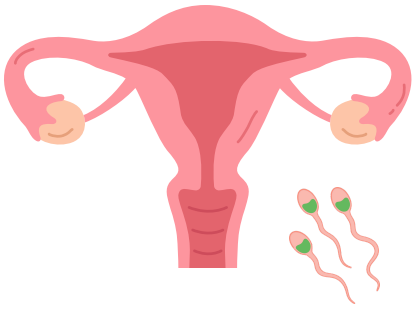
COASTAL IVF

YOUR GUIDE TO THE IVF PROCESS

Initial Consultation & Fertility Assessment

Your fertility journey begins with a consultation with one of our specialists.

Most patients will complete a structured fertility assessment, including:



- Pelvic ultrasound
- Ovarian reserve testing (AMH and/or AFC)
- Semen analysis
- Baseline blood tests including hormone panels and genetic screening
- Hysteroscopy and Micro-laparoscopy (if indicated)

Once your assessment is complete, your doctor will formulate an individualised treatment plan based on your situation and reproductive goals. Common reasons patients may require IVF include blocked fallopian tubes, reduced egg quality (with advancing age), severe endometriosis and sperm abnormalities.

IVF Information Session

Before starting treatment, you will attend a dedicated information session to go over the IVF (In Vitro Fertilisation) steps and processes. This will include information on pricing and a tour of our laboratory. This session ensures you feel confident and informed before beginning your cycle.

Stimulation Protocols at Coastal IVF

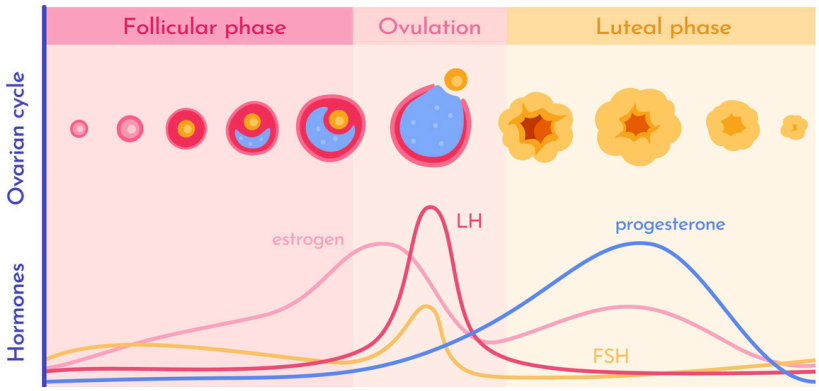
Your specialist will select the most suitable stimulation protocol based off your individual situation.

The aim is to recruit and collect an optimal number of eggs, ideally 10 to 20 mature oocytes.

However, the number of eggs varies between individuals and is largely determined by your age and ovarian reserve.

Common protocols include:

- Antagonist protocol – Flexible, safe, low ovarian hyperstimulation syndrome risk
- Long down-regulation – Specifically helpful for suppression of endometriosis
- Flare / Micro-flare – For low ovarian reserve or predicted poor responders
- Progestin – Prevents ovulation using an oral medication. Can only be used in freeze-all cycles.



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Your IVF Cycle - Step by Step Guide

Most cycles at Coastal IVF will start following a short course of the oral contraceptive pill or a GnRH therapy (e.g. Ryeqo). Occasionally, you may simply start with day 1 of your natural cycle.

1. Pre-Cycle Appointment/ Scan

A few days before starting your cycle you will attend an appointment to undergo an ultrasound, collect your cycle plan, medication instructions, and answer any questions you may have.

2. Follicle Stimulation

- **Daily injections** of gonadotropins (FSH +/- LH) are used to stimulate follicles to grow. These follicles contain the eggs that we aim to collect and grow into embryos.
- Your FSH dosage is personalised to give you the best chance of recruiting the ideal number of eggs
  - Usually **we are aiming for ~10-20 mature eggs**
- **Most patients require 8–12 days** of gonadotropin injections
- It is common to experience the following during ovarian stimulation: mild bloating, breast tenderness, twinges or pelvic pressure, headaches, mild mood changes & local redness at the injection sites.

3. Ovulation Inhibition

- **T**o stop the eggs from prematurely releasing, you will be given a **second medication to inhibit ovulation.**
- **T**his may be in the form of an injection, nasal spray or tablet, depending on your stimulation protocol.

