

# HELPING YOUR EMBRYOS TO IMPLANT WITH EMBRYOGLUE



Vitrolife 



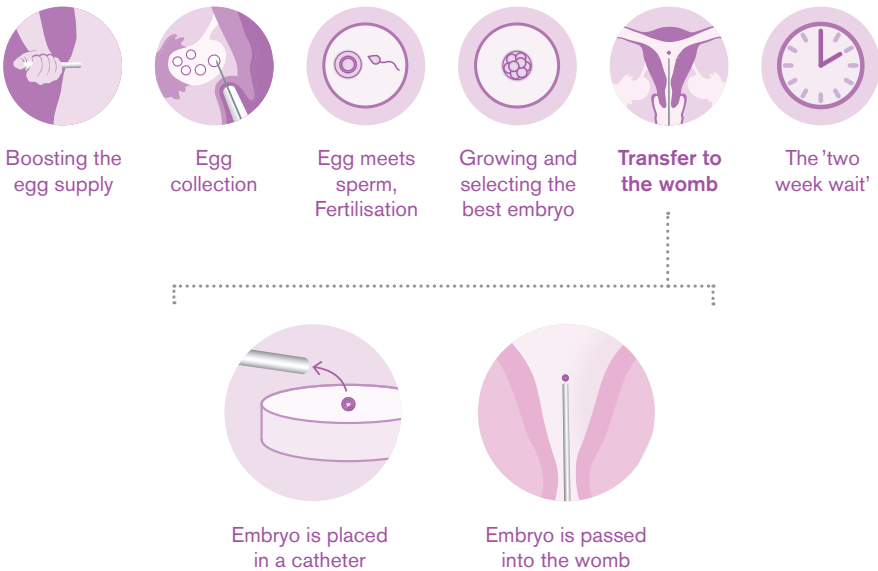
If you're having trouble becoming pregnant, in vitro fertilisation (IVF) may be right for you. IVF is used to treat a range of fertility problems.

An IVF cycle involves several different steps that will help you increase the chances of becoming pregnant. The final step of the IVF process is the embryo transfer.

# BACK TO THE WOMB

After your embryos have grown in the laboratory incubator for a few days, the best one is selected for embryo transfer. During the procedure, the embryo will be taken from the culture dish and placed into a thin tube called a catheter. The catheter is then passed through the opening of the womb (called the cervix) and the embryo is transferred into the womb, normally using ultrasound guidance.

## The IVF journey and the embryo transfer step

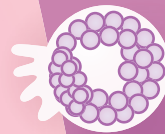


# GIVE YOUR EMBRYO A HELPING HAND WITH EMBRYOGLUE

Using a medium specifically designed for embryo transfer can support implantation even more. EmbryoGlue is a medium that closely resembles the environment in the womb at the time of implantation. Placing the embryo in EmbryoGlue before transfer gives it an even better chance to implant.

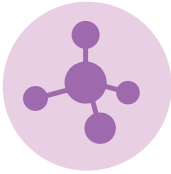
## Promoting implantation

EmbryoGlue is not an actual glue, but it acts like glue by increasing the chance of implantation of the embryo to the womb.<sup>1</sup> It consists of a high concentration of hyaluronan and recombinant human albumin, both of which promote implantation.



## Nature in a bottle

EmbryoGlue mimics the natural environment in the womb. Nutrients and energy substrates in EmbryoGlue are adapted to the embryos' needs at the time of implantation to mimic nature as much as possible.



## A key molecule in the body

The main component in EmbryoGlue is hyaluronan, which is a natural substance present in all tissues of the body and a key molecule in embryo development and implantation.



## Already in the womb

Hyaluronan is always present in the womb, but levels increase when the woman can become pregnant.



## Mirroring the levels

EmbryoGlue has been formulated with an elevated concentration of hyaluronan to mirror the level in the womb during implantation.

# BUILDING A BRIDGE BETWEEN THE EMBRYO AND THE WOMB

How do the components in EmbryoGlue help the embryo implant in the womb?

## Better mixing

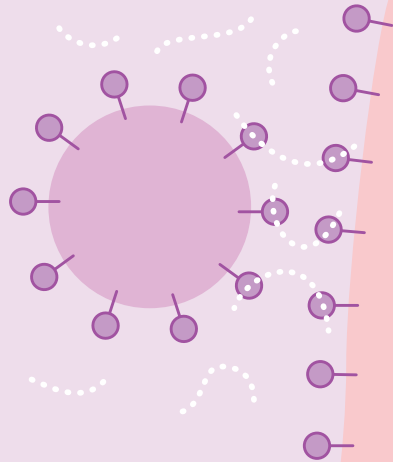
The high concentration of hyaluronan thickens EmbryoGlue to be more similar to the texture of the fluids in the womb and thus it is believed better mixing of these

fluids may minimise the drifting of the embryo.<sup>2-5</sup> EmbryoGlue is enriched with the components it needs to better support the embryo during embryo transfer and implantation.



