurs more than a few days after treatment may be a sign of an infection. Report this to your doctor immediately.</li> </ul>
Diarrhea may commonly occur.	<ul> <li>If diarrhea is a problem:</li> <li>Drink plenty of fluids.</li> <li>Eat and drink often in small amounts.</li> <li>Avoid high fibre foods as outlined in Food Ideas to Help with Diarrhea During Chemotherapy.*</li> </ul>
Constipation may sometimes occur.	<ul> <li>Exercise if you can.</li> <li>Drink plenty of fluids.</li> <li>Try ideas in Suggestions for Dealing with Constipation.*</li> </ul>
Headache may rarely occur.	Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day.

SIDE EFFECTS	MANAGEMENT
Your white blood cells may decrease 10 days after your treatment. They usually return to normal 3 weeks after your last treatment. 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.	<ul> <li>To help prevent infection:</li> <li>Wash your hands often and always after using the bathroom.</li> <li>Avoid crowds and people who are sick.</li> <li>Call your doctor <i>immediately</i> at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.</li> </ul>
Your <b>platelets</b> may decrease 10 days after your treatment. They usually return to normal 3 weeks after your last treatment. Platelets help to make your blood clot when you hurt yourself. <b>You</b> <b>may bruise or bleed more easily than</b> <b>usual.</b>	<ul> <li>To help prevent bleeding problems:</li> <li>Try not to bruise, cut, or burn yourself.</li> <li>Clean your nose by blowing gently. Do not pick your nose.</li> <li>Avoid constipation.</li> <li>Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene.</li> <li>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</li> <li>Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart).</li> <li>For minor pain, try acetaminophen (e.g., TYLENOL®) first, to a maximum of 4 g (4000 mg) per day, but occasional use of ibuprofen may be acceptable.</li> </ul>
Sore mouth may sometimes occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth, or in the throat. Mouth sores or bleeding gums can lead to an infection.	<ul> <li>Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste.</li> <li>Make a mouthwash with ½ teaspoon baking soda or salt in 1 cup warm water and rinse several times a day.</li> <li>Try the ideas in <i>Food Ideas for a Sore Mouth during Chemotherapy.</i>*</li> </ul>
Loss of appetite and weight loss may sometimes occur and may persist after discontinuation of mitoxantrone.	Try the ideas in Food Ideas to Help with Decreased Appetite.*

SIDE EFFECTS	MANAGEMENT
<b>Tiredness</b> and lack of energy may sometimes occur.	<ul> <li>Do not drive a car or operate machinery if you are feeling tired.</li> </ul>
	• Try the ideas in Your Bank of Energy Savings: How People with Cancer Can Handle Fatigue.*
Hair loss sometimes occurs with mitoxantrone. Complete hair loss is rare, but thinning may occur. If you lose hair, it will grow back once you stop treatment with mitoxantrone. Colour and texture may change.	If hair loss is a problem, refer to For the Patient: Hair loss due to chemotherapy.*

\*Please ask your chemotherapy nurse or pharmacist for a copy.

### SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of **heart or lung problems** such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty in breathing, or fainting.
- Signs of an infection such as fever (over 100°F or 38°C by an oral thermometer), shaking chills; severe sore throat, productive cough (coughing up thick or green sputum); cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin; extensive bruising.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
- Seizures or loss of consciousness.
- Repeated **vomiting** and cannot keep fluids or medications down.

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

- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs.
- Numbness or tingling in feet or hands.
- Signs of **gout** such as joint pain.
- Changes in eyesight or sore red eyes.
- Signs of **bladder problems** such as changes in urination, painful burning sensation, presence of blood, or abdominal pain.
- Increased **sore throat or mouth** that makes it difficult to swallow comfortably.
- For diabetics: uncontrolled blood sugars.

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

- Uncontrolled nausea, vomiting, heartburn, sweating, diarrhea, or constipation.
- Headache or pain not controlled with acetaminophen (e.g., TYLENOL®).
- Easy bruising or minor bleeding.
- Excessive swelling of hands, feet, or lower legs.
- Nail changes.
- Redness, swelling, pain, or sores where the needle was placed.
- Redness, swelling, pain, or sores on your lips, tongue, mouth, or throat.
- Depression, anxiety (nervousness or worry) or confusion that is not usual for you.
- Unusual thirst or frequent urination.
- For women: menstrual changes (e.g., irregular periods).

### **REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR**

