Objective:
To investigate the effect of metformin as an adjuvant therapy to a diet and lifestyle intervention on fetal growth and adiposity among women who are overweight or obese in early pregnancy.

Methods:
A secondary analysis of the GRoW Randomised Trial.¹

In Adelaide, South Australia, women with:
- a singleton pregnancy <20 weeks’ gestation
- BMI ≥25 kg/m²
were randomised to receive metformin or placebo throughout pregnancy. All women received dietary and lifestyle advice.

Ultrasound assessment of fetal biometry and adiposity was done at 28 and 36 weeks’ gestation.

Results:
With the exception of femur length at 36 weeks’ gestation, there were no statistically significant differences between treatment groups for fetal biometry z-scores, estimated fetal weight, or adiposity measures at either 28 or 36 weeks’ gestation.

The difference in femur length at 36 weeks’ was statistically significant (0.07 cm, 95% CI 0.01-0.14 cm, p=0.019), however this was at one time point only, and is likely of limited clinical significance.

Conclusion:
We find no evidence that the addition of metformin to dietary and lifestyle advice in pregnancy for women who are overweight or obese has a clinically relevant effect on fetal biometry or adiposity.