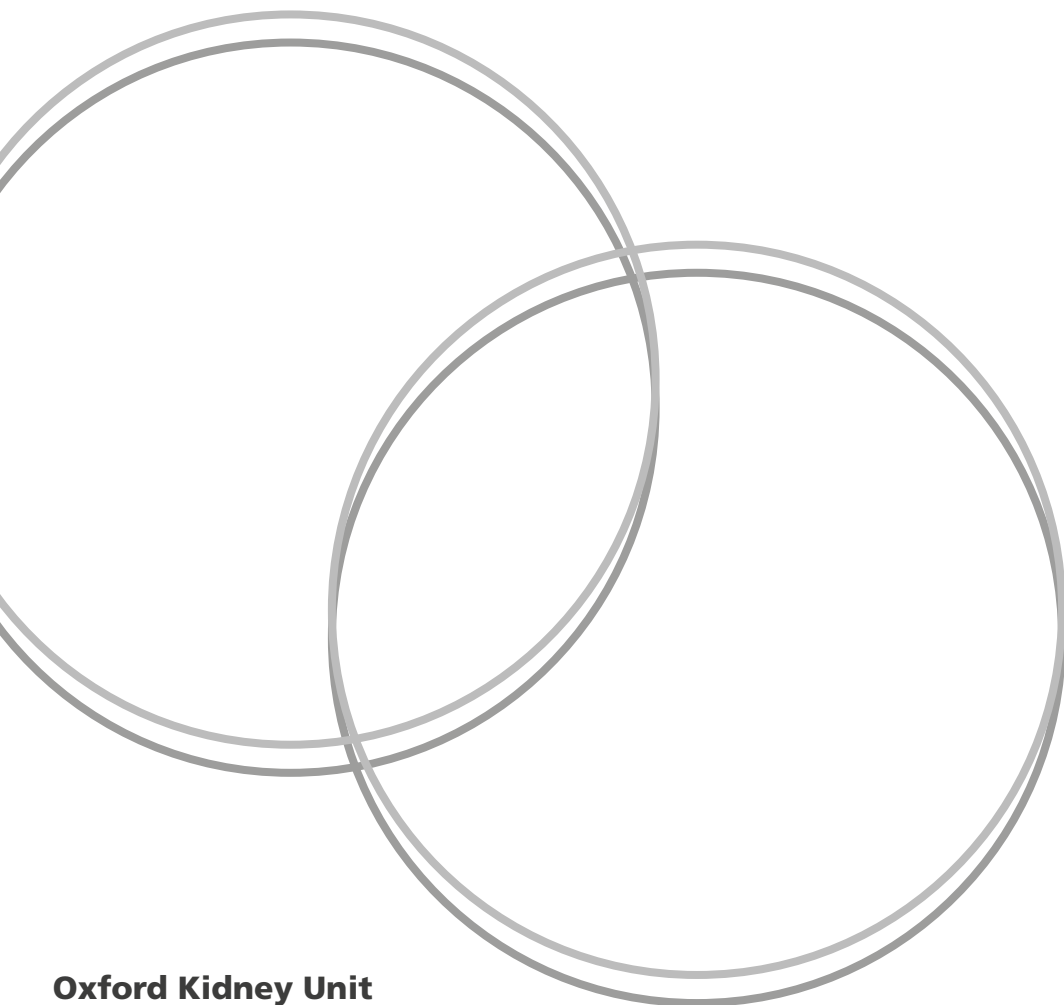


# Treating Kidney Diseases with Rituximab

Information for people being  
treated with rituximab





You have been given this leaflet as your doctor has prescribed you rituximab to treat your kidney condition.

## **What is rituximab?**

Rituximab (trade name Rixathon®) is a biological medicine, also known as a monoclonal antibody. Biological medicines are a group of newer medicines that directly target the immune system.

Rituximab works by removing a specific type of white blood cells in the body which are called B cells. The destruction of B cells in the body helps reduce the production of the antibodies that plays a role in your kidney condition.

