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## LETTER

### GnRH agonist is not required for frozen embryo transfers conducted under artificial hormone therapy

*To the Editor*

We were interested to read the paper by the group from Brussels (van de Vijver et al., 2014) as it supports our view that gonadotrophin-releasing hormone (GnRH) agonist down-regulation is quite unnecessary in cryopreserved transfer cycles conducted under an artificial hormonal regimen.

In the Australian and New Zealand setting, both safety and efficiency issues are major considerations in the practice of ART so that the vast majority of IVF cycles are now single embryo transfers (76.3% in 2012; Macaldowie et al, 2014). As a consequence, more embryos are cryopreserved and, overall, frozen-thawed embryo transfers (FETs) result in an equivalent birth rate to that obtained following fresh transfers (22.2% versus 22.8%, respectively). At 6.5%, Australia and New Zealand share one of the lowest rates of multiple births in the world.

In the PIVET Medical Centre facility in Perth, we can report the highest live birth rate for autologous thaw cycles of the 78 fertility units contributing to the Australian and New Zealand Assisted Reproduction Database (ANZARD), being 32.0% of cycles initiated overall and 42.5% for women under 35 years (see Table 19 of the 2012 ANZARD report which shows the quartile ranges for all the fertility units, sub-calculated for age ranges of the women; Macaldowie et al, 2014).

Against this background, PIVET has increasingly performed FET procedures using an artificial model similar to that used by the Brussels group, as the efficiency for management of the fertility clinic is cost-beneficial. FET procedures can be allocated to specific favourable days during the week, with Sundays and holidays being completely avoided without compromising pregnancy chances.

Furthermore the cycles can be conducted with minimal monitoring and be quite inexpensive for patients. In this context we have avoided the use of GnRH down-regulation but, in response to the challenge by a reviewer of one of our reports concerning FET outcomes, we have now completed a series of hormonally monitored cycles. Over a recent six-month period only one case out of 250 cycles showed an elevation in serum progesterone concentration >5 nm/l on the final day of the artificial "follicular" phase, i.e. the day prior to commencing progesterone pessaries for the artificial "luteal" phase.

We fully accept that endometrial synchrony is the key to successful embryo implantation, but we concur with the Brussels group in believing GnRH analogues are not required in FET cycles conducted with an appropriate artificial hormone controlled cycle.

## References

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