# Oocyte vitrification by Vitrolife

For time-efficient, easy and successful vitrification









# The oocyte - a fragile cell

In recent years, oocyte vitrification has become a reliabe routine for donation, as well as for fertility preservation, for medical and non-medical reasons.

However, successful vitrification of an oocyte remains challenging. Compared to an embryo, which can develop with only half of the cells intact after cryopreservation, this possibility does not exist for an oocyte. Sufficient equilibration of the large cell volume with cryoprotectants is therefore absolutely crucial for survival and viability of the oocyte.

# Special media for a unique cell

RapidVit<sup>™</sup> Oocyte is a specialised calcium-free media for oocyte vitrification. The media was developed after extensive research on the effects of cryoprotectants on oocytes and their intracellular calcium content.

Studies show that careful control of intra- and extracellular calcium has a significant impact on the success of cryopreservation and oocyte viability<sup>1,2</sup>.

# High lot-to-lot consistency ensures high performance

Vitrolife's tests go well beyond regulatory demands, using multiple endpoint assessment including blastocyst cell number, with narrow acceptance levels to ensure high performance and the best results for the customers.

Vitrolife has unique competence in testing, which is performed in-house to maintain full control with traceability of each released product.

### Maximum support



Based on the Vitrolife media with amino acids and energy substrates that support the metabolism.



MOPS buffered to stabilise pH during handling.



High levels of hyaluronan and HSA provide additional protection<sup>3</sup>.

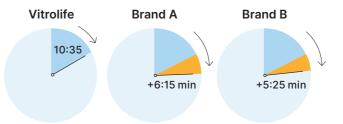


Handling at 37 °C maintains meiotic spindle integrity and viability of the oocyte<sup>4</sup>.



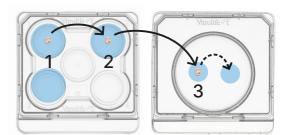
## Save time in every procedure

Working at 37 °C shortens vitrification time and minimises exposure to cryoprotectants. Using RapidVit Oocyte will save you time in every procedure. The graphs compare the maximum times needed to vitrify oocytes using different brands.



#### **Smooth workflow**

Simply move the oocyte in a few short steps. Less handling reduces stress for the oocyte. A straightforward method is easy to learn and more standardised.



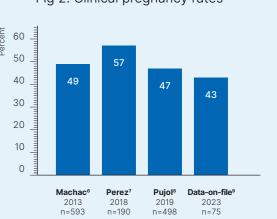
# **Excellent viability**

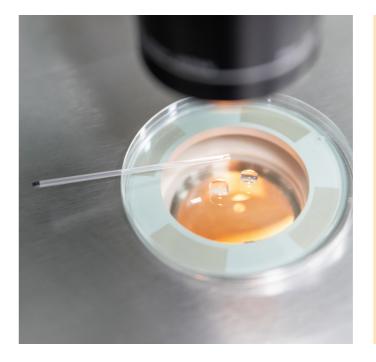
Survival rates >90 % show that RapidVit/Warm Oocyte in Rapid-i™ Vitrification System performs equally well as other systems.

Fig 1. Survival rates



Fig 2. Clinical pregnancy rates





"When overseeing multiple labs, repeatability becomes really important. We need a product that all embryologists can use easily.

The big win with RapidVit/Warm
Oocyte and the Rapid-i is that it is a
repeatable system with straightforward
protocols and this enables us to get
consistently good results with all our
embryologists."

Lindsey Zujovic, Group Director of Embryology, TFP

# **Product specification**

REF	10121 RapidVit™ Oocyte	3 × 10 ml
	10122 RapidWarm™ Oocyte	4 × 10 ml
Application	Ready to use after warming to 37 °C in ambient atmosphere. Do not place the solutions in a $\mathrm{CO}_2$ incubator.	
Storage	Store dark at $+2$ to $+8$ °C. The bottles can be used for up to two weeks after first opening, use aseptic technique and minimise the time outside the refrigerator.	
Quality control	pH Osmolality Sterility Bacterial endotoxins Mouse Embryo Assay (1-cell): Blastocyst formation as well as cell count.	
Sucrose concentration	10121 RapidVit™ Oocyte Vitri 1 Oocyte Vitri 2 Oocyte Vitri 3 Oocyte  10122 RapidWarm™ Oocyte Warm 1 Oocyte Warm 2 Oocyte Warm 3 Oocyte Warm 4 Oocyte	0.4 M 1 M 0.5 M 0.25 M

Rapid-i Vitrification System is an aseptic and closed system. It offers a simple, safe and structured workflow. Rapid-i Kit is renowned for being easy to load<sup>12</sup>. Oocytes are held in place by surface tension - no sticking to the device.

**Visit vitrolife.com** for more information about the Rapid-i Vitrification System.



