Does a Reduced hCG Trigger Dose Compromise Outcomes in a Large Prospective Trial of Vaginal Progesterone for Luteal Phase Support?

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BACKGROUND

- Elevation of hCG is often used to trigger luteal support in assisted reproductive technologies.
- A commonly used dose of 5,000 IU hCG is adequate in most cycles, but lower doses may be beneficial in selected cases.

OBJECTIVE

The objective of this prospective analysis was to compare outcomes following administration of 5,000 IU and 10,000 IU hCG for luteal phase support.

MATERIALS AND METHODS

- Retrospective analysis of data from a multicenter, randomized, phase 3 trial that enrolled healthy, low-risk women 18-45 years who were undergoing IVF.
- Key inclusion criteria included body mass index (BMI) ≤ 34 kg/m², baseline follicle-stimulating hormone (FSH) level ≤ 15.4 IU/L, and a history of infertility.
- Participants with a history of recurrent pregnancy loss (≤ 3 miscarriages), abnormal karyotype, or previous treatment for premature ovarian insufficiency were excluded from the study.

RESULTS

- The primary study outcome was ongoing pregnancy rate (defined as the presence of more than 90% viable blastocyst formation after 7–9 days of treatment).
- Secondary efficacy analyses included clinical pregnancy, clinical miscarriage, and live birth.
- Safety was assessed based on adverse event (AE) reports.

RETELLING

- The study was designed to evaluate the efficacy and safety of two doses of hCG (5,000 IU and 10,000 IU) for luteal support in IVF cycles.
- The primary outcome was ongoing pregnancy rate, defined as the presence of more than 90% viable blastocyst formation after 7–9 days of treatment.
- Secondary outcomes included clinical pregnancy, clinical miscarriage, and live birth.
- Safety was assessed based on adverse event reports.

CONCLUSIONS

- A reduced hCG trigger dose of 5,000 IU did not compromise the number of cycles resulting in ongoing pregnancy compared to the 10,000 IU dose, suggesting that the lower dose is an effective treatment option for triggering luteal phase support.
- In addition, the study was more complex than previously reported, with participants receiving either 5,000 IU or 10,000 IU hCG.

ACKNOWLEDGEMENTS

This study was supported by Worthing International Inc. Ethical approval was obtained by Worthing International Inc. All authors contributed to the study.

REFERENCES