

COASTAL IVF

FROZEN EMBRYO TRANSFER



What Is a Frozen Embryo Transfer?

A frozen embryo transfer (FET) involves thawing and transferring an embryo that was created and frozen during a prior IVF cycle. FET's are often used when:

- You have frozen embryos from a previous stimulated cycle
- A “freeze-all” approach was used (e.g. in the setting of high OHSS risk or an elevated progesterone level)
- You are using donor embryos or oocytes

FET cycles are usually gentler, involve fewer medications, and offer excellent pregnancy rates.

Ways to Prepare the Endometrium

There are two main types of FET cycles:

1. Ovulation-Based FET (Natural or Assisted)

a. These cycles rely on you developing a follicle ('egg') that produces hormones (oestrogen and progesterone) to prepare your endometrial lining for implantation.

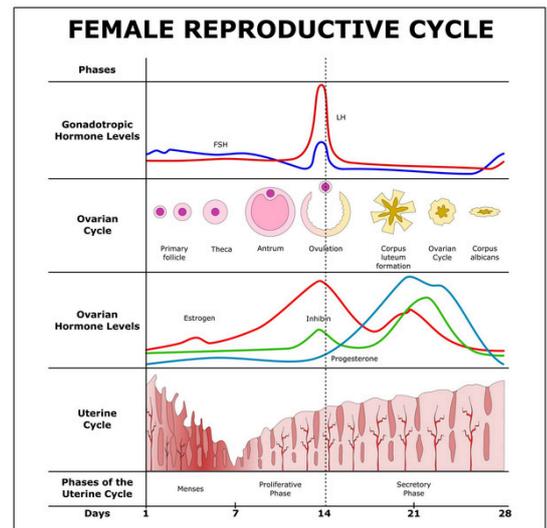
- i. *'True Natural' Cycle* – relies on natural ovulation
- ii. *'Assisted Natural' Cycle* – uses tablets e.g. Letrozole, or low-dose FSH injections to aid development of a follicle. This is used in patients where ovulation is abnormal or unreliable.

2. Hormone Replacement Therapy (HRT) FET

a. HRT cycles do not rely on ovulation and instead, the endometrium is prepared entirely with:

- Oestrogen (tablets and/or patches) to thicken the lining.
- Followed by Progesterone (vaginal pessaries and/or injections) to prepare it for pregnancy.

a. HRT FET cycles are helpful in patients with ovulation issues and/or for timing flexibility.



Starting a FET Cycle

Cycles may begin with your natural menstrual cycle or after stopping the pill or a GnRH therapy (e.g. Ryeqo).

Pre-Cycle Scan / Appointment:

- Before starting, you will have a scan either just before or during the first few days of your period to ensure there are no ovarian cysts present and confirm the uterus is suitable for a transfer.
- At this appointment you will review and collect your personalised medication plan.

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The Process - Ovulation-Based FET Cycle

1. Monitoring

- Monitoring typically begins around Day 10–12 of your cycle and includes [ultrasounds and/or blood tests](#).
- Ultrasounds ensures adequate follicular growth (>17mm at ovulation) and endometrial thickness (>7mm)

2. Detecting or Triggering Ovulation

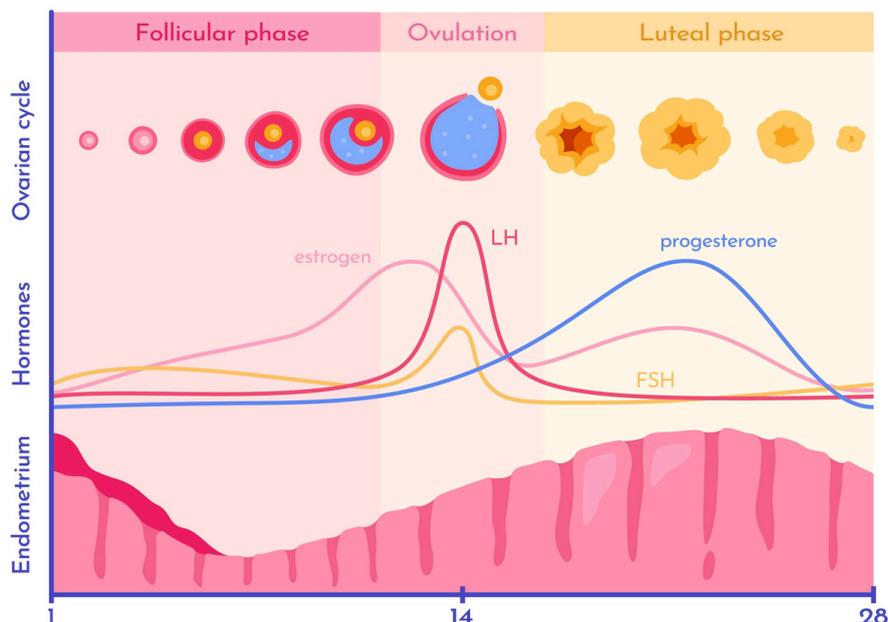
- Once the above parameters are met, ovulation may occur naturally or via a trigger injection (hCG).
- [Natural Ovulation](#) - We track for a spontaneous LH surge using blood tests and/or urine ovulation kits.
- [Triggered Ovulation](#) - A hCG injection triggers ovulation to occur around 36–40 hours later.

