**Renal Department: Vasculitis and Lupus Clinic**

**Rituximab**

**What is rituximab?**

Rituximab (trade name MabThera) is one of the newer ‘biological’ drugs. It is a drug known as a monoclonal antibody, which are synthetic drugs aimed at specific targets 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 taking rituximab, B cells 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. (Vasculitis and Lupus are diseases, affecting all ages, caused by abnormal activity of the immune system resulting in inflammation and damage to multiple parts of the body).

**Why am I being prescribed rituximab?**

Rituximab can be used where disease is severe and has not responded to other more conventional treatments. At present it is licensed for use in a related autoimmune disease called rheumatoid arthritis. However, it may be used at the discretion of your consultant for other diseases such as rheumatoid arthritis, systemic lupus erythematosus and vasculitis.

Rituximab will not be prescribed if:

- You have not tried standard treatments first (except in clinical trials)
- **You are wanting to become pregnant or are breast feeding**
- You have previously had a bad reaction to rituximab

Your doctor may decide not to prescribe rituximab if you have a history of heart disease, if you want to become pregnant or are breast feeding.

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

Rituximab is given by intravenous infusion (that is, as through a drip into a vein) as a two dose course of treatment with a two week interval between doses. You will need to go in to hospital, for a few hours, on each occasion.
You will be given medicines to prevent or reduce fever or allergy each time. The drug is infused over three to four hours on each visit. A repeat dose of rituximab is then given every six months.

How long will rituximab take to work?

The response to rituximab is often evident only after about six weeks. The duration of your rituximab treatment will depend on your response and will be determined by your consultant.

What are the possible side effects?

- Within the first two hours of the infusion you may develop fever, chills and shivering.
- Other side effects uncommonly seen during infusion are itching of your skin, sickness, tiredness, headache, breathing difficulties, sensation of the tongue or throat swelling, itchy, runny nose, flushing, back pain and irregular heart rate, although the nurses looking after you will be monitoring you closely. Pre-existing conditions such as heart disease may be affected. The frequency of these reactions decreases during subsequent infusions.
- Rituximab may rarely also cause abnormalities of your blood and affect liver function.
- There is a theoretical risk of increased infections after rituximab but this is very unusual in practice.
- Other undesirable effects have been recorded after administration of rituximab. Most are mild and serious complications are fortunately rare. However, the adverse effects recorded include: rashes, difficulty sleeping, pain in muscles and joints, pain at the infusion site, anxiety, dizziness, tingling or numbness in hands or feet, sweating, abnormal taste, cough, reactivation of viral infection (for example, cold sores), heart problems.

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.

Do I need any special checks while on rituximab?

You will have a physical examination and blood tests 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, and you should also tell any other doctor treating you that you are taking rituximab. Rituximab can interfere with the blood thinning drug warfarin.
Do not take ‘over-the-counter’ preparations without first discussing it with your doctor, rheumatology nurse or pharmacist.

**Can I have immunisations while on rituximab?**

If immunisations are desirable they should be given at least two weeks before rituximab. Live vaccines should be avoided.

**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 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 patients, we would generally recommend a gap of 12 months between having rituximab and trying for a baby.

**And what about breastfeeding?**

Do not breastfeed while on rituximab. It is not yet known whether rituximab could 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 consultant, specialist vasculitis nurse or pharmacist.

**Contact details**

Stella Burns and David Jayne  
Vasculitis and Lupus Clinic  
Box 118  
Addenbrooke’s Hospital  
Cambridge  
CB2 0QQ  
Telephone: 01223 217259
Patient Information

We are a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:

If you would like this information in another language or audio, please contact Interpreting services on telephone: 01223 256998, or email: interpreting@addenbrookes.nhs.uk For Large Print information please contact the patient information team: patient.information@addenbrookes.nhs.uk

Document history
Authors: Dr David Jayne and Stella Burns
Pharmacist: Olivia Kanka
Department: Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ www.cuh.org.uk
Contact number: 01223 217259
Publish/Review date: October 2019/October 2022
File name: Rituximab.doc
Version number/Ref: 6/PIN1090/Document ID 1122