RITUXIMAB
is used to treat people who have rheumatoid arthritis, lupus, vasculitis and myositis
What is rituximab?
Rituximab is a type of drug known as a biological therapy. It can be given for:

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

Normally, the immune system creates inflammation to protect the body from infections. But, in some conditions, a group of cells in the immune system, called B-cells, cause unnecessary inflammation which damages the body’s healthy tissue.

Rituximab works by lowering the number of these B-cells, to reduce inflammation, pain, swelling and joint damage.

If rituximab works for you, you'll probably notice an improvement in your symptoms 8–16 weeks after you start treatment.

Who can take rituximab?
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 assess how many of your joints are painful or swollen and how it makes you feel. This helps them work out how active your arthritis is.

You'll also need blood tests or x-rays before treatment to see whether the drug is suitable for you.

Your doctor may decide not to prescribe rituximab if you have severe heart problems or you have breathing problems.

Before you are given rituximab, you'll have blood tests to check your antibody and B-cell levels. If these levels are low, you may be given a lower dose of rituximab.

Your doctor will also check whether you've had tuberculosis (TB) and hepatitis infections. This is because rituximab can increase the risk of these starting up again. If you test positive for either of these, you may need treatment before starting rituximab.

Your doctor may also suggest an HIV test. If you have HIV, you won't be able to take rituximab.

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

If rituximab isn't suitable, your doctor will discuss other treatment options with you.

How is it taken?
Rituximab is given in hospital, through a drip into a vein. This is known as an intravenous infusion. This is done by a doctor or nurse, so they can check if you have any side effects while you're taking rituximab.

Usually, you'll start treatment with two infusions of rituximab, given two weeks apart. Then your rituximab infusions will be repeated when it is starting to wear off or to prevent a flare-up of your arthritis. This can be anything from six months to a few years later.

The first infusion usually takes around six hours. Later infusions may take around four hours. But it can vary.
Many people need to have infusions at least once a year. If you have vasculitis, your treatment may be more frequent than this.

On the day of your rituximab infusion, you may be given steroids and paracetamol. You may also be given an antihistamine. Antihistamines are drugs used to ease symptoms of allergies or reactions.

Your doctor may recommend that you stop taking any drugs that lower blood pressure, known as antihypertensive drugs, for 12 hours before taking rituximab in case you have a drop in blood pressure during the infusion. Antihypertensive drugs include diuretics and vasodilators.

Between infusions, you’ll have blood tests. A specialist doctor or nurse will also check how you’re getting on with the treatment.

**Biosimilars**

Rituximab was originally only available as a drug called MabThera. However, newer versions of biological therapies are becoming available, so you may be prescribed rituximab under a different name, such as Truxima, Ruxience or Rixathon. These drugs are known as biosimilars and work in a similar way.

If your rheumatology team suggests that you change from one type of rituximab to another, you should discuss this with them first before any changes are made.

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**Side effects and risks**

Like all drugs, rituximab can sometimes cause side effects. But not everyone gets them.

Some common side effects include:

- headache
- fever
- night sweats
- vomiting
- low mood
- constipation
- cough.

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

If you start feeling unwell during your infusion, tell the person giving it to you. They can slow down the infusion, so the drug enters your body more gradually. It’s rare to have severe side effects but, if you do, the infusion may need to be stopped.

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 signs of infection. These include a sore throat or fever, or any other new symptoms that concern you.

You should also see your doctor if you develop chickenpox or shingles or come into contact with someone who has developed these illnesses.

These illnesses can be more severe if you’re taking rituximab. You may need to get treatment, and your rituximab may be stopped until you’re better.
**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.

In rare cases, some people have reported having severe 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.

**Carrying an alert card**

It’s recommended that you carry a biological therapy alert card so anyone treating you will know that you’re on rituximab. Ask your rheumatology team for a card.

**Effects on other treatments**

Check with your doctor before starting any new medications. Always remember to mention you’re on rituximab if you’re treated by anyone other than your usual healthcare team.

Tell your doctor if you’re taking, or have previously taken, drugs for high blood pressure or a treatment that could affect your immune system, such as chemotherapy or immunosuppressants.

Don’t use complementary treatments, such as herbal remedies, without discussing this first with your doctor or pharmacist as some of them could react with rituximab.

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

**Vaccinations**

It’s best to discuss vaccinations with your healthcare team before starting rituximab.

It’s usually recommended that people on rituximab avoid live vaccines such as measles, mumps and rubella (MMR), chickenpox and yellow fever. But sometimes a live vaccine may be necessary, so you should discuss this with your rheumatology team.

Ideally, vaccines should be given four weeks before, or six months after, treatment.

You might be offered a vaccination against hepatitis before starting rituximab if you’re thought to be at risk of this. You might also be offered the shingles vaccination (Zostavax), which you should have at least two weeks before starting rituximab.
The Zostavax shingles vaccine is a live vaccine and isn’t recommended for people once they have started taking rituximab. However, a non-live shingles vaccine, Shingrix, is available so you may be able to have this instead.

If you’ve never had chickenpox, it’s good to get a vaccination against it before starting rituximab. But discuss this with your rheumatology team first.

It’s also a good idea to get any family or household members vaccinated against chickenpox before you start taking rituximab.

It’s recommended that you have the vaccination against COVID-19. Ideally you should get the COVID-19 vaccine at least two weeks before starting rituximab or no sooner than 4–8 weeks after your treatment.

You’re also advised to have the pneumonia vaccine and yearly flu vaccine injection while taking rituximab. These vaccines are not live, so it’s safe for you to have them.

**Having an operation**

Depending on the type of surgery, your specialist doctor or surgeon may advise you to stop rituximab for a while before and after the operation. This is because rituximab affects your immune system, so there may be an increased risk of infection following surgery.

**Alcohol**

There’s no need to avoid alcohol while taking rituximab.

You’re advised to stick within the guidelines of drinking no more than 14 units a week and that they should spread them out over the course of the week. In some cases, your doctor may advise lower limits.

**Fertility, pregnancy and breastfeeding**

If you’re planning to try for a baby, if you become pregnant, or if you’re thinking of breastfeeding, it’s a good idea to discuss your treatment with your doctor.

Because rituximab is a relatively new drug, we don’t yet know how it might affect pregnancy or an unborn baby. So, you’ll usually be advised to stop rituximab six months before trying to have a baby. If you’re a woman of childbearing age, it’s a good idea to use contraception while taking rituximab and for six months after you finish your treatment.

Tell your rheumatology team if you become pregnant whilst taking rituximab. If you accidentally take rituximab early in your first trimester, it’s unlikely to be harmful.

We don’t yet know whether rituximab can pass into breastmilk, so current advice is not to breastfeed while taking this drug.

It is considered safe for men to continue taking rituximab while trying to father a baby.
**Where to go for more information**

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.

You can also call our free helpline on 0800 5200 520, where our trained advisors can offer information, support and advice on your type of arthritis.

Visit our website www.versusarthritis.org to find out more.

**Thank you!**

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