## **Why am I being prescribed rituximab?**

The immune system has complex ways of defending you against infections, including making a particular form of white blood cells called B cells which produces a protein called an antibody.

Antibodies usually help the immune system to recognise bacteria and viruses invading your body and destroy them. However, there are diseases which cause the immune system to attack the healthy cells in your body. This is known as an autoimmune response and can cause your immune system to produce harmful autoantibodies, which can damage certain parts of your body.

There are a number of diseases in which the kidneys are damaged by this autoimmune process, such as:

- vasculitis
- systemic lupus erythematosus (SLE)
- membranous nephropathy.

Your kidney doctor will discuss with you and explain why rituximab is an appropriate treatment for you and the potential benefits for your kidney disease. Rituximab takes four to six weeks to work, therefore you may not notice any changes to your kidney condition straight away.

## **What are the risks and possible side effects of receiving rituximab?**

Rituximab is safe and well-tolerated for most people. However, rituximab has some potential side effects like any other medicines.

Common (around 1 in 100 people) short-term side effects of rituximab include:

- allergic reactions such as a rash, low blood pressure or shortness of breath
- feeling sick
- flushing
- low blood pressure
- flu-like symptoms such as chills, muscle aches, or fevers
- increased risk of infections for around six to nine months after each course of treatment as your immune system will take some time to recover.

Although this is very rare (less than 1 in 10,000 people), rituximab can cause a condition called progressive multifocal leucoencephalopathy (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.

## **Giving my consent (permission)**

Before you start the treatment, your doctor will explain the risks and benefits to you. If you decide to go ahead with the treatment, we will ask you to sign a consent form.

## **How is rituximab given?**

Rituximab is given as an intravenous infusion (a medicine given slowly into a vein using an infusion pump) through a cannula (small plastic tube) inserted into a vein in your upper arm.

The first two infusions are given two weeks apart. Your kidney doctor will review your kidney condition. In certain kidney conditions, if the treatment works well you may continue receiving six or twelve monthly infusions for up to two years.

## **What tests need to be done before I have the infusion?**

You will need to have blood tests to check your kidney function, liver function, full blood count, the presence of hepatitis B and C viruses and your immunity to it.

If you have an active hepatitis B or hepatitis C infection, you cannot be treated with rituximab. If the kidney doctor thinks that you are at risk from a previous hepatitis B or hepatitis C infection, they may also delay your rituximab treatment as rituximab increases the risk of reactivation of the hepatitis B and C viruses.

## **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 two 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 (TB).

## **What happens on the day of my rituximab infusion?**

You will need to arrive at the Renal Day Case Unit at the Churchill Hospital at the appointment time given to you. 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 for the course of the rituximab treatment. A cannula will then be inserted into a vein in your upper arm.

Before you have the rituximab infusion you will be given two medicines through the cannula:

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

You will also be given paracetamol orally prior to the rituximab infusion.

These all help to reduce the risk of you feeling unwell during the infusion (see page 5).

The first total infusion time takes about four and a half hours, this is slightly shorter for subsequent infusions. This is so that the doctor can assess you and explain the treatment. We will also carry out any tests that are needed, and arrange any medication supplies or appointments you might need.

A pharmacist will also go through all the medication changes with you to make sure you understand what medications you need to take. You will need to stay in the Day Case Unit for around six hours altogether. You may be able to bring a friend or relative to keep you company. Please phone the Renal Day Case before you arrive for your appointment for advice.

You will be given an alert card to carry with you so that, in an emergency, any health care professionals will know you have had a rituximab infusion and that your immune system may be reduced. Keep this with you at all times and for a year after the final infusion.



