RITUXIMAB is used to treat rheumatoid arthritis, lupus (SLE), vasculitis and myositis.
Introduction

Rituximab is a drug that can help prevent your condition causing damage to your body. You can discuss the benefits and risks of taking rituximab with your healthcare professionals before you start treatment, so you’re able to make an informed decision.

What is rituximab and how is it used?

Rituximab is a type of drug known as a biological therapy. It’s also known by the names MabThera, Rixathon and Truxima.

The immune system normally works by protecting the body from infections. It does this by causing inflammation. But in some conditions, a group of cells in the body’s immune system, called B-cells, make proteins, which attack the body’s own tissues by mistake.

Rituximab fights these B-cells, which reduces your pain, inflammation and swelling. If rituximab works for you, you’ll probably start to feel better after about six weeks.

Rituximab can be prescribed by a consultant rheumatologist for:

- rheumatoid arthritis
- lupus (SLE)
- vasculitis
- myositis.

See Versus Arthritis booklets ‘Rheumatoid arthritis’, ‘Lupus (SLE)’, ‘Vasculitis’, ‘Myositis’. You can view all our information online at www.versusarthritis.org
Is rituximab suitable for me?

Rituximab won’t be started if:

- your condition isn’t active
- you haven’t tried other treatments for your condition first
- you have an infection.

Before you’re prescribed rituximab, doctors sometimes use a scoring system to work out how active your arthritis is.

The type of system used depends on what condition you have. However, many of the questions you’re asked will be the same. These include how well you feel on a scale of 0 to 10 and your doctor will make a note of how many of your joints are tender and swollen. You’ll also need blood tests before treatment starts. This is to assess your condition and check if the drug is suitable for you.

You won’t be treated with rituximab if you’re pregnant or breastfeeding. Your doctor may decide not to prescribe rituximab if:

- you have severe heart problems
- you get short of breath very easily
- your B-cell or antibody levels are low
- you have seronegative rheumatoid arthritis.

If you’re unsure whether or not you have seronegative rheumatoid arthritis, ask your doctor.

Before starting rituximab, you’ll have blood tests to check your antibody and B-cell levels. These tests may be repeated at least every six months and before you have any other doses of rituximab. You might need to have a lower dose if these tests show that your antibody levels are low.
Your doctor may also check for previous infections of hepatitis or tuberculosis (TB), as rituximab can increase the risk of these infections starting up again. Treatment can be given for these infections before starting rituximab, and if you get them while taking the drug.

If you have HIV, you won’t be able to take rituximab. People in groups at high risk of HIV infection will be given an HIV test before starting treatment.

People who have cancer or have a high risk of cancer might not be able to take rituximab, but your doctor will discuss this with you.

**When and how do I take rituximab?**

Rituximab is given in hospital, through a drip into a vein. This is known as an intravenous infusion. A doctor or nurse will do this, so they can check for any side effects while you’re taking rituximab.

The first infusion takes around six hours, but later infusions will take around two to four hours.

Usually, you’ll start treatment with two infusions of rituximab, given two weeks apart. The infusions are then repeated when the improvement is wearing off, or to stop a flare-up of your arthritis.

This can be anything from six months to a few years later. Many people need to have rituximab infusions at least once a year. It can be given weekly if you have vasculitis.

On the day of your rituximab infusion, you’ll probably take some steroids, paracetamol and a drug to relieve the symptoms of allergies or reactions, known as an antihistamine. This is to reduce the chances of you having a reaction to the medication.
Between infusions, you’ll have blood tests and see a specialist doctor or nurse every six months to check how you’re getting on with the treatment.

**Biosimilars**

Rituximab was originally only available as a drug called MabThera. More recently, two new versions of rituximab have become available. These are called Truxima and Rixathon.

These drugs are known as biosimilars and work in a similar way to the original form of rituximab. New versions of biologic drugs are becoming available all the time, so you may be prescribed rituximab under a different name.

If you’re currently taking MabThera and your rheumatology team suggests you change to Truxima or Rixathon, discuss this with them before any change is made.

**Possible risks and side effects**

A few people experience a fever, wheeziness, a rash or fall in blood pressure while they are having the infusion, or shortly afterwards.

If you start to feel unwell while you are having the infusion, let the person giving you the infusion know so they can slow it down. If your symptoms are bad, you may need to stop the treatment, but this is rare.