4. Monitoring

- During your cycle we closely **monitor the growth of your follicles via ultrasound and/or blood tests.**
- This enables your clinician to make adjustments (if needed) and time your egg collection accordingly.
- **Monitoring usually starts around Day 6–9 of injections.**

Cancellation Risk (~5% or cycles) - Occasionally cycles are cancelled prior to egg retrieval because of a very low or excessively high response (and associated OHSS risk). If this occurs, we review promptly and adjust future cycles.

5. Ovulation Trigger

When follicles are mature, you receive a **trigger injection to initiate the ovulation process**. This may include a hCG and/or GnRH agonist injection and the **egg collection is usually scheduled around 36 hours later**.

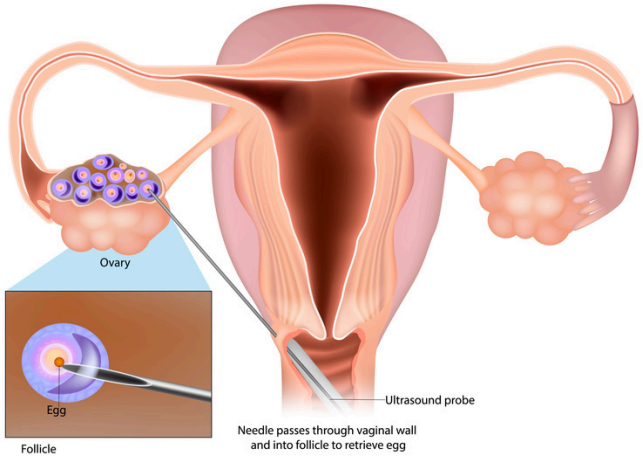
6. Egg Collection (EPU)

Majority of patients undergo egg collection next door at the Sunshine Coast Day Surgery under general anaesthetic. Alternatively, patients may elect to undergo an egg collection awake in our clinic with gas, local anaesthetic and pain relief.

Egg collection is a very low risk and quick procedure, with serious risks occurring less than 1 in 1000 cases. Most complications, if they occur are mild and easily treated.

After egg collection, it is common to experience some light spotting, period-like cramping and bloating. You may use paracetamol and heat packs for comfort.

You can return to light activity the next day but avoid heavy lifting or high impact exercise for around 1 week.



Freezing Eggs - *If you are freezing eggs, you will be notified how many are frozen and a follow up appointment will be organised within 2-4 weeks.*

7. Sperm Sample

- Leading up to egg collection, we advise **ejaculating every 1–2 days**.
  - This keeps sperm fresh and reduces DNA damage ensuring the best quality sample.
  - We do advise **24 hours of abstinence prior** to producing the sample for fertilisation.
- Producing the sample (on the day of egg collection):
  - You may produce the sample at home as long as you can **transport it to our laboratory within 1 hour**
  - Alternatively you can produce the sample on site in our private room
    - If you are planning this please notify our team in advance
  - You will be given a **specific drop-off time** and please ensure you **bring photo identification** (e.g. license)

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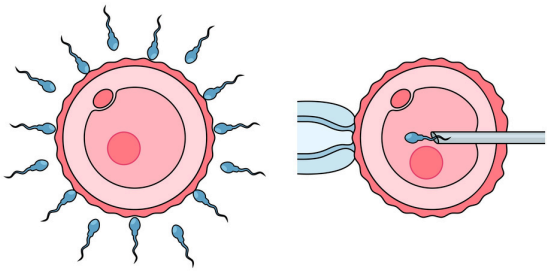
8. Fertilisation

- **Standard IVF (In Vitro Fertilisation)**
  - If the sperm analysis is normal, eggs are placed in a dish and surrounded by sperm. The sperm then compete naturally, and the healthiest sperm fertilises the egg.
- **ICSI (Intracytoplasmic Sperm Injection)**
  - If there are concerns about fertilisation, ICSI is used. This involves selecting a single sperm and injecting it directly into the egg to bypass fertilisation issues.



