



Provincial Health Services Authority

**For the Patient: Doxorubicin**  
Other names: ADRIAMYCIN®, Adria, Dox

- Doxorubicin (dox-oh-ROO-biss-in) is a drug that is used to treat many types of cancers. It is a red 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, mitomycin or mitoxantrone before treatment begins.
- 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 such as digoxin (LANOXIN®) and cyclosporine (NEORAL®, SANDIMMUNE®) may **interact** with doxorubicin. Tell your doctor if you are taking this/these or any other drugs as you may need extra blood tests or 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) does not appear to affect the safety or usefulness of doxorubicin.
- Doxorubicin may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with doxorubicin.
- Doxorubicin may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with doxorubicin. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- **Tell** doctors or dentists that you are being treated with doxorubicin 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.

BLOOD COUNTS	MANAGEMENT
<p>Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. <b>When they are low, you are at greater risk of having an infection.</b></p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> <li>• Wash your hands often and always after using the bathroom.</li> <li>• Take care of your skin and mouth.</li> <li>• Avoid crowds and people who are sick.</li> <li>• Call your doctor <b>immediately</b> 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>
<p>Normal platelets help your blood to clot normally after an injury (e.g., cut). <b>When the platelet count is low you may be more likely to bruise or bleed.</b></p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> <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> </ul> <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"> <li>• Do not stop taking any medication that has been prescribed by your doctor (e.g., <b>ASA for your heart</b>).</li> <li>• For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable.</li> </ul>

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>Doxorubicin <b>burns</b> if it leaks under the skin.</p>	<p>Tell your nurse or doctor <b>immediately</b> if you feel burning, stinging or any other change while the drug is being given.</p>
<p>Your <b>urine may be pink or reddish</b> for 1-2 days after your treatment.</p>	<p>This is expected as doxorubicin is red and is passed in your urine.</p>

SIDE EFFECTS	MANAGEMENT
<p><b>Nausea and vomiting</b> may occur after your treatment and usually ends within 24 hours.</p>	<p>You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. <b>It is easier to prevent nausea than treat it once it has occurred, so follow directions closely.</b></p> <ul style="list-style-type: none"> <li>• Drink plenty of liquids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Try the ideas in <a href="#">Practical Tips to Manage Nausea</a>.*</li> </ul>
<p><b>Pain or tenderness</b> may occur where the needle was placed.</p>	<p>Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</p>
<p><b>Diarrhea</b> may occur.</p>	<p>If diarrhea is a problem:</p> <ul style="list-style-type: none"> <li>• Drink plenty of fluids.</li> <li>• Eat and drink often in small amounts.</li> <li>• Avoid high fibre foods as outlined in <a href="#">Food Choices to Help Manage Diarrhea</a>.*</li> </ul>
<p><b>Sore mouth</b> may occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth or in the throat. <b>Mouth sores or bleeding gums can lead to an infection.</b></p>	<ul style="list-style-type: none"> <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 <math>\frac{1}{4}</math> teaspoon baking soda AND <math>\frac{1}{4}</math> teaspoon salt in 1 cup warm water and rinse several times a day.</li> <li>• Try the ideas in <a href="#">Food Ideas to Try with a Sore Mouth</a>.*</li> </ul>
<p><b>Hair loss is common</b> and may begin within a few days or weeks of treatment. Your hair may thin or you may become totally bald. Your scalp may feel tender. You may lose hair on your face and body. Your hair will grow back once your treatments are over and sometimes between treatments. Colour and texture may change.</p>	<p>Refer to <a href="#">Resources for Hair Loss and Appearance Changes – Patient Handout</a>.* You may also want to:</p> <ul style="list-style-type: none"> <li>• Apply mineral oil to your scalp to reduce itching.</li> <li>• If you lose your eyelashes and eyebrows, protect your eyes from dust and grit with a broad-rimmed hat and glasses.</li> </ul>
<p>Your <b>skin may darken</b> in some areas such as your nails, soles or palms.</p>	<p>This will slowly return to normal once you stop treatment with doxorubicin.</p>

