Belimumab (Benlysta®)

This sheet is about exposure to belimumab in a pregnancy or while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is belimumab?

Belimumab is a prescription medication used to treat systemic lupus erythematosus (SLE). Belimumab is prescribed to people who have active SLE and who are receiving other lupus medications. Belimumab is a type of protein known as a monoclonal antibody and has also been referred to as a “biologic”. Belimumab is sold under the brand name Benlysta®. MotherToBaby has a sheet on lupus available at: https://mothertobaby.org/fact-sheets/lupus-pregnancy/.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

I am taking belimumab, but I would like to stop taking it before becoming pregnant. How long does the drug stay in my body?

People eliminate medications at different rate. In healthy adults, it takes up to 4 months, on average, for most of the belimumab to be gone from the body.

I take belimumab. Can it make it harder for me to get pregnant?

Studies have not yet been done to see if belimumab could make it harder to get pregnant.

Does taking belimumab increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Based on animal studies done by the manufacturer, and a case series and one study in humans, belimumab is not expected to increase the chance for miscarriage. Lupus itself might increase the chance of miscarriage.

Does taking belimumab increase the chance of birth defects?

Every pregnancy starts with a 3-5% chance of having a birth defect. This is called the background risk. Animal studies done by the manufacturer (with doses higher than the recommended dose used in people) did not show an increase in birth defects after exposure to belimumab. In humans, two case series and one study have not found an increased chance for a pattern of birth defects.

Could taking belimumab in pregnancy increase the chance of other pregnancy related problems?

It is not known if belimumab can cause other pregnancy complications, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). One study did not find an increased chance for pregnancy related problems. Active lupus, itself, may increase the chance of pregnancy complications such as preterm delivery and poor growth of the baby.

Could taking belimumab during pregnancy have any effect on my baby after birth?

It is not yet known if belimumab can have an effect on the baby after birth. Monoclonal antibodies, such as belimumab, cross the placenta during the third trimester of pregnancy and in theory might affect the baby’s immune system (the system in the body that helps fight off infections). One small study did not find a risk for leukopenia, lymphopenia, neutropenia, or thrombocytopenia in the days after birth. Animal studies done by the manufacturer showed a weakened immune system in the offspring of females exposed to belimumab during pregnancy, but these effects went away after 3 to 12 months.

Does taking belimumab in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if belimumab can cause behavior or learning issues for the child.
Can my baby receive live vaccines before one year of age if I take belimumab while pregnant?

Most vaccines given in the first 6 months of life are noninfectious and can be given to a baby even if belimumab is present in their blood. Noninfectious vaccines are not live vaccines, meaning a person cannot get the infection from the vaccine. Live vaccines carry a small chance that a person could develop the infection from the vaccine. However, live vaccines usually contain a milder form (attenuated) of the virus or bacteria than what you might be exposed to in the community. Types of live vaccines given in the US include measles-mumps-rubella (MMR), varicella (chicken pox), and rotavirus vaccine. The rotavirus vaccine is the only live vaccine given to infants less than one year of age in the United States. Rotavirus is one of the leading causes of vomiting and severe diarrhea in children.

It is not known if exposure to belimumab during pregnancy affects a baby’s ability to fight off infection. Some recent research has shown that babies exposed to biologics in pregnancy appear to build antibodies as expected and have the same typical response to vaccines as babies not exposed to these medications. Talk to your child’s healthcare provider about any medications or exposures during pregnancy and/or breastfeeding. They can discuss the risks and benefits of live vaccines with you.

Breastfeeding while taking belimumab:

Belimumab is a large protein and little of the medication is expected to pass into breast milk. Belimumab is not well absorbed from the gut when swallowed. So any medication that would get into breast milk would be unlikely to enter the baby’s system. It is possible babies born before 37 weeks with digestive systems that are not fully developed may absorb more of medication in breast milk. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male takes belimumab can it make it harder for to get a partner pregnant or increase the chance of birth defects?

There are no studies looking at possible risks to a pregnancy when males are exposed to belimumab. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

MotherToBaby is currently conducting a study looking at belimumab use in pregnancy. If you are interested in learning more about this study, please call 1-877-311-8972 or visit https://mothertobaby.org/join-study.

Please click here for references.

Belimumab (Benlysta™) Pregnancy Registry. There is a study looking at belimumab in pregnancy. For more information you can look at their website: http://pregnancyregistry.gsk.com/belimumab.html