

EmbryoGlue know-how

EmbryoGlue is a medium designed for embryo transfer. It contains a high concentration of hyaluronan of specific molecular weight range, which increases the probability of successful transfer of fresh or frozen embryos at any developmental stage¹. If you are considering starting to use EmbryoGlue, here are a few points that can help you.

1 Prepare the dish and equilibrate it correctly

Prepare dishes with EmbryoGlue in a flow hood at room temperature, one dish at a time. Aliquot ≥ 1.5 mL of EmbryoGlue: ≥ 0.5 mL for embryo transfer and ≥ 0.5 mL for rinsing the catheter. Equilibrate the dishes with the lid on for 2–24 h in a humidified incubator at 6% CO₂ and preferably low O₂. If you must use a dry incubator, prepare the dishes on the day of embryo transfer, and equilibrate them with the lid on to ensure that the osmolality remains below 300 mOsm². In a non-humidified environment, dishes should not be stored for more than 6 h.

2 Exposure time

Equilibrate the embryo with EmbryoGlue in a 6% CO₂, 37°C environment for 10 min–4 h. Recent data indicate that rather prolonged exposure is beneficial³.

3 Rinse the catheter

Draw up 0.5 mL of EmbryoGlue into the syringe and rinse the catheter. Leave a continuous column of EmbryoGlue in the catheter. We recommend using EmbryoGlue for rinsing because using another culture media will dilute the hyaluronan concentration during transfer.

4 Load the catheter correctly

Use a total volume of ~ 30 μ L of EmbryoGlue to transfer the embryo into the uterus. Initially, draw up ~ 20 μ L of EmbryoGlue followed by the embryo in the remaining 10 μ L. Next, draw in a 4–5 mm column of air, which will improve visualization of the catheter tip on the ultrasound. To calibrate your embryo transfer protocol, prepare a 30 μ L droplet, aspirate it using your chosen catheter, and record the length of the EmbryoGlue column in the catheter.

5 Apply pressure on a plunger

Pass the tip of the catheter into the uterus approximately 1 cm from the top of the cavity and expel the embryo in a total volume of approximately 25–30 μ L of medium. The embryo should be released from the catheter gently, so maintain pressure on the plunger during withdrawal of the catheter.

These simple steps will help you achieve the best possible outcome for all your patients. EmbryoGlue is a transfer medium with a proven clinical benefit. It has been used for more than a million treatment cycles worldwide since 2003. The benefits of using EmbryoGlue are supported by scientific evidence including meta-analyses performed by the independent Cochrane organization.^{1, 4, 5}

REFERENCES 1. Heymann D et al (2020) Cochrane Database of Systematic Reviews 9. 2. Vitrolife data on file 2018. 3. Perez O (2019) Fertil Steril 112. 4. Bontekoe S et al (2014) Cochrane Database Systematic Reviews 2. 5. Bontekoe S et al (2010) Cochrane Database Systematic Reviews 7.