

Treating kidney diseases with rituximab

Information for patients



This leaflet has been written to tell you about rituximab. Your kidney doctor has recommended rituximab as a treatment for your kidney condition, because you have a problem with your immune system.

What is the immune system?

The key role of the immune system is to protect you from infections, such as viral and bacterial illnesses (for example measles, influenza and pneumonia). The immune system has complex ways of defending you against infections, including making special white blood cells called lymphocytes. One form of lymphocyte is called a "B-cell" which produces a protein called an antibody. Antibodies help the immune system to recognise bacteria and viruses and destroy them.

There are diseases which cause the immune system to attack the healthy cells in your body. This is known as an auto-immune response and can cause your immune system to produce lymphocytes or antibodies, which can damage certain parts of your body. There are a number of diseases in which the kidneys are damaged by this auto-immune process, such as systemic vasculitis, systemic lupus erythematosus (SLE), rheumatoid arthritis, cryoglobulinaemia, membranous nephropathy and anti-GBM disease.

Why am I being prescribed rituximab?

Your kidney doctor will explain why rituximab is an appropriate treatment for you and the potential benefits for your kidney disease. Treatment with rituximab may also reduce the number of other drugs (immunosuppressants) and the doses, which you are already being prescribed to suppress your immune system. Rituximab takes 4-6 weeks to work, so you will need to continue taking your other immunosuppressants during this time.

What is rituximab?

Rituximab is a medication which is used to reduce and destroy the number of B-cells (normal and abnormal) in your body. It is also used to treat some cancers of the bone marrow (leukaemia) and lymph glands (lymphoma), especially when the abnormal cell is a B-cell.

How will I be given the rituximab?

Rituximab is given as an intravenous infusion (a medicine given slowly into a vein using an infusion pump) through a cannula inserted into the back of your hand. You will be given two infusions 2 weeks apart.

Your course of infusions will reduce the number of B-cells for a period of 6 to 9 months, when the levels may increase again. This is why you may need to have repeated courses of treatment. Your kidney doctor will talk to you about how long you will need rituximab treatment.

What needs to be done before I have the infusion?

You will need to have blood tests to check your kidney function, liver function, haemoglobin, the presence of hepatitis B virus and your immunity to it. These blood tests will need to be done before the rituximab infusion. If you have hepatitis B you cannot be treated with rituximab, as it increases the risk of reactivation of the virus. This could lead to severe hepatitis and even death.

What happens on the day of my rituximab infusion?

You will need to arrive between 8am and 9am at the Renal Day Case Unit at the Churchill Hospital. You can have your usual breakfast that morning. Please bring all your medications with you.

When you arrive you will be seen by a doctor to check it is safe to administer the infusion. The doctor will explain the risks and benefits to you and will ask you to sign a consent form. A cannula will then be inserted into a vein in the back of your hand.

Before you have the rituximab infusion you will be given a dose of paracetamol (tablets) and two medicines through the cannula:

- chlorphenamine (an antihistamine also called Piriton®)
- methylprednisolone (a corticosteroid).

These all help to reduce reactions to the infusion (see page 5).

Half an hour after these medicines have been administered, you will be given the rituximab infusion. This takes about 4½ hours. You will need to stay in the Day Case Unit for around 6 hours altogether. You can bring a friend or relative to keep you company.

What will I need to take home with me?

You will be given an antibiotic (co-trimoxazole) during your rituximab infusion and will need to continue taking this for 6 months after the infusion. This helps to protect you from a particular lung infection called pneumocystis.

What side effects may I experience?

After the rituximab infusion you may experience some of the following:

- an allergic reaction, including skin reactions, low blood pressure or wheezing (around 1 in 100 people suffer these)
- increased risk of infections for around 6-9 months after each course of treatment.

Although this is very rare (less than 1 in 10,000 people), rituximab can cause a condition called Progressive Multifocal Leukoencephalopathy (PML). This is a serious viral brain infection which can be fatal. You should seek medical help immediately if you notice any of the following symptoms:

- pins and needles, weakness or difficulty moving your face arms or legs
- shaky movements or unsteadiness
- loss of vision
- difficulty in speaking or changes in your behaviour or mood.

What do I need to tell my kidney doctor before I have rituximab?

Please tell your kidney doctor if:

- you have had a reaction to rituximab or any other medications or vaccines in the past
- you have a current infection or have had one in the last 2 weeks
- you are pregnant or trying to become pregnant
- you have any significant heart or lung conditions, especially chronic infections such as bronchiectasis or tuberculosis.

What else do I need to know?

- You have an increased risk of developing an infection. Try to avoid people with infections, colds, flu or chicken pox. **If you have not had chicken pox before and are in contact with someone who has chicken pox, you should contact your kidney doctor immediately.**
- You should tell dentists, surgeons, pharmacists and other doctors that you have been treated with rituximab.
- Check with your kidney doctor before having any immunisations. **Immunisations with live vaccines are not safe and you should not have them without checking with your kidney doctor.**
- If you are a woman, you should use contraception for up to 12 months after your last infusion. If you do become pregnant within 12 months of having rituximab, please let your kidney doctor know as soon as possible. It is not known what harm this medication may cause to an unborn baby.
- Breastfeeding is not recommended for 12 months after a course of rituximab, as you could pass the medication to your baby through the breast milk.

- Let your doctor know if you develop a rash within 4 months of receiving rituximab.
- It is safe to drink alcohol within the Department of Health's recommended limits.

How will I know if rituximab is helping my kidney condition?

Your kidney condition may take several months to respond to the course of rituximab. You will be seen by your kidney doctor in clinic and have a blood and urine test 4-6 weeks after your last rituximab infusion.

Your kidney doctor will monitor your general wellbeing, kidney function, any signs of infection or inflammation and your level of antibodies.

Your kidney doctor will write to your GP, letting them know the results of your blood tests.

Where can I get further information?

Arthritis UK information group

Website: www.arthritisresearchuk.org/arthritis-information/drugs/rituximab/what-is-it.aspx

NHS Choices website on the condition systemic lupus erythematosus (SLE).

Website: www.nhs.uk/Conditions/Lupus/Pages/Symptoms.aspx

The Oxford Kidney unit for patients and relatives

Website: www.ouh.nhs.uk/OKU/

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

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