## Do I need to take anything else during the course of rituximab treatment?

- **Co-trimoxazole:** an antibiotic that helps preventing a particular type of lung infection called pneumocystis jiroveci pneumonia (PJP). You will need to take one tablet once daily and continue this for six months after the final infusion.
- **Prednisolone:** rituximab is often prescribed along with steroid tablets. Steroids are an essential part of the treatment for many kidney conditions. They work by helping to reduce inflammation in the kidneys. The length of time you need to take steroids for will depend on your kidney condition. If your doctor prescribes you steroids, they will talk to you about why you need them and how long you will need to take them for. You will also be given separate information about the side effects and what to look out for when taking them. We have a separate leaflet on steroids. Please ask a member of staff if you have not been given a copy.
- **Adcal-D3:** calcium and vitamin D supplementation that helps protect your bone health whilst you are on steroid tablets.
- **Omeprazole:** a medicine that helps protect your stomach and reduce the side effects from taking steroid tablets.

If you cannot take any of these medications because of an allergy or a medical condition, please speak with one of the kidney doctors, pharmacists or renal nurses.

## **Pregnancy and breastfeeding**

The potential risk of rituximab to an unborn baby has not been studied.

**Women** – you should wait for twelve months after finishing your last rituximab treatment before trying to become pregnant. It is important that you use a reliable form of contraception whilst receiving rituximab. You should discuss with your kidney doctor before trying for a baby.

It is uncertain whether rituximab is excreted in human milk, therefore you should not breastfeed if you are receiving rituximab because the drug may pass into breast milk and could be harmful to your baby. You should wait for twelve months after your last treatment before considering breastfeeding.

**Men** – few concerns have been raised on the use of rituximab by men who are trying for a baby. However, there is currently limited scientific data to rule out the potential risk completely. If you would like more information, please discuss this with your kidney doctor.

## **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 two 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.

## **Can I have vaccinations?**

You should avoid live vaccines, such as chickenpox (varicella), shingles or MMR vaccine. Pneumococcal, covid vaccinations and yearly flu vaccines should be given at least 4 weeks before the rituximab infusion.

Speak to your kidney team (doctor, pharmacist or nurse) if you require vaccination after receiving rituximab.

## What else do I need to know?

- You have an increased risk of developing an infection. Try to avoid people with infections and all viral illnesses, such as covid, flu and 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.
- Let your kidney doctor know if you develop a rash within four 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 four to six 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 more information?

### **NHS Website**

Provides information on systemic lupus erythematosus (SLE).

Website: [www.nhs.uk/Conditions/Lupus/Pages/Symptoms.aspx](http://www.nhs.uk/Conditions/Lupus/Pages/Symptoms.aspx)

Provides information on specific conditions.

Website: [www.nhs.uk/conditions/vasculitis/pages/introduction.aspx](http://www.nhs.uk/conditions/vasculitis/pages/introduction.aspx)

### **UK National Kidney Federation**

The UK National Kidney Federation is a national kidney charity run by patients with kidney problems and their carers, for kidney patients. It has more information about vasculitis.

Website: [www.kidney.org.uk/vasculitis](http://www.kidney.org.uk/vasculitis)

### **Oxford Kidney Unit**

Useful information about the Oxford Kidney Unit for patients and their relatives.

Website: [www.ouh.nhs.uk/oku](http://www.ouh.nhs.uk/oku)

## Contact details

### Renal Day Case Unit

Churchill Hospital

Telephone: 01865 226 106

8am to 6.30pm, Monday to Friday

(Please leave non-urgent messages on the answerphone)

### Renal Outpatient

Churchill Hospital

Telephone: 01865 225 355

8am to 5pm, Monday to Friday

### Renal Pharmacists

Churchill Hospital

Telephone: 01865 226 105

Email: [oxfordrenalpharmacists@ouh.nhs.uk](mailto:oxfordrenalpharmacists@ouh.nhs.uk)

9am to 5pm, Monday to Friday

(Please leave a message on the answerphone)

### Renal Ward

Churchill Hospital

Telephone: 01865 225 780

24 hours, including weekends and bank holidays



## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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August 2024

Review: August 2027

Oxford University Hospitals NHS Foundation Trust  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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