JIVFww

Blockeel, C. Exploring the Benefits of Double Stimulation and Examining the Hype and Hope in Dual Triggering. *Journal of IVF-Worldwide*. 2024;2(4.1):5-6.
doi:10.46989/001c.126626

Conference Materials

Exploring the Benefits of Double Stimulation and Examining the Hype and Hope in Dual Triggering

Christophe Blockeel,[1]

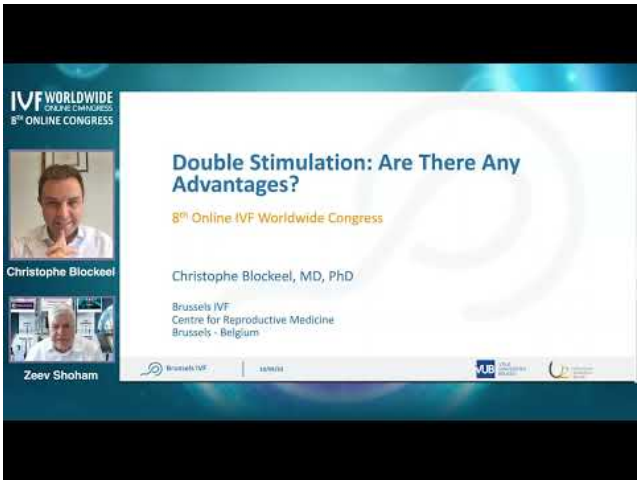
[1] Centre for Reproductive Medicine, UZ Brussel

Keywords: Double Stimulation, Dual Triggering, fertility treatments, mature oocytes, IVF

https://doi.org/10.46989/001c.126626

Journal of IVF-Worldwide

Vol. 2, Issue 4.1, 2024



URL: https://www.youtube.com/embed/sBAMzF1Wz9Y

In the informative video titled "**Exploring the Benefits of Double Stimulation and Examining the Hype and Hope in Dual Triggering," Professor Christophe Blockeel**, a leading expert in reproductive medicine and fertility treatment, discusses the captivating topic of double stimulation and dual triggering in fertility treatments takes center stage. With a grateful acknowledgment of the opportunity to delve into this area, Professor Christophe Blockeel paints a comprehensive picture of the potential advantages and implications of these innovative approaches.

Professor Christophe Blockeel begins by underscoring the potential benefits of double stimulation, presenting a compelling case for its integration into fertility treatments. These advantages include lower dropout rates, cost reduction, expedited attainment of euploid embryos, and promising applications in fertility preservation. A notable mention of the prospect of luteal phase stimulation posts an agonist trigger is made.

The benefits of double stimulation are further explored, contemplating its role in luteal phase stimulation and its potential utility for cases necessitating expedited oocyte retrieval or accumulation of oocytes and embryos within the same ovarian cycle. Particularly beneficial for low-responder patients, dual stimulations increase the likelihood of reaching the embryo transfer stage and finding a euploid embryo, ultimately enhancing the prospects of success. The prospect of pooling embryos from both stimulations is highlighted as a cost-saving measure in embryo biopsy and preimplantation genetic testing (PGT). Moreover, dual stimulation emerges as a potential solution to counter the high dropout rates prevalent in fertility treatments, addressing both physical and psychological barriers and potentially leading to increased live birth rates.

Delving into comparative studies, Professor Christophe Blockeel meticulously weighs the outcomes of dual stimulation against conventional stimulation, unveiling noteworthy insights. The study findings suggest comparable numbers of oocytes, mature oocytes, and good-quality embryos in both groups. However, the freeze-all strategy demonstrates higher pregnancy rates in the study group, hinting at the potential benefits of this strategy for low-responder patients. The conclusion is drawn that dual stimulation could find a meaningful place in fertility preservation for patients undergoing oncological treatment.

The narrative steers toward the broader perspective of embracing innovation and scientific progress in in vitro fertilization (IVF). While a universal "Do No Harm" group might not be universally necessary, the importance of embracing innovation for specific reasons is emphasized. Dual triggering takes center stage in this context, and the differences between GnRH agonists and HCG triggers are elucidated. Strategies for predicting and preventing ovarian hyperstimulation syndrome (OHSS) are discussed, with a strong emphasis on the advantage of reduced OHSS risk with the agonist trigger. Dual triggering emerges as a potential rescue strategy for the luteal phase in high-responder patients.

Intriguingly, the discussion traverses through various studies, showcasing the potential advantages of dual triggering over HCG triggering in fertility treatments. Despite yielding a higher number of oocytes, mature oocytes, fertilized oocytes, and usable embryos, the live birth rates did not exhibit a significant difference between the two methods. This led to an insightful decision to switch back to HCG triggering, except in cases where patients displayed low oocyte maturation. The dichotomy in findings across clinics and the subsequent discontinuation of the dual trigger strategy adds a layer of complexity to the discussion.

The latter part of the video meticulously scrutinizes the benefits and limitations of dual stimulation and dual trig-

gering in IVF. While dual stimulation promises to generate more mature and fertilized oocytes, the translation into higher live birth rates remains elusive. It is emphasized that the dosage of FSH should be carefully regulated, not exceeding 300 units, as higher doses have not demonstrated significant differences in outcomes. In combination with FSH, LH has also been found to lack consistent benefits across various studies. Other combined treatments, such as incorporating letrozole or clomiphene citrate, may offer viable alternatives for low responders, considering both efficacy and cost-effectiveness.

Concluding on an exploratory note, Professor Christophe Blockeel probes into the realm of managed natural cycles and low-dose FSH stimulation, aiming to bolster pregnancy rates in low responders. The introduction of the managed natural cycle and the strategy of triggering low-responder patients at an earlier follicle size are potential game-changers. The intriguing results from Nikolaos Polyzos ' study, revealing promising pregnancy rates in younger patients using the managed natural cycle, underscore the need for further investigation and analysis.

In summation, Professor Christophe Blockeel's presentation on double stimulation and dual triggering in fertility treatments is a valuable contribution to the field, generating keen interest and appreciation from the audience. The insights provided and the need for continued research underscores the dynamic nature of this critical area of reproductive medicine, aiming to optimize outcomes and enhance patient experiences.

Submitted: November 27, 2024 CST, Accepted: November 27, 2024 CST