

Practical question

A pre-registrant embryologist under your supervision has drafted an abstract for submission to an ARCS conference (given below). Please make a list of at least 10 comments/suggestions you would raise with the author to improve the content and clarity prior to submission.

A RETROSPECTIVE ANALYSIS EVALUATING A STAGE SPECIFIC VERSUS UNIVERSAL KIT FOR BLASTOCYST STAGE WARMING

Objective: To trial 2 warming kits to select the favoured one for use for blastocyst stage warming. There are numerous advantages to using a universal kit in the laboratory rather than multiple stage specific kits.

Design: A retrospective analysis of FETs between Jan 2023 and December 2024.

Materials and Methods: In June 2023 the laboratory switched to performing blastocyst stage warming with a universal kit rather than the stage specific kit from the same company. The outcomes of FETs using the stage specific kits were compared to those using the universal kits. Blastocyst survival, re-expansion status, clinical pregnancy rate (CPR) and implantation rate (IR) were assessed using Fishers Exact Test. The cryopreservation policy remained unchanged during the analysis period.

Results: The survival was slightly higher for the FETs performed using the stage specific versus universal kits but was not statistical significant (95% versus 90%, $P=0.07$). For the blastocysts that survived the re-expansion status at 2 hours post warming was equivalent between the kits with 76% assessed as fully re-expanded. There was no statistical difference in the CPR and IR between the FETs using the different kits ($p>0.05$).

Conclusions: There was a trend towards a higher rate of survival with the stage specific kit. However for those blastocysts that survived the re-expansion status at 2 hours was equivalent. No statistical difference was observed in the CPR and IR using the stage specific versus universal kit. Given the advantages of using a universal kit and no difference in clinical outcome the universal kit is still in use within the laboratory for oocyte, cleavage and blastocyst stage warming.

Oral questions

- 1) A Trainee comes to you as they have noticed when observing as part of their training that some members of the laboratory are preparing dishes differently and has some questions about sterility and volume control. Describe your response to the trainee and subsequent actions.
- 2) In March 2020 the HFEA wrote to all UK licensed clinics to tell them to stop patient treatments until the extent of the Covid crisis was known. Describe your response to stopping treatments in terms of staff management.