Dupilumab (Dupixent®)

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

What is dupilumab?

Dupilumab is a monoclonal antibody. It has been used to treat moderate-to-severe atopic dermatitis (eczema), prurigo nodularis (a skin condition with hard, itchy bumps called nodules), certain types of moderate-to-severe asthma, sinusitis with nasal polyps (swelling/inflammation of the sinuses with growths inside the nose), and eosinophilic esophagitis (ongoing inflammation of the tube that connects the mouth to the stomach). It is sold under the brand name Dupixent®.

MotherToBaby has fact sheets on asthma here https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/ and atopic dermatitis | eczema here: https://mothertobaby.org/fact-sheets/atopic-dermatitis/.

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. For example, poorly treated asthma has been associated with a higher chance of pregnancy complications.

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

Human studies have not been done to see if dupilumab could make it harder to get pregnant.

Does taking dupilumab increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if dupilumab increases the chance for miscarriage. An increased chance of miscarriage has not been reported in case reports of dupilumab use in pregnancy.

Does taking dupilumab increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Studies have not been done to see if dupilumab increases the chance for birth defects in human pregnancies. Case reports and small cases series looking at the outcomes of 23 pregnancies that were exposed to dupilumab in the first trimester. An increased chance for birth defects was not noted in these reports. Experimental animal studies done by the manufacturer did not report an increase in birth defects or problems with the newborns immune system with exposure to dupilumab.

Does taking dupilumab in pregnancy increase the chance of other pregnancy-related problems?

Studies have not been done to see if dupilumab increases the chance for pregnancy-related problems such as preterm delivery (birth before 37 weeks of pregnancy) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

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

Studies have not been done to see if dupilumab can cause long-term problems in behavior or learning. Experimental animal studies by the manufacturer did not find problems with development.

Breastfeeding while taking dupilumab:

There are no studies that have looked at how much dupilumab enters breastmilk and no studies checking for infant side effects. Dupilumab is a very large protein, which means not much of the medication is expected to pass into breast milk. Any that does get into the breast milk is likely to be destroyed in the infant’s gastrointestinal tract (stomach and intestines). There are two reports on the use of dupilumab while breastfeeding, and no infant side effects noted. Be sure to talk to your healthcare provider about all your breastfeeding questions.
If a male takes dupilumab, could it affect fertility (ability to get partner pregnant?) or increase the chance of birth defects?

Experimental animal studies did not report lower fertility when dupilumab was used. Human studies have not been done. One report described two males who used dupilumab during conception and throughout their partner’s pregnancy. No birth defects were reported. In general, exposures that fathers or sperm donors have are unlikely to increase the 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 dupilumab and other medications used to treat asthma / autoimmune disorders in pregnancy. If you are interested in learning more, please call 1-877-311-8972 or visit https://mothertobaby.org/join-study.

Please click here for references.