

1. Arthritis Rheum. 2010 Jan 28. [Epub ahead of print]

Birth outcomes in pregnant women taking leflunomide.

Chambers CD, Johnson DL, Robinson LK, Braddock SR, Xu R, Lopez-Jimenez J, Mirrasoul N, Salas E, Luo YJ, Jin S, Jones KL; The OTIS Collaborative Research Group The following members of the OTIS Collaborative Research Group contributed to this study: Arizona Teratology Information Program, University of Arizona, Tucson: D. Quinn, S. Riordan; CTIS Pregnancy Risk Line, University of California San Diego: K. Kao; Connecticut Pregnancy Exposure Information Service, University of Connecticut Health Center, Farmington: S. LaVigne, J. Brochu; Nebraska Teratogen Project, University of Nebraska Medical Center, Omaha: E. Conover; New York Pregnancy Risk Network, State University of New York, Binghamton: M. Roth; PEDECS, University of Rochester Medical Center, Rochester: R. Miller; Texas Teratogen Information Service, University of North Texas, Denton: B. Debus, L. Wolfe; Utah Pregnancy Risk Line, Utah Department of Health, Salt Lake City: J. Robertson, J. Carey; Motherisk Program, Hospital for Sick Children, Toronto, Ontario: N. Djokanovic, G. Koren; G. Briggs, Long Beach Memorial Hospital, Long Beach; J. Polifka, University of Washington, Seattle; S. Lamm, Washington D.C.; O. Solden, Georgetown University Medical Center, Washington D.C.; A. Berard, University of Montreal, Montreal; A. Einarson, Hospital for Sick Children, Toronto, Ontario; C. Lyons Gaffaney, University of California Irvine; K. Wisner, University of Pittsburgh, Pittsburgh.

Department of Pediatrics, University of California San Diego, La Jolla, CA.

OBJECTIVE: In preclinical reproductive studies, Arava(R) (leflunomide) was embryotoxic and teratogenic. Women treated with leflunomide are advised to avoid pregnancy; those who become pregnant are advised to reduce fetal exposure through a cholestyramine drug elimination procedure. However, little human safety data is available regarding leflunomide-exposed, cholestyramine-treated pregnancies. **METHODS:** Sixty-four pregnant women with rheumatoid arthritis (RA) treated with leflunomide (95.3% treated with cholestyramine), 108 pregnant women with RA not treated with leflunomide, and 78 healthy pregnant women were enrolled in a prospective cohort study between 1999 and 2009. Information was collected by maternal interviews, medical records, and a specialized physical examination of infants. **RESULTS:** There were no significant differences in the overall rate of major structural defects in the exposed group (3/56 live births or 5.4%) relative to either comparison group (4.2%, 4.2% respectively, $p = 0.13$). The rate was similar to the 3-4% expected in the general population. There was no specific pattern of major or minor anomalies. Infants in both the exposed and RA comparison groups were born smaller and earlier relative to healthy comparison infants; however, after adjustment for confounders, there were no significant differences between the exposed and disease-matched RA group. **CONCLUSIONS:** Although the sample size is small, these data do not support a substantial increased risk for adverse pregnancy outcomes due to leflunomide exposure among women who go through the cholestyramine elimination procedure early in pregnancy. These findings can provide some reassurance to women who inadvertently become pregnant while taking leflunomide and who go through the washout procedure.

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