RBMO

LETTER

Response: Risk of non-lethal abnormalities should not prevent pregnancies in women of advanced maternal age

To the Editor

Thank you for the opportunity to respond to Professor Iñigo de Miguel Beriain (*Beriain, 2018*) who asks whether a statement in our editorial (Yovich et al., 2018) suggests that women aged 45 years or more should be denied the opportunity to have assistance to achieve pregnancy because of aneuploidy risk. The answer is definitely 'no', and we did not wish to imply such. In fact, whilst it is well established that the aneuploidy rate in embryos increases with a woman's age (*Demko et al., 2016*), recent data from IVF and ICSI studies show a reversal in the rate of birth defects among the children of women aged 40 years and older, with an odds ratio of 0.45 compared with women aged under 30 years (*Davies et al., 2017*). Whilst it appears that aneuploid embryos underlie the reduced implantation and higher miscarriage propensity for older women, in the IVF setting those pregnancies which do ensue are not more likely to have abnormalities than either those naturally conceived or those generated by IVF in younger women. Furthermore, this consideration will be further reduced as women increasingly avail themselves of the opportunity for pre-implantation genetic testing for aneuploidies (PGT-A) to maximise their chance of success with a single treatment cycle as euploid embryos have a better implantation rate and chance of live birth than aneuploid embryos (*Rubio et al., 2017*).

Our editorial was written from the perspective of efficacy, focusing on the chance of a live birth in the IVF setting being 0.3% per initiated cycle using autologous oocytes but 21.7% where the woman uses donor oocytes or embryos (*Fitzgerald et al., 2017*). We have also found a similarly high live birth chance where the woman uses her own cryopreserved embryos generated from autologous oocytes at an earlier age. We are not advocating restriction of her options but drawing attention to the low success of the autologous model and have the view that women should be given realistic information about their chance of achieving a live birth. Furthermore, where IVF is subsidized by public funds, this should be carefully considered by both the patient and the medical clinic in the context of such low returns.

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