A Randomized Controlled Trial (RCT)

Objective: This study is trying to answer if there is a way to improve the preparation of sperm for the intracytoplasmic sperm injection procedure (ICSI) while assessing the impact of paternal age on embryo culture. The 2 preparation methods are:

Routine

Density grade centrifugation (DGC) is a process that involves using a machine to spin the sperm. The better sperm tends to settle at the top of the tube after being spun.

Study

Microfluidic devices (Zymot) separate the best moving sperm through tiny channels and chambers which mimic the female reproductive tract.



Enrollment

Please review the consent form. If interested, schedule your informed consent discussion by email or telephone. The study team can answer your questions.

Female

- If at least four or more mature eggs are retrieved, then the eggs will be split into two groups and randomized, like the flip of a coin, to determine which group receives the study sperm preparation technique.
- The other group receives the routine, DGC sperm preparation technique.

randomization of the eggs and use of 2 sperm preparation methods.

Study Methods

The only differences in this

study from routine care are the

Male

Routine

DGC Sperm

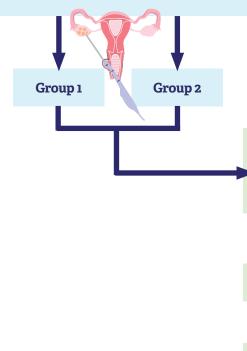
Preparation

- Produce a routine sperm sample.
- A portion of the sample will be placed in the study preparation method.
- The remaining sample will be placed in the routine DGC sperm preparation technique.

Study Method

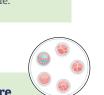
Sperm

Preparation





Routine ICSI Procedure After the sperm is prepared via each method, then the sperm is selected by the embryologist using a microscope per routine.



Routine Embryology Care

Embryo Biopsy + PGT-A Frozen Embryo Transfer

- Embryos that develop to the blastocyst stage will be biopsied for preimplantation genetic testing for aneuploidy (PGT-A) per routine.
- The best quality, normal embryo will be transferred in a frozen embryo transfer cycle.
- Participants receive complimentary embryo biopsy fee.