Rituximab affects your immune system, which can make you more likely to pick up some infections. Tell your doctor or rheumatology nurse straight away if you develop any new symptoms that concern you. This could be a sore throat, fever or other signs of infection.
You should also see your doctor if you develop chickenpox or shingles, or come into contact with someone who has them. These illnesses can be worse in people taking rituximab, and you will probably need to take anti-viral treatment.

After three or four infusions of rituximab, the levels of antibodies in your blood that protect you from infections may go down. This may not be a big problem, but it might mean your risk of infection increases.

Your doctor and rheumatology nurse will discuss this with you before deciding if you need any more treatment. They might recommend you stop rituximab for a while if you develop a serious infection.

In rare cases, people have reported having bad skin reactions up to four months after a rituximab infusion. You should tell your doctor or rheumatology nurse straight away if you develop a rash after starting rituximab.

Very rarely, patients treated with rituximab can develop a serious condition called progressive multifocal leukoencephalopathy (PML), which can damage the brain and spinal cord. You will need to see your doctor straight away if you have any of the following:

- pins and needles
- weakness, shaky movements or unsteadiness
- sight loss
- speech problems
- changes in behaviour or mood
- difficulty moving your face, arms or legs.

PML has only affected a very small number of people who have been treated with rituximab.
Tips to reduce your risk of infection

- Try to avoid close contact with people you know have an infection.
- Wash your hands regularly and carry around a small bottle of antibacterial hand gel.
- Keep your mouth clean by brushing your teeth regularly.
- Stop smoking if you’re a smoker.
- Make sure your food is stored and prepared properly.
- Try to keep your house clean and hygienic, especially the kitchen, bathrooms and toilets.

Taking other medicines

Rituximab is often given alongside other drugs, including methotrexate and steroids. You should discuss any new medications with your doctor before starting them, and tell anyone treating you that you’ve had rituximab.

You can carry on taking a non-steroidal anti-inflammatory drug (NSAID), such as ibuprofen, or painkillers if needed, unless your doctor tells you otherwise.

Don’t take over-the-counter or herbal remedies without talking to your doctor or rheumatology team first.

It’s recommended that you carry a biological therapy alert card. This will mean that anyone treating you will know that you’ve had rituximab and that your antibody levels may be low. You can get a card from your rheumatology team.
Let your doctor know if you take medication for high blood pressure or if you have taken other drugs that have affected your immune system.

Vaccinations

It’s usually recommended that people on rituximab avoid live vaccines, such as yellow fever. In certain situations, a live vaccine may be necessary, your doctor will let you know if this is the case.

Before starting rituximab, you might be offered a vaccination against hepatitis. You might also be offered the shingles vaccination (Zostavax), which you should have at least two weeks before starting rituximab.

If you haven’t had chickenpox, you may have the option to be vaccinated against this before you start treatment. Other people who live with you might be able to have this vaccination too, if they haven’t been exposed to chickenpox before.

If you’re on other treatments that affect your immune system, such as steroids, you might not be able to have these vaccines. Check with your rheumatology team.

Vaccines for flu and pneumonia can also be given while on rituximab, but it’s better if they’re given at least one month before an infusion.

Teenage girls can be given the vaccination against human papillomavirus (HPV) if they’ve already had the first dose before they start rituximab. If they’re already taking rituximab before having this vaccination, they might be able to take it in two or three doses at a later date.
Having an operation

If you need to have an operation, this will usually be scheduled for at least three months after your last infusion. Make sure your surgeon knows you’re on rituximab.

Alcohol

You can drink alcohol while on rituximab, but you should keep within the recommended limits for adults, which is a maximum of 14 units per week. Try to have alcohol-free days every week, and don’t save up units to drink in one go.

If you’re also taking methotrexate, you should keep well within these limits because methotrexate and alcohol can interact and damage your liver.

Fertility, pregnancy and breastfeeding

We don’t yet know how rituximab might affect an unborn baby. Current guidelines advise that people who have been taking rituximab should try to avoid becoming pregnant for at least six months after treatment.

If you do have rituximab treatment in early pregnancy, or before your pregnancy is confirmed, it’s unlikely to be harmful. Men who are trying to father a child can still take rituximab.

Rituximab can be passed on in breast milk and the effects on a baby aren’t yet known. This means you shouldn’t have rituximab if you’re breastfeeding.

This leaflet is a guide to rituximab, its benefits and potential side effects. If there’s anything else you’d like to know about this drug, just ask the healthcare professionals in charge of your care.
Thank you!

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