

What is Rituximab?

Rituximab is an agent used to treat different types of lymphomas. It can also be used for non-cancerous conditions.

How does it work?

Rituximab is a monoclonal antibody that identifies the CD20 antigen on specific cancer cells and on B-lymphocytes. Rituximab binds to the antigen on the cell surface, activating your immune system to attack the cells with CD20, therefore destroying the cancer cells and B-lymphocytes.

How is it given?

Rituximab is given as an intravenous (IV) infusion. The duration of the infusion can vary depending on if it is the first time you are receiving rituximab or not.

Special instructions:

- You may be asked not to take blood pressure medications 24 hours before and after receiving rituximab as rituximab can cause fluctuations in your blood pressure.
- Your doctor will prescribe you medications to be taken before receiving rituximab to prevent the flu-like effects that occur with rituximab infusions.
- The nurse will observe you closely during and after you receive the rituximab as some people may react to this medication.
- Let your doctor or nurse know immediately if you are feeling short of breath, have chills, feel lightheaded or dizzy, or if you feel like your muscles are stiffening.
- It may be easier for you to get infections while receiving rituximab. Stay away from crowds or people with colds, flu or other infections.

Possible Side Effects:

Listed below, but not limited to, are the more commonly experienced side effects that you may see. The side effects your child might experience may be temporary and some may be permanent.

	Common Happens to 21-100 children out of every 100	Less Likely Happens to 5-20 children out of every 100	Rare but serious Happens to <5 children out of every 100
Immediate Within 1-2 days of receiving the medicine	<ul style="list-style-type: none"> ▪ Fever and chills including shaking chills. These are more common with the first dose. ▪ Nausea ▪ Tiredness and feeling of being unwell 	<ul style="list-style-type: none"> ▪ Vomiting ▪ Headache ▪ Throat irritation ▪ Pain in the chest, abdomen or back ▪ A decrease or increase in blood pressure ▪ Irregular heart beat during the infusion ▪ Diarrhoea ▪ Rash, hives or itchiness during the infusion ▪ Cough ▪ Shortness of breath ▪ Runny nose ▪ Dizziness or fainting ▪ Night sweats ▪ Aches and pains in the muscles and joints ▪ Red patches or wheals on the skin 	<ul style="list-style-type: none"> ▪ Anxiety ▪ Flushing of the face and chest during the infusion ▪ Allergic reactions during the infusion that can be severe and life-threatening and may lead to difficulty breathing, a drop in blood pressure, irregular heartbeat, heart attack, fluid in the lungs or damage to the lungs and shock. ▪ The rapid death of large numbers of tumour cells which can cause certain salts and uric acid in the blood to rise quickly, and this could lead to a life threatening irregular heart beat or kidney damage. ▪ Seizures

Rituximab

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Patient/Caregiver Information

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Immediate Within 1-2 days of receiving the medicine			<ul style="list-style-type: none"> ▪ A reaction (serum sickness) which may lead to fevers, aches and pains in the joints, enlarged lymph nodes and kidney damage. ▪ Low levels of calcium in the blood
Prompt Within 2-3 weeks, prior to the next course	<ul style="list-style-type: none"> ▪ Fewer white blood cells which can make it easier to get infections. ▪ Infections including those caused by bacteria, viruses and fungus. 	<ul style="list-style-type: none"> ▪ Inflammation of the sinuses ▪ Increased sugar in the blood ▪ Fluid retention ▪ Elevation in the blood of certain enzymes found in the liver 	<ul style="list-style-type: none"> ▪ Fewer red cells and platelets in the blood. A low number of red blood cells can make you feel tired and weak. A low number platelets causes you to bruise and bleed more easily ▪ Severe rashes which can affect the skin and mucous membranes and be life-threatening
Delayed Any time later during therapy, excluding the above conditions			<ul style="list-style-type: none"> ▪ A stoppage or blockage of the intestine or a hole in the intestines which would cause leakage into the belly with pain and infection which would require treatment and may be life-threatening
Late Any time after completion of treatment			<ul style="list-style-type: none"> ▪ A temporary drop in white blood cells called neutrophils which fight infection. This can occur 1-2 months after therapy ▪ Heart failure that occurs later after treatment and can be fatal ▪ Damage to the lungs that can permanently affect breathing ▪ Reactivation of viral infections eg. Hepatitis B and C that may be serious and may be life threatening ▪ A rare type of cancer of bone marrow cells (plasma cells) which can make the blood thick and cause enlargement of and affect the function of the liver and spleen. ▪ Most people as children have been infected with JC virus (a polyomavirus). In most cases the virus does not cause any problems, but in rare cases of patients who have received rituximab, this virus can become active again, leading to severe damage to brain tissue which could lead to coma and death.

This information sheet is a brief overview. Each individual can respond differently to the medication, it is vital that you communicate all signs and symptoms you observe to your doctor or nurse.

If you have any questions about the information provided please discuss them with your oncologist or haematologist.

Further information can be obtained from your doctor, nurse or pharmacist or at the following website:
<http://medsafe.govt.nz/consumers/medicine/where.asp>