

# Belimumab (Benlysta)

Belimumab is an immunosuppressant drug approved by the FDA for the treatment of lupus and lupus nephritis in children and adults. Belimumab is used in combination with other lupus drugs such as hydroxychloroquine and steroids. Belimumab treats people with mild or moderate lupus affecting the blood, skin, joints, and kidneys. It works against a protein that triggers certain cells in the immune system to attack different parts of the body.

## How To Take It

Belimumab can be given as an infusion or injection. When given by infusion, the medication is administered through an IV that is inserted into a vein. The infusion is given in a healthcare facility and lasts about one hour. The dose is based on your weight. Infusions are every two weeks for the first 3 doses and every four weeks, thereafter. Belimumab may take 12 weeks to take effect, but it can take longer in some patients.

Belimumab is also available as an autoinjector (i.e. self-injection). This means you can give the medication to yourself by injecting it under the skin once a week. The autoinjectors are preloaded with 200 mg of medication. The injection dose is based on the treatment of lupus or lupus nephritis.

## Side Effects

Common side effects of belimumab include fever, diarrhea, nausea, muscle aches, headache, trouble sleeping, and infections, such as colds, bronchitis, and urinary tract infections. You may also experience redness, itching, or swelling at the site of your injection. Having a foreign object, such as a needle, put into your veins (infusion) can also be a source of infection.

Belimumab can lower the number of white blood cells in the blood of some people. It can also cause you to feel down and have thoughts of harming yourself, especially if you have a history of depression.

To know if belimumab is causing side effects, keep track of how long the symptoms last and whether they come back after your next infusion or injection. If so, discuss this with your rheumatology provider.

## Tell Your Rheumatology Provider

Before taking belimumab, tell your rheumatology provider if you plan to become pregnant. It is unknown if belimumab is safe for pregnant women to take. You should not try to become pregnant or breastfeed while taking this drug. If you do become pregnant, immediately tell your doctor.

Tell your rheumatology provider if you have an infection, a history of cancer, or a history of depression. Belimumab can increase the risk of getting cancer, infections, and depression. Make sure your doctor knows if you have any concerns or new symptoms while taking belimumab.

Many vaccines, such as the flu shot, pneumonia shot, and new shingles vaccine (Shingrix), are safe while taking belimumab; but others, such as live vaccines (Zostrix), are not. Talk to your doctor about getting vaccines before starting belimumab.

*Updated February 2024 by Kiren Sahni, DO, FACR, and reviewed by the American College of Rheumatology Committee on Communications and Marketing.*

*This information is provided for general education only. Individuals should consult a qualified healthcare provider for professional medical advice, diagnosis, and treatment of a medical or health condition.*