

PHARMACY

Drug Information

RITUXIMAB (Non-oncology)



What is Rituximab?

- Rituximab is a type of medicine called biologic disease modifying anti-rheumatic drugs (bDMARDs) which works by targeting a type of blood cells, called B cells. Normally, B cells protect us from infection by producing antibodies that attack foreign objects like bacteria. However, when B cells become abnormal, the antibodies may attack the body's own tissues instead.
- Rituximab helps to deplete the B cells in the body, and this has shown to result in an improvement and control of rheumatic diseases.
- Rituximab is approved for use in patients with active rheumatoid arthritis despite treatment with other standard drugs. It is mainly used for patients who are either unable to use anti-tumor necrosis factor (anti-TNF) drugs or show limited response to the treatment. It may also be used with the approval of your doctor for other diseases such as systemic vasculitis and systemic lupus erythematosus (SLE).
- Rituximab was originally only available as a brand called MabThera. Recently, a new formulation of rituximab called Truxima (a biosimilar drug) has become available. Truxima works in a similar way to MabThera.

How is Rituximab Administered to a Patient?

- Rituximab is given to a patient as an intravenous infusion (i.e. a drip into a vein) in the hospital. Each infusion will take several hours. A course of treatment usually consists of two doses given two weeks apart. The course may be repeated if there are signs that the improvement in disease control is wearing off.

How Long Does It Take for Rituximab to Work and What Monitoring is Required?

- It may take several weeks after each course of Rituximab treatment before any clinical improvement is observed. The full effect usually occurs by the third month and can last up to nine months or more.
- Blood tests will be required during your Rituximab treatment to monitor your condition and to determine the effectiveness of the treatment. The frequency of blood tests depends on other medications and medical conditions you have.

Before Receiving Rituximab, You Should Inform Your Doctor if You Have:

- An infection
- Hepatitis B or C
- Heart disease or high blood pressure
- A scheduled surgery
- Other long-term medicines including prescriptions and over-the-counter medicines, supplements or traditional/herbal remedies. It is also important to inform other doctors whom you may consult (e.g. your family doctor) that you have received Rituximab.

What are the Important Side Effects of Rituximab?

- Most patients tolerate Rituximab well without experiencing any significant side effects. The most common side effects are low blood pressure, nausea, runny nose or sore throat during and immediately after infusion.
- Side effects may occur during the first two hours of the infusion (called infusion reaction) or later after the infusion. If you experience other side effects not mentioned below or feel unwell, please inform your doctor.

Side Effect	Management
Infusion reaction (e.g. fever with chills, drop in blood pressure, itching with flushing, fast heartbeat, shortness of breath)	Medications such as paracetamol, corticosteroids and anti-histamines may be given before the infusion to reduce the risk of an infusion reaction.
Infections (Warning signs: fever more than 38°C, chills, cough, painful urination, blood in urine, tiredness)	Seek medical attention immediately. The doctor whom you consult with should be informed that you have received Rituximab.
Hepatitis B reactivation (Warning signs: Yellowing of the whites of your eyes)	Consult your doctor immediately. Your doctor will do blood tests to check if this side effect occurs.

Side Effect	Management
or skin, dark or tea-coloured urine or constant abdominal pain)	
Rare: Progressive Multifocal Leukoencephalopathy (PML) (A rare virus infection that can damage the brain and spinal cord)	If you start showing signs of weakness or unsteadiness, speech or visual problems, behavioural or mood changes, please seek medical attention immediately.
Severe skin reaction (Warning signs: painful mouth and lip sores or ulcers, blisters, peeling of skin, rashes, bumps)	Seek medical attention immediately.

If you develop rashes, swelling of the face or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

Are There Any Special Precautions That I Need to Take?

Vaccinations

- You should not receive live vaccines e.g. MMR (measles, mumps and rubella), OPV (oral polio vaccine), varicella/chickenpox, yellow fever or BCG (tuberculosis) when you are on Rituximab. Influenza and pneumococcal vaccines are recommended, but it is best if the vaccine is given at least one month before beginning a course of Rituximab. For vaccinations against hepatitis B, shingles and those for young ladies (up to the age of 26), human papillomavirus (HPV) can be considered. Please discuss your vaccination plans with your doctor.

Pregnancy and Breastfeeding

- If you are pregnant or planning to conceive, you should not use Rituximab as there is limited information about its effects on unborn babies. Females of reproductive age should use effective birth control when receiving Rituximab and for the immediate 12 months after it is given. Breastfeeding should also be avoided when receiving Rituximab and for six months after the last dose.

If you have any problem with your treatment, please contact your doctor, pharmacist or rheumatology nurse clinician.

