



Renal Department

Raigmore Hospital

Inverness

Information for patients

Treatment of diseases affecting the kidney using Rituximab

“Working with you to make Highland the healthy
place to be”

This information has been written by the medical and pharmacy team to give you some information about the treatment we are recommending for you. A member of staff will be happy to discuss this leaflet with you and answer any questions you or your family may have.

What is Rituximab?

Rituximab (trade name Truxima[®]/Rixathon[®]) is one of the newer 'biological' medicines known as a monoclonal antibody. This type of medicine is produced to target specific cells in the body. It works by removing a type of blood cell called the B cell, which is involved in the making of antibodies by the immune system.

How does it work?

The immune system produces antibodies and immune cells to attack viruses and bacteria. In autoimmune conditions, such as lupus or vasculitis, there is abnormal activity of the immune system and B cells. After you have been given rituximab, we expect that your B cells will become undetectable in the blood for several months and then slowly return to normal levels. Clinical trials have shown that the loss of B cells is followed by improvement in lupus and vasculitis.

Why am I being prescribed rituximab?

At present it is only licensed for the treatment of patients with active granulomatosis with polyangiitis and microscopic polyangiitis. However, it may be used at the discretion of your consultant for other autoimmune diseases such as systemic lupus erythematosus (SLE), membranous nephropathy, relapsing steroid sensitive minimal change disease.

Rituximab will not be prescribed if:

- You have previously had a bad reaction to rituximab
- You have a severe active infection
- You have, or have had, hepatitis B infection

Your doctor may decide not to prescribe rituximab if you have a history of heart disease (such as angina, palpitations or heart failure), want to become pregnant or are breastfeeding.

When and how do I take rituximab?

Rituximab is given by a nurse by an intravenous infusion through a drip into a vein. You will usually be given 2 doses in total and this counts as one course of treatment. You will have 2 weeks between your doses. You will need to go into hospital, for a few hours, on each occasion, but will usually not have to stay overnight.

You will receive an appointment letter from the infusion suite telling you what time to arrive at hospital.

Before you have the drip, you will be given medicines to prevent or reduce fever or allergy each time. These are a steroid drip, an antihistamine injection and some paracetamol tablets.

You will be given your rituximab infusion over 3 to 4 hours. Some conditions require the treatment to be repeated 6 monthly.

What are the possible side effects?

Before starting this medication, you need to be aware of the side effects. Please note most patients suffer no or only minor side effects with rituximab. Side effects of rituximab fall into two groups:

- 1. Infusion related side effects:** these occur during the infusion or within a few hours of the drug being given
- 2. Later side effects** which occur after a few days or weeks of treatment

Infusion related side effects

Infusion related side effects are common and occur during the infusion or within a few hours of it being given. They are usually mild or moderate and can usually be treated by slowing or stopping the drip until you feel better. When you feel better the drip can be continued. These reactions are less likely to happen after the first infusion.

You will be closely monitored during your infusion, but it's very important to tell your nurse or doctor if you feel unwell or have any of the following symptoms:

- Flu like symptoms, such as headache, feeling flushed, having a fever, chills or dizziness
- Nausea
- Red, warm and itchy bumps on the skin (like nettle rash)
- A feeling of swelling in the lips, tongue or throat
- Wheezing, a cough or sudden difficulty breathing
- Pain in your back or tummy
- A tight chest or chest pain

Sometimes an infusion related reaction can happen a few hours after treatment. If you develop these symptoms or feel unwell when you get home, contact the hospital straight away for advice.

Other medical conditions that you have such as heart disease may be affected, and we will monitor you for that.

Late side effects

- **Infection.** As the body's immune system is suppressed, resistance to infection is reduced. If you develop signs of infection your doctor should be consulted.
- **Reduced circulating antibody levels.** This may promote the development of infections
- **Reactivation of previous hepatitis B infection.**
- **Viral infection of the brain.** Very rarely, some patients taking rituximab have had a serious brain infection (called Progressive Multifocal Leukoencephalopathy), which has been fatal.
- **Skin reaction.** Very rarely, severe blistering skin conditions that can be life-threatening can occur, such as inside the mouth, genital areas or eyelids. If you develop these symptoms contact your doctor immediately.

You should seek immediate medical attention if you experience any of the following symptoms after treatment with rituximab:

- Fever, persistent cough, weight loss or listlessness
- Confusion, memory loss or problems thinking
- Loss of balance or a change in the way you walk or talk
- Decreased strength or weakness on one side of the body
- Blurred or loss of vision

Despite this list of side-effects, over 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.

How long will rituximab take to work?

It may take 6 weeks before we see a response to rituximab, and you may not feel any benefit for a few weeks. How long you have rituximab for will depend on your response and will be determined by your consultant.

Do I need any special checks while on rituximab?

You will have blood tests and a chest X ray prior to treatment and then further monitoring blood tests after treatment

Can I take other medicines along with rituximab?

You should discuss any new medications with your doctor before starting them, including medicines obtained without a prescription and herbal medicines. In particular, tell you doctor:

- If you are taking medicines for high blood pressure. You may be asked not to take these 12 hours before you are given rituximab. This is because some people have a fall in their blood pressure while they are being given rituximab
- If you have ever taken medicines that affect your immune system – such as chemotherapy or immune-suppressive medicines.

You should also tell any other doctor/ nurse treating you that you are taking rituximab.

Are there any other special precautions?

We recommend that you attend your GP practice for pneumococcal and annual influenza vaccine. It is better that you have them at least 4 weeks before rituximab or seven months after but if this is not possible you should still receive them as there will still be some benefit. You should avoid “live vaccines”, which include vaccines such as yellow fever, shingles, polio, and MMR - please ask your GP or practice nurse to check that your vaccines are not live and are safe for you.

Planned operations should ideally be scheduled for at least one month after your last infusion. Therefore, it is important to tell your surgeon or dentist if you have had Rituximab or planning to receive it. Rituximab may increase your risk of infection after surgery or dental work.

Rituximab reduces your ability to fight infections, if you have a chronic infection, have had TB or a history of recurrent infection please let your doctor know before you receive Rituximab. If you have not had chickenpox before and you come into contact with someone with chicken pox, you should contact your doctor immediately.

May I drink alcohol while taking rituximab?

Yes, in moderate amounts.

What if I am thinking of getting pregnant?

No one knows the risk of rituximab to an unborn baby. Women and men of child-bearing age must use contraception while on rituximab. Do not take rituximab if you are thinking of becoming pregnant in the near future or if you are not using contraception.

Since it is unknown whether rituximab would harm an unborn baby, it is also unknown whether it is safe to try for a baby shortly after having rituximab treatment. For female and male patients, we would recommend a gap of 12 months after your last treatment with rituximab before trying for a baby.

What about breastfeeding?

Do not breastfeed while on rituximab, or for 12 months after your last treatment. Rituximab may pass into the breast milk and no one knows the risk to the baby.

Where can I obtain further information?

If you would like any further information about rituximab, or if you have any concerns about your treatment, you should discuss this with your Renal Consultant (Renal Unit telephone number 01463 704483).

This leaflet is also available in different formats. These include large print and different languages. To get the leaflet in another format please contact the Renal Unit on telephone number 01463 704483.

Authorship

This document was produced by the Renal team in Raigmore Hospital in October 2019 (Issue No.2). This patient information is based upon the patient information leaflet used at Salford Royal NHS Foundation Trust, where it was produced by their Renal team in 2011.

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