Objective: This is a prospective study examining the pregnancy and live birth rates in a group of 1550 infertile couples who were trying to get pregnant naturally, and assessing the reliability of 2 ovarian reserve markers in predicting the conception outcome (pregnancy and live birth).

Design: Participants of the study were based in the UK and diagnosed as infertile. Participants had mild infertility or unexplained infertility, the median maternal age was 35.6 years and the median duration of infertility was 2.2 years.

Materials and Methods: The medical information for each couple was self reported, including the time spent trying to conceive since the last pregnancy, maternal age and BMI (n=1550). Some couples provided information on their ovarian reserve status: AMH (n=174) and FSH (n=389). Maternal age and time trying to conceive were used to build a pregnancy probability model as well as a live birth outcome model. Ovarian reserve markers FSH and AMH, were assessed individually for their predictive value beyond the original model. This is identified by any consistent difference between the simple model and data grouped according to any of those factors.

Results: Our data suggest that FSH or AMH do not improve either the predicted pregnancy or live birth rate beyond use of age alone. A weak trend was observed with moderately high FSH (>9 nmol/L) indicating a possible reduction in pregnancy rate, but no evidence was found of it impacting live birth rate. A weak trend suggested that a high AMH (>21 pmol/L) could be linked with an increased pregnancy and live birth rate, however this was not significant.

Conclusions: Our initial data suggests that female age and time trying to conceive is sufficient when counselling patients on their likely outcome with spontaneous conception. Counselling with respect to AMH or FSH testing should be restricted to discussion of outcomes from IVF, and AMH or FSH test results should not be used to predict spontaneous conception rates.