

# Rituximab

## Rituximab

This patient information leaflet is for patients who have been prescribed rituximab by the renal team. The leaflet is not meant to replace talking to your doctor about your condition or treatment. Please speak to your doctor if you have any questions about your treatment with rituximab.

## What is rituximab?

Rituximab is a medicine used to reduce the activity of the immune system. It is also used in the treatment of certain cancers.

## The immune system

The immune system makes antibodies and immune cells, which are in the blood to help your body to fight infections, such as those caused by bacteria and viruses. In certain illnesses the immune system becomes too active and fights the person's own body instead of helping to protect it. These kinds of diseases are called auto-immune diseases. Two examples of an auto-immune disease are Systemic Lupus Erythematosus (SLE) and Vasculitis.

## How does rituximab work?

B cells are a type of white blood cell found in your blood and are involved in making the antibodies. Rituximab works by removing these B cells from the blood for several months. After this time, levels will slowly return to normal. Clinical trials have shown that following the removal of B cells there is an improvement in diseases, such as SLE and vasculitis.

## Does rituximab work?

Research has shown that rituximab has a major benefit for 80% of patients. It allows other immunosuppressive drugs (cyclophosphamide, mycophenolate mofetil etc.) to be stopped and reduce steroids to a safer level. Patients receiving rituximab have fewer hospital admissions and improved quality of life

Rituximab has also been shown to help reduce relapses in patients with membranous nephritis and minimal change disease.

## What I should tell my doctor before treatment with rituximab?

Tell your doctor about all your medical conditions, including:

- If you have had a bad reaction to rituximab in the past or are allergic to similar products;
- If you are pregnant or breastfeeding;
- If you could be pregnant or are planning to have a baby. This is important for men and for women.

## Also tell your doctor:

- If you have heart or lung problems (angina, palpitations, heart failure, breathlessness)
- If you have an infection (even a mild one, such as a cold) or have suffered from lots of infections in the past
- If you think you have or have had a hepatitis infection

- If you have just had or are going to have a vaccination, i.e. flu, hepatitis b, etc.
- If you are going to have surgery
- If you are taking blood pressure tablets - these sometimes need to be stopped as your blood pressure can drop while having rituximab

## How is rituximab given?

Rituximab is given as an infusion into a vein. You will be prescribed other medications before the infusion to prevent pain, reduce fever and any reduce other side effects that can be caused by the infusion.

The first infusion takes up to 6 hours and is often given on the Renal Day Case unit. Please bring lunch with you.

## How long does rituximab take to work?

Rituximab takes about 4-6 weeks to work and depending on your renal disease. The effect of rituximab usually lasts for between six and nine months. The first two doses are given two weeks apart. Further treatment will be assessed by your consultant, if necessary.

## What are the possible side effects of rituximab?

For most people, rituximab is safe and well-tolerated and they have very few side effects. Over half a million patients worldwide have received rituximab and serious side effects are very rare. Side effects can begin during the first dose of the drug and may continue for a few hours afterwards, but are usually milder with further doses.

## Side effects may include:

- Flu like symptoms.
- Low blood pressure
- Sickness (nausea).

- Allergic reactions, skin rashes and breathlessness (let the nurse or doctor know immediately if you experience any of these)
- Lowered resistance to infection.
- Rituximab may worsen heart problems for people who have significant heart disease.

More than 1 in 100 people who have rituximab may get one or more of the following side effects:

- bronchitis
- depression
- diarrhoea
- feeling anxious
- feeling dizzy
- gastroenteritis
- gastro-oesophageal reflux
- hair loss
- high levels of cholesterol in the blood
- indigestion
- joint problems
- migraine
- mouth ulcers
- muscle, joint or bone pain
- osteoarthritis
- paraesthesia (sensation of tingling, burning, pricking, or numbness of a person's skin)
- sciatica

Despite this list of side effects, over half a million patients worldwide have received rituximab and serious side effects have been rare. For the great majority of patients, rituximab is safe and well-tolerated.

**If you notice any side effects, either listed in this leaflet or not, please tell the nurse or doctor immediately.**

## Susceptibility to Infection

There is a theoretical risk of increased infections after rituximab but this is very rare. However, you should be aware of and seek medical advice if you have any of these symptoms:

- Fever
- Cough
- Sore throat
- Burning pain when passing urine
- Diarrhoea
- Generally feeling weak or unwell.

Please also avoid any unnecessary contact with people known to have an infection.

## Can I take other medicines along with rituximab?

Tell your doctor if you plan to take any new medicines before starting them. Also tell any other doctor treating you that you are taking rituximab. Rituximab can interfere with the blood thinning drug warfarin.

**Do not** take any 'over-the-counter' medicines or herbal remedies without first discussing it with your kidney doctor or pharmacist.

## Complementary preparations and vitamins

Medicines can interact with complementary preparations and vitamins. If you are planning to take or are already taking any complementary preparations and vitamins, you should ask your doctor whether there are any known interactions with rituximab.

If you experience any unusual effects while taking rituximab in combination with complementary preparations and vitamins, you should tell your doctor, nurse or pharmacist.

## Vaccinations while on rituximab

Tell your doctor/nurse you are receiving rituximab. If vaccinations are needed they should be given at least two weeks before rituximab.

**Live** vaccines, such as rubella (German measles), MMR, yellow fever, BCG, typhoid and polio should **not** be given.

## Can I drink alcohol?

Yes, in moderation as there are no known interactions between alcohol and rituximab. Follow the government's recommended safe limits for alcohol of one or two units a day with a maximum weekly limit of 14 units.

## Diet

There are no specific foods that you must exclude from your diet when having rituximab. The renal dieticians can be contacted for advice if required on 01392 402524.

## Driving and operating machinery

When taking any medicine, you should be aware that it might interfere with your ability to drive or operate machinery safely. Like all medicines, rituximab can cause side effects. You should see how this medicine affects you and then judge if you are safe to drive or operate machinery. If you are in any doubt, talk to your doctor.

## I am thinking of having a baby.

It is not known if rituximab harms an unborn baby, or how long to wait after treatment to try to conceive. We would generally recommend a gap of at least 12 months after the end of rituximab treatment and trying for a baby. Please let the doctor know if you think you are pregnant or are thinking of becoming pregnant in the near future or if you are not using contraception.

If you are a man and wish to start a family, we would suggest waiting for 12 months before trying for a baby. Please let the doctor know if this is something you are thinking about.

## Breastfeeding

Certain medicines can pass into breast milk and may reach your baby through breastfeeding.

Women who are having rituximab **should not** breastfeed during treatment and for at least 12 months after having the last dose of rituximab.

## Contact details

Renal day case 01392 404792 Monday – Friday  
8.30-4.30

Creedy Ward 01392 402591

Or please call your consultants secretary via  
switchboard 01392 411611

## References

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