Rituximab (ri' tux' i mab) is a drug that is used to treat some types of cancer. It is a monoclonal antibody, a type of protein designed to target and interfere with the growth of cancer cells. It is a clear liquid that is injected into a vein.

Tell your doctor if you have ever had an unusual or allergic reaction to rituximab before receiving rituximab.

Tell your doctor if you have ever had an infection with hepatitis virus, human immunodeficiency virus (HIV or the virus that causes AIDS), tuberculosis, or any other chronic infection.

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.

Tell your doctor if you are taking drugs that lower your blood pressure as you may need to skip the dose of your blood pressure drug on the day of your treatment.

Other drugs may interact with rituximab. 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 rituximab.

Rituximab may damage sperm and may harm the baby if used during pregnancy. It is best to use birth control while being treated with rituximab and for 12 months after. Tell your doctor right away if you or your partner becomes pregnant. Do not breastfeed during treatment.

Tell doctors, dentists, and other health professionals that you are being treated with rituximab 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

<table>
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<th>Allergic reactions commonly occur. Signs of an allergic reaction may include flushing, rash, hives, itching, dizziness, swelling or breathing problems. These reactions can occur immediately after receiving rituximab. Reactions usually only occur with the first or second treatment.</th>
<th>Tell your nurse if this happens while you are receiving rituximab or contact your oncologist <em>immediately</em> if this happens after you leave the clinic.</th>
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</table>
| **Nausea** may sometimes occur after your treatment. Most people have little or no nausea. | You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. 
**It is easier to prevent nausea than treat it once it has occurred,** so follow directions closely. 
- Drink plenty of fluids. 
- Eat and drink often in small amounts. 
- Try the ideas in *Practical Tips to Manage Nausea.* |
| **Skin rashes** may sometimes occur. | If itching is very irritating, call your doctor. Otherwise, be sure to mention it at your next visit. |
| **Fever and chills** may sometimes occur shortly after treatment with rituximab. Fever should last no longer than 24 hours. | • Take acetaminophen (e.g., *TYLENOL®*) every 4-6 hours, to a maximum of 4 g (4000 mg) per day. 
• 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.* |

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.**

To help prevent infection:
- Wash your hands often and always after using the bathroom.
- Avoid crowds and people who are sick.
- Call your doctor *immediately* 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.
# Side Effects and Management

<table>
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<th>SIDE EFFECTS</th>
<th>MANAGEMENT</th>
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| 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.** | To help prevent bleeding problems:  
  - 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.  
  Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.  
  - 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. |
| **Headache** may occur. | Take acetaminophen (e.g., TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000 mg) per day.  
  - Tell your doctor if your headache doesn’t go away or if it is associated with seizures, confusion, or changes in your eyesight. |
| **Tiredness** and **lack of energy** may sometimes occur. | Do not drive a car or operate machinery if you are feeling tired.  
  - Try the ideas in *Fatigue/Tiredness – Patient Handout.* |
| **Hair loss** is rare with rituximab. If you lose hair, it will grow back once you stop treatment with rituximab. Colour and texture may change. | If hair loss is a problem, refer to *Resources for Hair Loss and Appearance Changes – Patient Handout.* |

*Please ask your chemotherapy nurse or pharmacist for a copy.
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), 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 an allergic reaction (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
- Seizures or loss of consciousness, with or without confusion, headache, or changes in eyesight.
- Memory loss, trouble thinking, difficulty walking or clumsiness, weakness on one side of the body, or changes in mood.
- Signs of heart or lung problems such as chest pain or pressure, shortness of breath or difficulty breathing, swelling of feet or lower legs, dizziness.
- 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 anemia such as unusual tiredness or weakness.
- Signs of liver problems such as yellow eyes or skin, white or clay-coloured stools.
- Signs of bladder problems such as changes in urination, painful burning sensation, presence of blood, or abdominal pain.

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

- Uncontrolled nausea, vomiting, or diarrhea.
- Headache, muscle or back pain.
- Skin rash, itching, or blistering.
- Trouble sleeping.
- Loss of appetite.
- For diabetic patients: uncontrolled blood sugars.

REPORT ADDITIONAL PROBLEMS TO YOUR DOCTOR