HIGHER GENOMIC COMPETENCE IMPROVES OUTCOMES

Understanding the latest sperm science in the ZyMōt™ revolution

Not all sperm are created equal

Using the best sperm helps increase the odds of a successful fertility treatment cycle. **But not all sperm are created equal**: up to 11% of men with a normal semen analysis have a measurable problem with sperm chromatin (DNA) fragmentation, and thus reduced motility.[1]

ZyMōt Sperm Separation Devices are a better way to process sperm, without harmful centrifugation.[2,3] ZyMōt devices enable the separation of sperm with nearly undetectable levels of DNA fragmentation and oxidative stress.[4] Improved sperm health means better clinical outcomes.[5,6]

In research[1] from scientists at Weill-Cornell Medical College, ZyMōt devices were directly compared to density gradient centrifugation (DGC), evaluating parameters of sperm health and clinical outcomes.

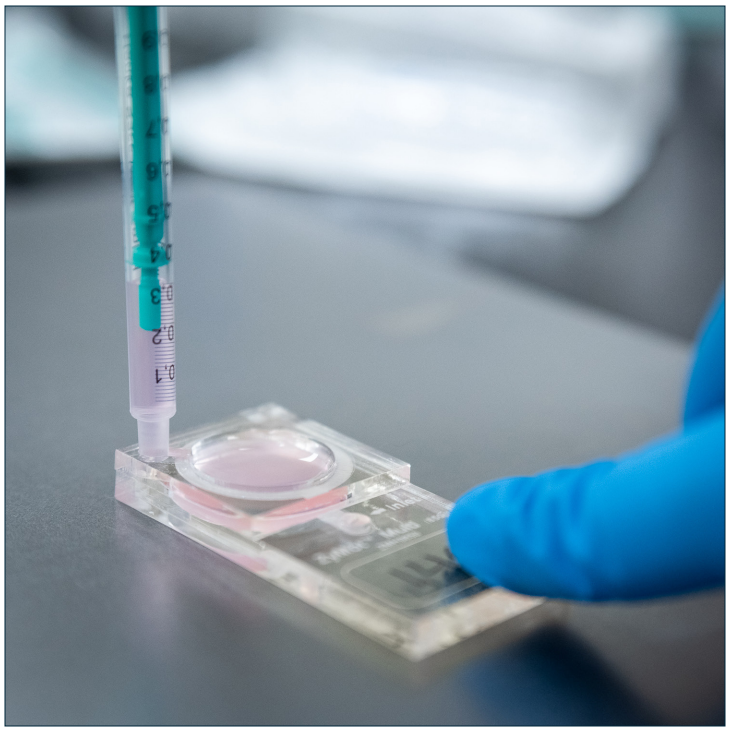
Results

In a collection of 23 patients, semen samples were split and processed by either DGC or the ZyMōt Multi 850µL device, with analyses before and after processing. Highly statistically significant results were observed in the ZyMōt-processed samples, when compared to DGC: **Sperm motility and normal morphology increased. DNA fragmentation decreased**.

Similar processing was applied to another 25 couples undergoing intracytoplasmic sperm injection (ICSI). Again, statistically significant results were observed when ZyMōt processing was compared to DGC: improved sample motility, progression and normal morphology. There was a dramatic decrease in DNA fragmentation.

In studying clinical outcomes within a cohort of 16 patients with a history of recurrent implantation failure, ZyMōt device use followed by fresh embryo transfer in 9 patients resulted in a **50% clinical pregnancy rate**. This group of patients had experienced a 0% implantation rate in their previous cycles, which used density gradient centrifugation.

The remaining 7 patients in the cohort underwent PGT-A prior to a frozen embryo transfer. These patients saw a statistically significant increase in the number of euploid embryos following the use of a ZyMōt Multi (850µL) Sperm Separation Device. Additionally, they experienced an **80% ongoing pregnancy rate**.



The ZyMōt Multi (850µL) device delivers a processed sperm sample with significantly reduced DNA fragmentation, increased motility and normal morphology, leading to improved euploid rates and more healthy pregnancies.

Conclusion

Processing with ZyMōt **enhanced sperm sample motility, progression and morphology**, along with providing a "remarkable reduction" of DNA fragmentation. ZyMōt devices yielded sperm with "**higher genomic competence**" demonstrated by their improved euploid rate and ability to establish healthy pregnancies. ZyMōt devices are suitable for use with IUI and ICSI procedures. **Learn more at zymotfertility.com.**

References

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