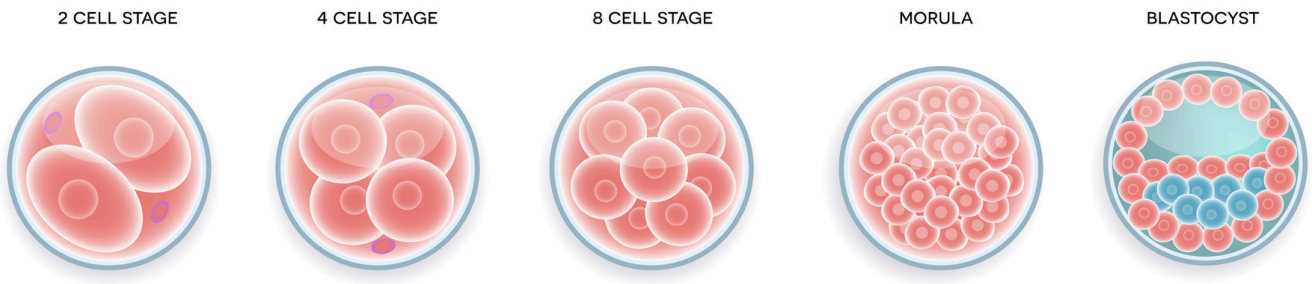
Conventional IVF ICSI

You will receive a fertilisation update the day after egg collection. **On average, 60–70% of mature eggs fertilise**.

9. Embryo Development

After fertilisation, embryos are placed in a carefully controlled incubator that mimics the conditions inside the fallopian tube and uterus. **Embryos typically reach the blastocyst stage on day 5 or day 6**. At this stage, they may be transferred, frozen for future use, or biopsied for preimplantation genetic testing (PGT).

As a general guide **~30–40% of fertilised eggs will develop into blastocysts**. This varies significantly between individuals, and even between different cycles for the same person. Factors such as age, egg quality, sperm quality, and underlying conditions influence development



If fertilisation and/or embryo development is lower than expected, our team will review your cycle and discuss adjustments that may improve future outcomes.

*For more information please see our **dedicated information sheet.***

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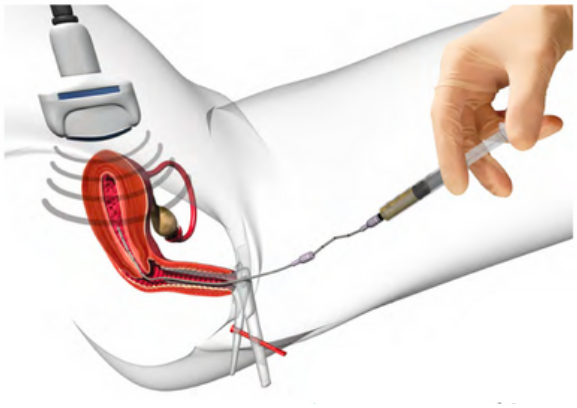
10. Embryo Transfer (ET)

If you are having a fresh embryo transfer, it is usually performed **five days after egg collection**, when the embryo reaches the blastocyst stage. Any high-quality **embryos that are not transferred will be frozen** for future use. Embryo transfer is a **simple, quick outpatient procedure** and is usually painless.

What to expect:

- Unless instructed, **do not empty your bladder** prior to transfer
- A speculum is inserted (similar to a cervical screening test).
- A soft, flexible catheter is passed through the cervix.
- The embryo is loaded into an inner catheter and gently placed in the uterus via ultrasound guidance and/or measurements from prior ultrasound or hysteroscopy.
- You can return to normal activities shortly afterwards.



Single vs Double Embryo Transfer

- Coastal IVF **recommends single embryo transfer** for majority of patients, as it offers high success rates with lowest miscarriage and pregnancy risk.
- However, in certain situations your clinician may discuss double embryo transfer (DET), such as advanced age where embryo aneuploidy is increased.
- DET increases the risk of twins, so this decision is made carefully.

When a Freeze-All Cycle Is Recommended

- In some situations, the **safest and most effective option is to freeze all embryos** and avoid a fresh transfer.
- Your doctor may recommend this if progesterone levels are elevated prior to the trigger injection (causing the endometrium to be out of sync, reducing implantation chances) OR if there is a significant risk of ovarian hyperstimulation syndrome (OHSS).
- Freeze-all cycles do not reduce your overall chance of pregnancy; they simply optimise timing and safety.

11. Pregnancy Test and Follow-Up

A blood test (β-hCG) is performed **10 days after your transfer** to determine whether implantation has occurred.

- **If the Test Is Positive** - We will schedule an early pregnancy ultrasound 3 weeks later (~7 weeks gestation) to confirm the pregnancy is in the correct location, has a heartbeat and is progressing appropriately.
- **If the Test Is Negative** - We understand how disappointing and emotionally draining this can be. A follow-up appointment will be arranged 2–3 weeks later to review your cycle in detail, including future modifications and your options moving forward.

