RITUXIMAB

What are Biologics?

- Biologics are a new class of DMARD (Disease Modifying Anti-Rheumatic Drug) which have been available for over 10 years now.
- Biologics are most commonly used in the treatment of inflammatory arthritis including rheumatoid arthritis, psoriatic arthritis & ankylosing spondylitis. However, they have also been used to try to treat a variety of other autoimmune rheumatic conditions.

What is Rituximab?

- Rituximab is a biologic, a newer class of DMARD (Disease Modifying Anti-Rheumatic Drug) While in class of biologics like TNF antagonists, Rituximab does not work in the same way.
- Rituximab is primarily used in the treatment of inflammatory arthritis such as rheumatoid arthritis, but has also been used to treat a variety of other rheumatic autoimmune diseases.

What is the typical dose? How often do you take them?

- Rituximab is typically given through an intravenous infusion twice, 2 weeks apart, at a dose of 1000mg. It is usually re-administered between 6-12 months later, depending on its effectiveness.

How does Rituximab work?

- The immune system is made up of many different parts. By interfering with the correct part, it is possible to decrease the inflammation being caused by rheumatoid arthritis and similar diseases.
- For rituximab, it binds a molecule on the surface of B cells, blocking their action and modulating the immune system’s response. This decreases inflammation, reduces pain, and improves function.
What are B cells? Don’t I need them to work?

- B cells are an important part of the body's immune system, including making antibodies to fight infections. Rituximab binds a molecule named CD20. CD20 is on most B cells, but not B cells that are immature or fully matured. By targeting this specific part of B cells, it allows the immune system to only be mildly suppressed while allowing the medication to control your autoimmune condition.

How soon will I feel the effects of Rituximab?

- Rituximab can take at least 3-4 months before starting to gain benefit.

If I start Rituximab, can I stop all my other DMARDs?

- Most rheumatologists will suggest you continue with at least methotrexate, assuming you have not had side effects, in addition to most Biologics, including rituximab. Studies have shown that Biologics work significantly better when combined with methotrexate.
- Keep in mind: In most instances, your rheumatologist has recommended you start a Biologic because your inflammatory arthritis has not been well controlled. It is important to try to control your disease as best as possible first, which may mean continuing all DMARDs for some time, before trying to decrease them.

What should I do if I miss a dose?

- If you miss your dose, let your physician know right away to see if they can arrange a new infusion time, if appropriate to do so.

What are the possible side effects of Rituximab?

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<td>Intravenous Infusion Reactions</td>
<td>If severe, the medication is stopped. However, certain medications can be given to prevent similar reactions from re-occurring.</td>
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### Side Effect | Ways to Reduce Side Effects
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- Rituximab may increase your risk of developing severe infections, particularly lung infections.  
  Although rare, there have been reported cases of a serious viral brain infection. | - Let your physician know if you are sick when you are supposed to receive your infusion. They may discuss postponing your infusion until you are better.  
  Fevers and other severe illness should not be ignored. Discuss this with your doctor.
- Skin reactions | - Let your doctor know if you notice any skin changes even a few weeks after your infusion.
- Viral Hepatitis | - There may be some risks associated with taking rituximab and certain types of hepatitis. Let your doctor know if you have ever been diagnosed with hepatitis.
- Medication Interactions | - Let your doctor know if you take medication for blood pressure.  
  - Live vaccines should be avoided.  
  - Discuss vaccinations with your rheumatologist.  
  - Live vaccines should be given prior to starting Rituximab.

*For more information about rituximab, or for questions that are specific to your situation, always consult your physician.*