Leflunomide (Arava®)

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

**What is leflunomide?**
Leflunomide is a prescription medication used to treat the autoimmune condition rheumatoid arthritis. It is classified as a DMARD (disease modifying anti-rheumatic drug) because it can reduce arthritis symptoms like joint swelling and can slow down joint damage. Leflunomide is available as a generic drug or sold under the brand name Arava®.

**Should I stop taking leflunomide before I try to get pregnant?**
The manufacturer recommends that women should NOT take leflunomide if they are trying to get pregnant, if they are not actively using birth control to prevent a pregnancy, or if they are already pregnant. However, you should not stop taking any medications without first talking with your healthcare provider.

Individuals break down medication at different rates. On average, it takes about 10 weeks (two and a half months) after the last leflunomide dose for most of the drug to be gone from the body. However, the manufacturer of Arava® says that for some people it could take up to two years for all of the drug to leave the body. Treatments (like cholestyramine or charcoal) can be given to help shorten the time it takes for leflunomide to leave the body. Cholestyramine or charcoal, when taken as prescribed, can help remove leflunomide from the body, usually within two weeks.

If you are a woman who wants to become pregnant, it has been recommended that you start trying to get pregnant only after a blood test shows leflunomide is completely out of your blood. If a blood test shows that levels of the medication are still in your blood, there are treatments to help clear the leflunomide from your blood more quickly, such as cholestyramine or charcoal. If leflunomide is still found in the blood after one or more courses of treatment with cholestyramine or charcoal, the process may need to be repeated. To be sure leflunomide is out of your blood before pregnancy, the cholestyramine or charcoal treatments should be completed, and a blood level should show that the medication is out of your system before trying to get pregnant. Talk with your healthcare providers about the blood test to check leflunomide levels and treatments to remove the drug from your body. One group of authors suggested that, based on the data, a waiting period of 3.5 months before trying to get pregnant should be enough time.

**I take leflunomide. Can it make it harder for me to become pregnant?**
Animal studies done by the manufacturer did not find that leflunomide made it more difficult to get pregnant. However, women who are trying to get pregnant should not be taking leflunomide.

**Does taking leflunomide increase the chance for miscarriage?**
For women who accidentally become pregnant while on leflunomide, the results from human data has not suggested an increased chance of miscarriage.

**Does taking leflunomide in the first trimester increase the chance of birth defects?**
In every pregnancy, a woman starts off with a 3-5% chance of having a baby with a birth defect. This is called her background risk.

Experimental studies in animals have raised concern that leflunomide could increase the chance for birth defects when treated with the medication at levels comparable to those used to treat humans. Results from case reports,
registries and studies have not shown an increased chance of birth defects or a distinct pattern of birth defects from exposure to leflunomide during pregnancy. One small study of 109 women (64 women in the main study and 45 in the case-series study) who became pregnant while taking leflunomide did not find an increased chance of birth defects. Nearly all of the women in the study stopped taking leflunomide very early in their pregnancy, and, received the recommended cholestyramine treatment once they found out that they were pregnant, which eliminated the drug as quickly as possible from their blood. These factors make it more difficult to draw conclusions about the possible effects leflunomide might have on pregnancies where women had leflunomide in their blood for longer periods of time in pregnancy. Two small studies where some of the women did not receive the recommended ‘wash out’ treatment with cholestyramine, and were exposed during the first trimester, did not suggest an increased chance of birth defects.

Can taking leflunomide in the second or third trimester cause other pregnancy complications?
The limited data from a few studies has not supported an increased chance of prematurity (birth before 37 weeks), or low birth weight (less than 5 lbs., 8 oz.) with the use of leflunomide during pregnancy.

Can I breastfeed while taking leflunomide?
Leflunomide is not recommended during breastfeeding. There are no studies looking at the use of leflunomide in breastfeeding, which means there is no information on the amount of leflunomide that can get into the breast milk. Medications with a long-half life (the amount of time for 50% of the drug to eliminate from the body), such as leflunomide, have the potential to build up in the breast milk. In persons who take leflunomide, the medication can weaken the immune system, which leads to some concerns about the possible effects to a nursing infant. Talk to your healthcare provider about all of your breastfeeding questions.

If a man takes leflunomide, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?
There was one study that observed men who received prescriptions for medications used to treat rheumatoid arthritis. A small number of these expectant fathers were exposed to leflunomide three months prior to pregnancy. While the data is quite limited regarding leflunomide specifically, no increased chance of birth defects were observed. In general, exposures that fathers 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/pdf/.

MotherToBaby is currently conducting a study looking at rheumatoid arthritis and the medications used to treat RA in pregnancy. If you would like to learn more, please call 1-877-311-8972 or visit https://mothertobaby.org/join-study/.

Please click here for references.