

Abstract Summary

Clinical evidence for ultra-fast blastocyst warming in low-sucrose media

INTRODUCTION

Blastocyst warming requires a significant amount of time, however, recently several publications have shown that blastocysts can be warmed using a single warming step. This summary presents clinical data retrospectively gathered from a clinic in Belgium, comparing an ultra-fast warming protocol (January–July 2024) with the standard warming protocol (2023)¹.

OBJECTIVE

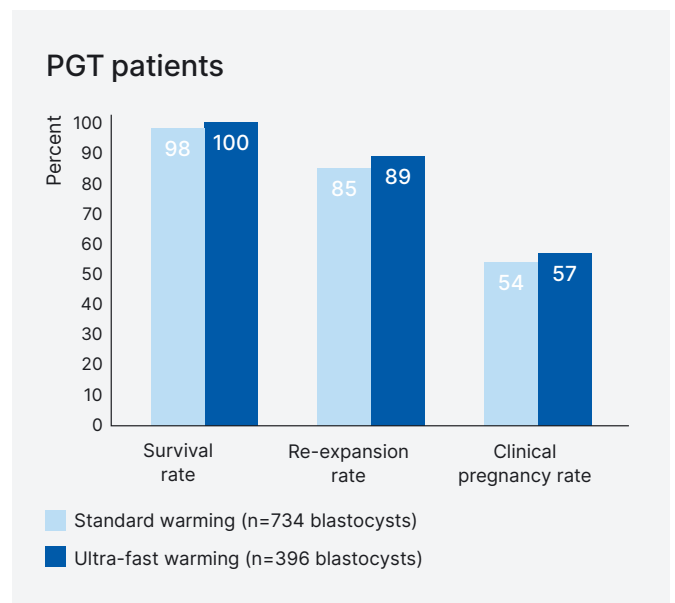
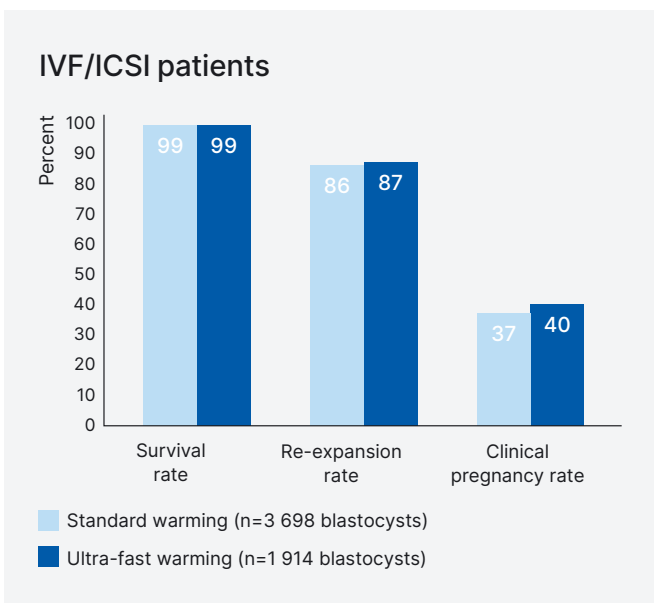
To investigate whether an ultra-fast warming protocol for vitrified blastocysts achieves comparable survival and clinical pregnancy rates to the standard warming procedure.

MATERIAL AND METHODS

Blastocysts were vitrified using FUJIFILM Irvine Scientific Vit Kit Freeze NX media and CBS HSV closed device. The 2-minute ultra-fast warming protocol (Vitrolife media with 0.25 M sucrose) was compared to the 12-minute multi-step standard warming protocol (FUJIFILM Irvine Scientific VitKit Warm NX media). Outcomes from 5 716 single frozen embryos transfers (SFETs) were analyzed, including IVF/ICSI and PGT cycles.

RESULTS

Blastocyst survival rates, full re-expansion rates, and clinical pregnancy rates (based on fetal heartbeat) were similar between the ultra-fast and standard warming protocols in both patient groups.



Abstract Summary

Clinical evidence for ultra-fast blastocyst warming in low-sucrose media

CONCLUSION

This large-scale retrospective analysis shows that the ultra-fast warming protocol using 0.25 M sucrose achieves high blastocyst survival and clinical pregnancy rates, comparable to the standard warming method. The ultra-fast protocol enhances daily efficiency in IVF labs without compromising clinical outcomes.



“Data on rapid warming of vitrified research blastocysts were promising and convinced us to perform a pilot study in 2023. We found

that the time saving procedure also gave benefits with less steps, less manipulations and less handling risks. In addition, it is an operator friendly and simple protocol easy to train to other lab technicians.”

Lisbet Van Landuyt

Senior Clinical Embryologist, Brussels IVF