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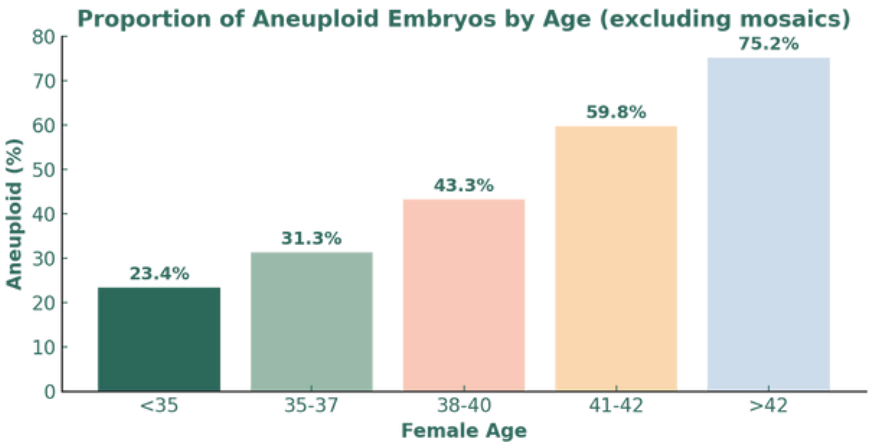
Success Rates of IVF

IVF success vary widely between individuals. Many factors influence outcomes including age, egg quality, ovarian reserve, sperm quality and uterine/pelvic factors. Because these differ so much between patients, it can be difficult to provide precise success predictions before your first cycle. We often gain the most useful information after your initial stimulation cycle, once we see your egg numbers, fertilisation rates and embryo development.

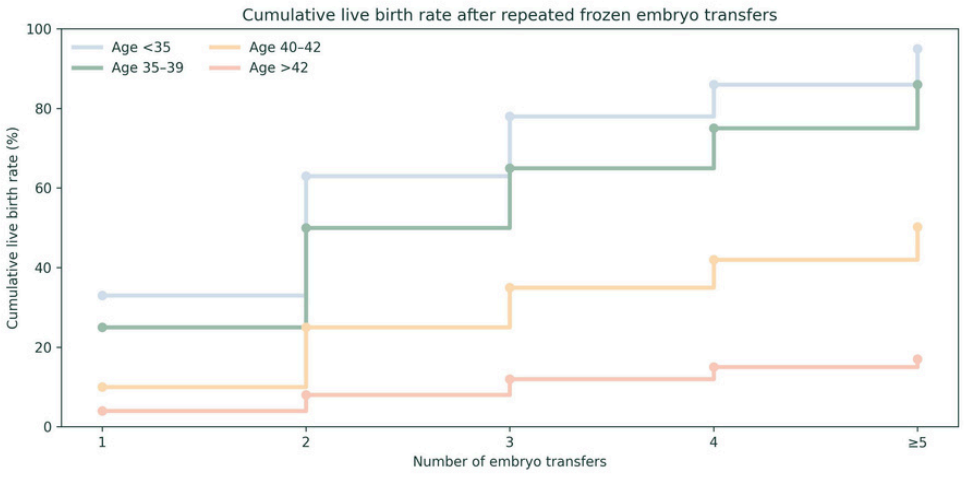
The Importance of Age and Embryo Genetics

- Age has the biggest impact on egg quality and euploid (genetically balanced) embryo rate.
- Even in young women ~30–40% of the embryos they create will be aneuploid (genetically unbalanced).
- By age 40, aneuploidy rates increase to 60–70% making it harder to conceive.



Data from Cooper Genomics

A Realistic Perspective - IVF is often described as a marathon rather than a sprint. It can be physically demanding, emotionally challenging, financially stressful and unpredictable from cycle to cycle. However, cumulative success rates are high when patients continue treatment, especially when good-quality embryos are available.



Chinese Study - https://pubmed.ncbi.nlm.nih.gov/40064027

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IVF Risks

- Risks Related to Treatment
  - IVF is generally very safe, but like any medical treatment there are potential risks.
  - *Ovarian Hyperstimulation Syndrome (OHSS)*
    - A small proportion of patients experience an excessive response to stimulation. Symptoms can include abdominal bloating, discomfort, nausea or fluid retention. Moderate to severe OHSS is rare (<1%)
    - We minimise OHSS through personalised FSH dosing, antagonist protocols, and GnRH agonist triggers.
    - Freeze-all cycles may be recommended to reduce the risk of significant OHSS to almost zero
  - *Egg Collection*
    - EPU is a low-risk procedure performed with a fine needle under ultrasound guidance.
    - Rare complications (<0.1%) include bleeding, infection, organ injury & anaesthetic complications.
  - *Cycle Cancellation*
    - Approximately 5% of IVF cycles may be cancelled before egg collection mainly due to low ovarian response (insufficient follicles) or excessive response or concerns (including concerns of OHSS risk).

