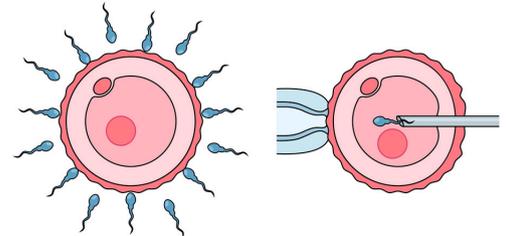




What is Fertilisation?

Fertilisation is the process where a sperm joins with an egg to create an embryo. In IVF, this happens in the laboratory using one of two methods:

- **IVF (In Vitro Fertilisation):** Eggs and sperm are placed together in a dish. Fertilisation may occur naturally when a sperm enters the egg.
- **ICSI (Intracytoplasmic Sperm Injection):** A single sperm is carefully injected directly into each mature egg.



Conventional IVF

ICSI

What is a Normal Fertilisation Rate?

On average, **around 60–70% of mature eggs will fertilise** after IVF/ ICSI.

Your embryologist will update you on the fertilisation results. If fewer eggs fertilise than expected, this is called a lower-than-expected fertilisation rate.

What Does a "Lower Than Expected Fertilisation Rate" Mean?

This means that fewer eggs fertilised normally than we would usually expect.

Example: If 10 mature eggs are collected, we would typically expect 6–8 to fertilise. If only 1 or 2 fertilise, this is considered a lower-than-expected fertilisation rate.

Why Might Fertilisation Be Low?

There are many reasons, and sometimes it may be due to a combination of factors:

- **Egg quality** – eggs may be immature or affected by age and other factors.
- **Sperm quality** – even if sperm appears normal, it may not function as expected.
- **Unexplained** causes – in some cases, no clear reason is found.



A fertilised (2pn) embryo

What Can Be Done in Future Cycles if Fertilisation is Low?

If fertilisation is lower than expected, your specialist and embryology team will carefully review your cycle.

Depending on the possible cause, options may include:

- **Changing the method of fertilisation** (for example, using ICSI instead of IVF in future cycles).
- **Adjusting medication or stimulation protocols** to improve egg maturity and quality.
- Considering **additional investigations** to better understand the cause.

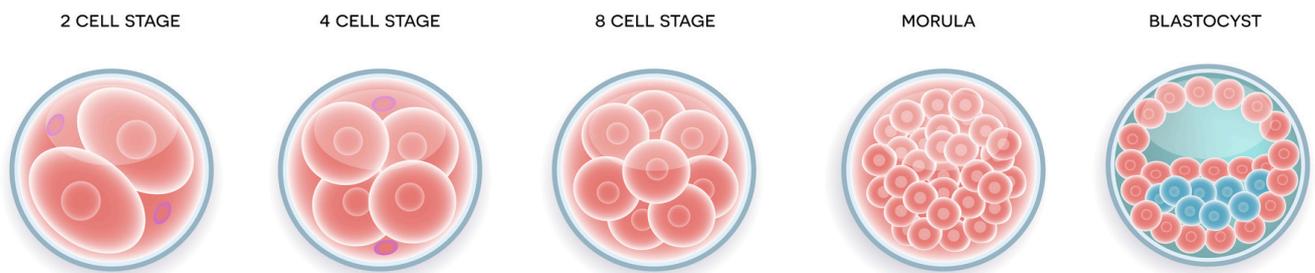
Your doctor will discuss your results with you and outline the most suitable next steps, tailored to your individual situation.



What is the Blastocyst Stage?

After an egg is fertilised by a sperm, it begins to grow and divide in the laboratory. Over 5–6 days, it goes through several stages of cell division before becoming a blastocyst. This is the stage that an embryo is transferred or frozen for future use. Your embryologist will update you further at the time of embryo transfer. If it is freeze all cycle without a transfer, an update will be provided on day 6 of culture.

On average, **40–50% of embryos reach the blastocyst stage**, however not all blastocysts will be suitable for transfer, biopsy or freezing.



Why Might Embryos Not Reach the Blastocyst Stage?

There are several possible reasons why embryos may stop developing before blastocyst:

- **Egg factors** – age, quality, or underlying issues affecting cell division.
- **Sperm factors** – sperm may carry genetic or functional problems not obvious under the microscope.
- **Chromosomal abnormalities** – many embryos naturally have imbalances in their chromosomes, which prevents further development.
- **Unexplained reasons** – in some cases, no clear cause is found.

What Can Be Done if Blastocyst Development is Poor?

If few or no embryos reach the blastocyst stage, your specialist may:

- **Review fertilisation methods** (e.g., using ICSI if not already used).
- **Adjust ovarian stimulation protocols** to improve egg maturity and quality.
- **Undertake additional testing** to determine contributing factors.
- **Discuss advanced options**, such as pre-implantation genetic testing or donor eggs/sperm if appropriate.

Every case is individual, and your care team will guide you through the results and possible next steps.