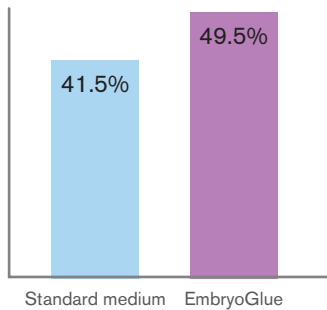
## A bridge of molecules that helps implantation

The inner wall of the womb and the embryo itself have special molecules on their surface. Hyaluronan binds to these molecules and acts like a bridge between the embryo and the womb.<sup>6-9</sup> This helps the embryo to implant in the womb much like during natural conception.



# MORE CHILDREN BORN WITH EMBRYOGLUE

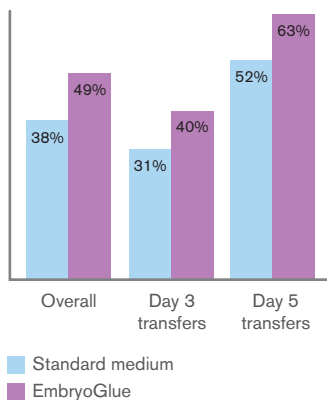
The use of EmbryoGlue increases the chance of becoming a parent. All patients going through IVF procedures that result in a transfer can benefit from EmbryoGlue.



Improved pregnancy rates

19%

Relative improvement\*



More children\*\*

Delivery rate per patient

\* A relative increase of 19 % in pregnancy rates in more than 3200 IVF treatments when using EmbryoGlue for embryo transfer, compared to other media used for embryo transfer.<sup>1</sup>

\*\* An increase of 29% in delivery rates when EmbryoGlue was used for transfer.<sup>10-11</sup>

# HELPING THOUSANDS SINCE 2003

EmbryoGlue has been used clinically since 2003 and is the most documented embryo transfer medium. It has been shown to increase both implantation, pregnancy rates and live birth rates.



The most  
documented



“We maximised our chances by using EmbryoGlue and we named our son Maxim. We are now a complete and happy family and we are not sure we would have been as successful if we hadn’t used EmbryoGlue. It worked for us and it might work for someone else too.”

Corrie and Alexandra battled infertility for 7 years and went through two cycles of IVF. In their second cycle, the couple used EmbryoGlue for their embryo transfer.

➔ Find the full story on [www.vitrolife.com](http://www.vitrolife.com)

Ask your clinician to find out more about EmbryoGlue and how it can help improve your chances for a successful IVF treatment.

#### REFERENCES

1. Bontekoe S, Blake D, Heineman MJ, Williams EC, Johnson N. Adherence compounds in embryo transfer media for assisted reproductive technologies (Review). The Cochrane Library 2010, Issue 7.
2. Lee CN and Ax RL Concentration and composition of glycosaminoglycans in the female bovine reproductive tract. *J Dairy Science* 67:2006-2009 (1984).
3. Suchanek E et al. Follicular fluid contents of hyaluronic acid, follicle-stimulating hormone and steroids relative to the success of in vitro fertilization of human oocytes. *Fert.Steril* 62:347-352 (1994).
4. Rodríguez-Martínez et al. In *Gametes: Development and Function*, Spono symposia. Rodríguez-Martínez H et al (1998) GAGs and spermatozoa competence in vivo and in vitro. In *Gametes: Development and Function* pp 239-272 Eds A Lauria, et al. Spono Symposia, Roma (1998).
5. Kano K et al (1998) Effects of glycosaminoglycans on the development of in vitro-matured and fertilized porcine oocytes to the blastocyst stage in vitro. *Biol of Reprod* 58:1226-1232 (1998).
6. Campbell S et al (1995) CD44 is expressed throughout preimplantation human embryo development. *Hum Reprod* 10:425-430 (1995).
7. Behzad F et al (1994) Expression of two isoforms of CD44 in human endometrium. *Biol Reprod* 51:739-747 (1994).
8. Yaegashi N et al (1995) Menstrual cycle dependent expression of CD44 in normal human endometrium. *Hum Pathol* 26:862-65 (1995).
9. Stojkovic M et al (2003) Developmental regulation of hyaluronan-binding protein (RHAMM/HHABP) expression in early bovine embryos. *Biol Reprod* 68:60-66 (2003).
10. Balaban, K. Yakin, B. Ata, A. Isiklar, B. Urman. Effect of hyaluronan-enriched transfer medium on take home baby rate after day 3 and day 5 embryo transfers: a prospective randomized study. 27th Annual Meeting of ESHRE, Stockholm, Sweden, O-060, 2011.
11. Bontekoe S, Heineman MJ, Johnson N, Blake D. Adherence compounds in embryo transfer media for assisted reproductive technologies (Review). The Cochrane Library. Issue 2. 2014.



## **WE SHARE YOUR DREAM**

Vitrolife's vision is to fulfil the dream of having a baby. Our commitment to increase pregnancy rates has never been more dedicated. Together with equally devoted clinics, we are improving IVF success and fulfilling more couples' greatest dream. We are very proud to be a part of making this happen.

Find much more information about EmbryoGlue on our website [www.vitrolife.com](http://www.vitrolife.com)

