# Lay Title:

Effect of Rituximab on pregnancy outcome in women with Rheumatoid Arthritis

Diederik De Cock, Lucy Birmingham, Kath Watson, Lianne Kearsley-Fleet, Deborah Symmons, Kimme Hyrich

### Lay summary:

#### What was already known?

Rituximab (RTX) is a type of drug called a biological therapy used for treating individuals with Rheumatoid Arthritis (RA). RTX works by depleting the B-cells to reduce inflammation and improve symptoms. It can cross the placenta from the beginning of the second trimester and therefore could have effects on the foetus. Current guidelines advise that you take care to avoid becoming pregnant for at least six months after treatment. In general, we know little how RTX might affect pregnancy. Mostly single cases of RTX use before or during pregnancy are reported, with a majority of cases in patients with other diseases than RA.

#### What was discovered?

This report summarises 32 cases of women with RA who received RTX in any period before conception in the British Society for Rheumatology Biologics Register (BSRBR). No women received RTX during pregnancy. RTX was received in 10 cases within 6 months of conception, 8 women received RTX between 6 and 12 months before conception and 14 women received RTX at 12 months or longer before conception. Overall, the majority of women had live births (66%) and could restart RTX after delivery. No major foetal or maternal harm was detected in any case. Moreover, no notable differences were observed between the groups of women having different time windows between RTX exposure and conception.

## What's next?

The results of this study are reassuring for the use of RTX before conception. However, this study reports on a small number of women and more evidence is needed.