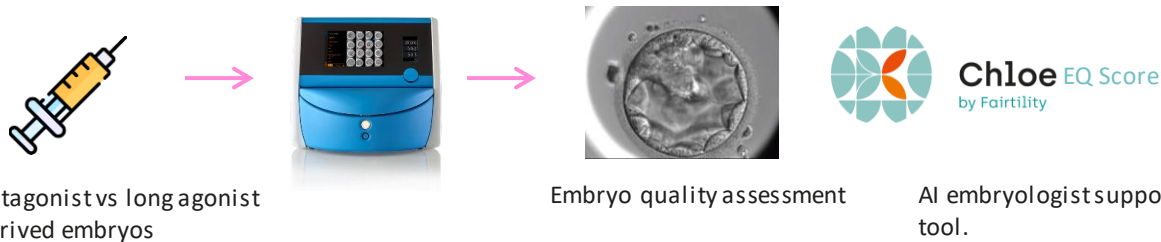


Assessment of stimulation protocol's effect on embryo quality and clinical outcome and how AI might help monitor different clinical practices.

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Objectives & Background

To assess if the type of stimulation affects clinical outcome and embryo quality as assessed by an AI algorithm (CHLOE EQ).



Methods

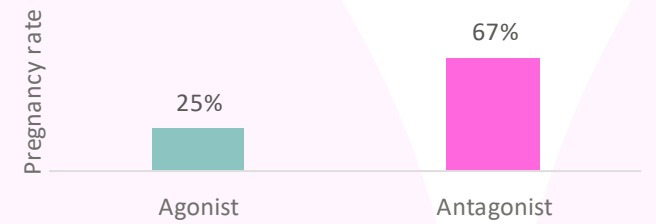
Retrospective comparative analysis assessing:

- Clinical outcome of antagonist vs long agonist derived embryos.
- Embryo quality measured by CHLOE EQ (t-test).
- Embryo development by comparing morphokinetic events at hours post insemination in each group: antagonist vs long agonist (t-test).
- Demographic confounders: measured using t-test.

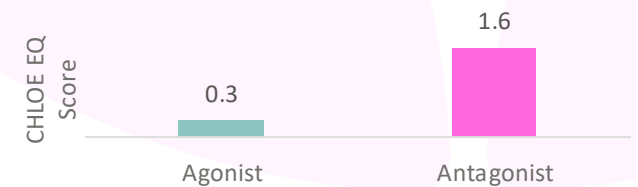
Conflict of interest: Zepeda A. & Hickman C. are consultants at Fairtility; Funding by Fairtility

Results

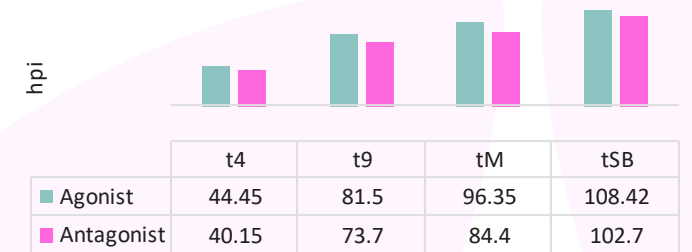
Antagonist protocol-derived embryos led to a higher pregnancy rate compared to long agonist protocol-derived embryos (p=NS)



Antagonist protocol-derived embryos had an improved embryo quality (CHLOE EQ Score) compared to long agonist protocol-derived embryos (p<0.001).



Antagonist protocol-derived embryos were faster than long agonist protocol-derived embryos (p<0.05)



Conclusion

- **Antagonist-derived embryos are faster, have higher quality and were associated with higher pregnancy rate than agonist-derived embryos.**
- CHLOE-EQ provides monitoring of clinical practices to determine if protocols influence clinical outcomes and KPIs.