



of similar age who have normal ovarian reserve. These observations effectively exclude decreased ovarian reserve per se as a reason for infertility. Thus, an ovarian reserve test (ORT) is not required from a diagnostic standpoint.

ORT would be relevant for choice of management if ovarian reserve status is a determinant of the probability of pregnancy with expectant management, OS-IUI or IVF. Studies reviewed above do not suggest that ovarian reserve status would determine the probability of a spontaneous pregnancy in 6-12 months, so ORT may not be informative to predict the success of expectant management over such a period. While one retrospective study suggests improved accuracy of the Hunault model used to categorize couples based on their anticipated chance of spontaneous conception, it needs to be validated prospectively and for other settings where referral by primary care is not required before consulting a fertility specialist (Hunault et al., 2004, Nguyen et al., 2022). While a retrospective study including 3019 women younger than 35 years old, who underwent IUI in a natural or stimulated cycle, reported similar cumulative live birth rates up to seven IUI cycles between women with serum AMH levels less than 1 ng/ml and higher than 1 ng/ml (Tiegs et al., 2020), another retrospective study including 1861 gonadotropin stimulated IUI cycles without an age limit reported that women in the lower 25th percentile of the study population for serum AMH levels, or women with serum AMH level <0.7 ng/ml were significantly less likely to achieve a clinical pregnancy over six cycles as compared with women higher AMH levels (Vagios et al., 2021). Another retrospective study including 195 couples also reported a positive correlation between serum AMH level and cumulative pregnancy rate over three OS-IUI cycles (Bakas et al., 2015). It should be noted that the study populations were not limited to UI in the latter two studies and a variety of OS protocols have been used. In addition to the limitations of retrospective design, these features introduce some heterogeneity and limit generalizability of findings to UI. It is uncertain whether ovarian reserve status determines the probability of pregnancy with OS-IUI cycles, where the aim should be to limit the number of growing follicles to 2 – 3 to prevent multiple pregnancies. It may be inappropriate to exclude women from OS-IUI based on ovarian reserve status.

On the other hand, ovarian response, hence ovarian reserve, is a major determinant of cumulative probability of live birth per OS cycle in IVF. Women with decreased ovarian reserve will have lower pregnancy/live birth rate per cycle with IVF (because of a low number of oocytes/stimulation) compared to women with similar characteristics but higher ovarian reserve. Thus, diverting women with low ovarian reserve directly or rapidly to IVF is questionable.

Further information

Details of the literature study and evidence tables are available in Annex 6 and Annex 7 (question II.3).