- Risks Related to Pregnancy
  - Pregnancies generally follow similar courses to natural conceptions, but there is slightly increased risks of:
    - *Multiple pregnancy* (mainly with double embryo transfer) – increased miscarriage and obstetric risk.
    - *Pre-eclampsia and hypertensive disorders* – slightly higher in IVF pregnancies (especially HRT FET)
    - *Placental abnormalities* – e.g. placenta praevia or placenta accreta.
    - *Caesarean section* – higher chance for reasons related to both IVF and underlying infertility factors.

- Risks for Children Born Through IVF
  - Extensive local and overseas data show that IVF is safe and children have excellent long-term outcomes.
  - Current evidence shows a *very small increase in birth defects* in children conceived through IVF. It remains unclear whether this is due to the fertility treatment itself or the underlying reasons for infertility.

Preimplantation Genetic Testing (PGT)

PGT-A checks if an embryo is euploid (has the correct number of chromosomes). A few outer cells (which form the placenta, not the baby) are biopsied and the embryo is frozen while the sample is analysed. Results usually take about 4–6 weeks and euploid embryos can be thawed/ transferred, with high implantation rates of around 60–80%.

There are pros and cons to PGT and more detailed information can be found on our **dedicated information sheet**

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Emotional Wellbeing During IVF

IVF can be physically demanding, but it is often the emotional side of treatment that patients find the hardest. Feelings of stress, frustration, grief, uncertainty and loss of control are very common and completely normal. Everyone's emotional journey through IVF is different. Our goal is to make sure you feel supported at every step.

- **Support Services at Coastal IVF**
  - Coastal IVF partners with experienced counsellors who understand the unique challenges of treatment.
  - We offer all patients a complimentary counselling session with one of our affiliated counsellors. This can be helpful at any stage - before starting, during treatment, or after results.
  - If you would like to arrange a session, please speak with our reception team.

Lifestyle recommendations whilst undergoing IVF

- Eat a balanced diet. Minimise processed foods and excess sugars
- Take a prenatal vitamin with at least 400-600mcg folate (plus iodine)
- Excercise is encouraged but avoid high-intensity workouts or lifting once your ovaries are enlarged.
  - Be guided by comfort and avoid overheating (spas, saunas)
- Avoid alcohol, smoking, vaping and recreational drugs
- Limit caffeine, ideally to 1-2 coffees per day
- Aim for 7-9 hours of sleep and try to minimise stress (consider exercise, yoga, acupuncture)
- Avoid unprotected intercourse during stimulation and up until your embryo transfer
- Supplements:
  - Currently, there is a lack of high-quality evidence showing benefit and/or harm for 'fertility' supplements. **Given this, Coastal IVF does not recommend supplements and they are not approved for use by the Therapeutics Goods Administration (TGA).** You must notify your doctor if you are taking any medications.
  - *Anti-oxidants - Coenzyme Q10 (CoQ10), N-Acetylcysteine (NAC) and Melatonin* - Evidence shows possible benefit in older women or those with poor ovarian reserve but the quality and quantity of evidence is poor and most studies show no improvement in live birth rates.
  - *Nicotinamide Adenine Dinucleotide or Mononucleotide (NAD/ NMN)* - Enzymes involved in mitochondrial function. No robust human data but prominising animal studies for improving egg and sperm quality. More research is needed (including long term safety data) before recommending in IVF.
  - *DHEA* - DHEA is a weak androgen precurosr, some studies showed benefit in women with poor ovarian reserve. DHEA may intefere with your IVF cycle, so it should only be used if recommended by your specialist.

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Links to other information

- IVF/ICSI pricing information
- Egg freezing pricing information
- Fertilisation and embryo development
- Frozen Embryo Transfer information
- PGT information
- What to do with your unused gametes/ embryos
- Ovarian Hyperstimulation Syndrome (OHSS) information

Contact Information:

- (0800-1600 Mon-Fri) Coastal IVF - (07) 5443 4301 or email (reception@coastalivf.com.au)
- (After-hours) Contact your doctor or Buderim Private Hospital Maternity Unit - (07) 5430 3100
- (Emergencies or Urgent Concerns) Call 000 or Buderim Hospital Emergency Department - (07) 5452 0599