

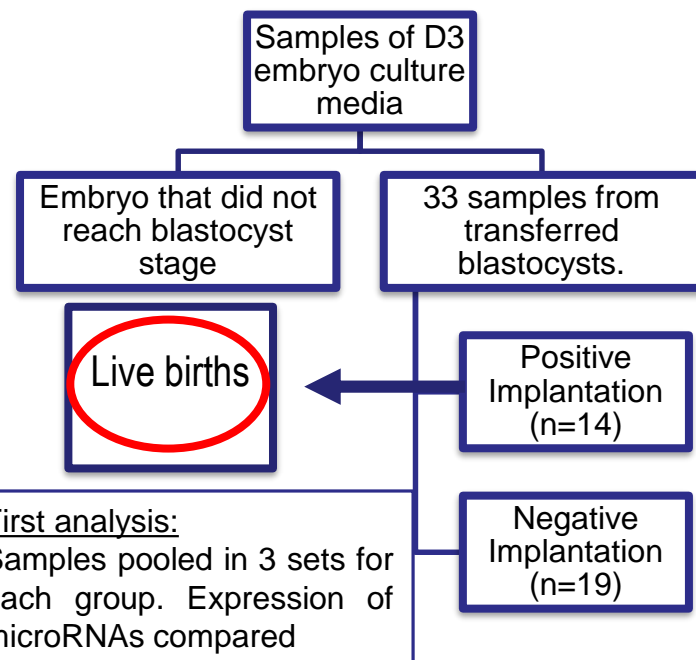
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INTRODUCTION

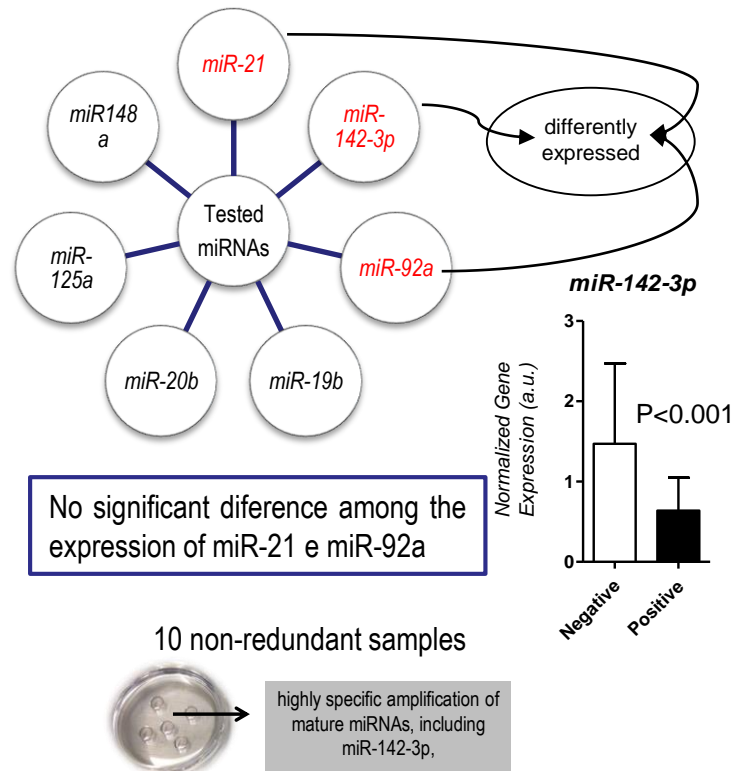
MicroRNAs are small non-coding RNAs that regulate gene expression through mRNA degradation or inhibition of translation. MicroRNAs can be detected in the extracellular environment, such as biological fluids and are already used as diagnostic and prognostic markers of several diseases. Therefore, the goal for this study was to identify possible miRNAs biomarkers of embryo implantation and live birth, in the culture media of individual *in vitro* produced embryos

MATERIALS AND METHODS



Second analysis:
Ten more samples tested, to check if miRNAs could be detected in individual samples

RESULTS



CONCLUSION

MiR-142-3p may be a biomarker of implantation failure. The identification of specific miRNAs on the culture media offers opportunities for early, fast and cheap diagnosis of implantation, and live birth. This may reduce emotional and financial costs. Moreover, it favors the single embryo transfer, avoiding multiple pregnancies and its consequences.

In conclusion, the miRNA signature may be a tool to predict the embryo implantation and live birth.