3. Luteal Support

- Depending on your history and treatment plan, you may be given additional progesterone support. This is most often in the form of a vaginal pessary twice per day. Your clinician will advise the best approach.

4. Embryo Transfer Timing

- [A](#) blastocyst transfer occurs 5 days after ovulation.
- This is typically six days after a natural LH surge, seven days after an hCG trigger or five days after your progesterone rise.



[Cycle cancellation](#) occurs in ~5–10% of ovulation-based FET cycles, mainly due to abnormal follicular development, ovulation issues, suboptimal hormone levels or the lining not thickening adequately.

If this occurs, your clinician will advise whether another ovulation cycle or a medicated cycle is more suitable.

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The Process - HRT FET Cycle

1. Growing the Endometrium

- You will take oestrogen (oral tablets and/or patches) to thicken the uterine lining.
- Around 2 weeks later, you will have an ultrasound +/- blood test to check the lining and exclude any cysts.
- If the lining is suitable (usually >7mm and normal pattern), you will proceed to starting progesterone.

2. Adding Progesterone

- Progesterone prepares the lining for implantation. You will continue your oestrogen and start progesterone:
 - Vaginal pessaries twice daily, and/or
 - Injectable progesterone (e.g. Prolutex)
- A blood test is often performed the day before transfer to confirm adequate progesterone levels.

3. Embryo Transfer Timing

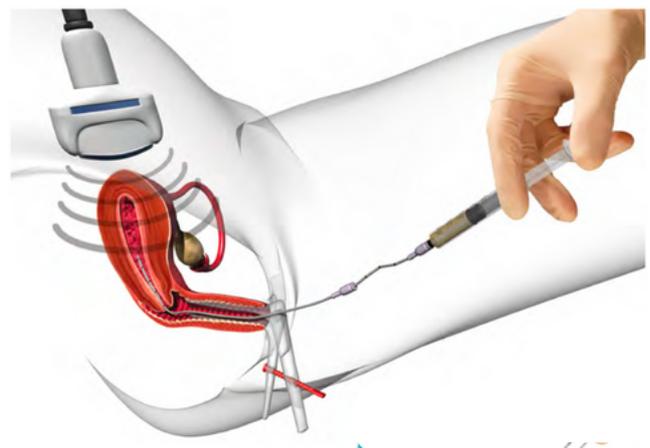
- Transfer is scheduled after the correct number of progesterone days to match the developmental age of the embryo (e.g. blastocyst transfer occurs after 5 full days of progesterone).
- Hormone replacement must continue until 8-12 weeks of pregnancy when the placenta takes over.

HRT FET Risks - Because there is no corpus luteum in medicated cycles, research shows a slightly higher risk of placental issues such as pre-eclampsia and adherent placentation.

Embryo Transfer (ET)

What to Expect:

- Arrive with a comfortably full bladder.
- A speculum is inserted (similar to a pap smear)
- A soft catheter is gently passed through the cervix
- The embryo is loaded into an inner catheter and placed in the uterus using ultrasound guidance and/or prior uterine measurements
- You may return to normal activities shortly after



Single vs Double Embryo Transfer

- We recommend single embryo transfer for most patients due to its high success rates and lowest risk.
- In select cases (e.g. advanced maternal age with high aneuploidy rates), a double embryo transfer may be discussed. DET increases the chance of twins and associated risks, so this decision is made carefully.

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Pregnancy Test and Follow-Up

A blood test (β -hCG) is performed 10 days after blastocyst transfer.

- **If Positive** - An early pregnancy scan is booked ~3 weeks later (at 7 weeks gestation) to confirm the location of the pregnancy, presence of a heartbeat and appropriate development.
- **If Negative** - A follow-up appointment will be arranged to review the cycle, discuss what worked well and what could be optimised, and plan next steps. Options may include a repeat FET, a new stimulation cycle, taking a break, or undergoing further investigations and/or treatment.
 - Some patients prefer to move straight into another cycle, others need time to regroup emotionally. Both approaches are completely normal and there is no right or wrong decision.

Lifestyle recommendations whilst undergoing a FET

- Eat a balanced diet. Minimise processed foods and excess sugars
- Take a prenatal vitamin with at least 400mcg folate (plus iodine)
- Exercise is encouraged. 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 ovulation FET cycles until after you embryo transfer due to the risk of unplanned multiple pregnancy
- Supplements (see 'Your Guide to the IVF Process' information sheet)

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