Frozen Embryo Transfer Cycle

What you need to know

This handout explains how to prepare and what to expect during a frozen embryo transfer cycle. This handout adds to talks you have with your provider. It is important that you fully understand the cycle, so please read this handout carefully. Always feel free to ask any questions now and during your treatment.

What is a frozen embryo transfer cycle?

A frozen embryo transfer (FET) cycle is a process to help you become pregnant. FET uses embryos (fertilized eggs) that have been frozen. During the FET cycle, your embryos are thawed and placed into your uterus. This is done at a time in your menstrual cycle that best supports a pregnancy.

You will be given hormones to help your endometrium (lining of your uterus) accept the embryos. While you are taking the hormones, you will have blood tests and ultrasound exams to help us monitor how your body responds to hormone treatment.

- You will have **blood draws** from a vein in your arm. The blood samples are used to check your hormone levels.
- For your **transvaginal ultrasound exam**, an ultrasound probe is placed inside your vagina. The probe uses sound waves to check your uterus and ovaries. These images appear a screen in the exam room for your doctor to view and print.

Your care team will give you detailed instructions. To improve your chance of pregnancy success, closely follow all instructions.

What happens before and during the FET cycle?

- Before the FET cycle, you will take medicines to reduce ovarian activity. You will take either birth control pills or an injection of a hormone called *leuprolide* (Lupron).
After taking this medicine for at least 10 days, you will take the hormone estradiol, as a pill, injection, or patch. Estradiol helps prepare your endometrium to accept the embryo.

Blood tests will be done to measure your estradiol level. A vaginal ultrasound will be done after you have used estradiol for about 2 weeks. This test will determine if your endometrium is thick enough for an embryo transfer.

When your endometrium is at the right thickness and your estradiol is at a good level, we will tell you to use the hormone progesterone. Progesterone is given as an injection into a muscle (intramuscular) or as a vaginal gel or pill. Your doctor will decide the best method for you.

Make sure you know exactly when to start the progesterone. The timing is very important. It is related to when your frozen embryos will be thawed and transferred.

We will also tell you when to take Medrol, a steroid medicine that is sometimes used to help with embryo implantation. You will take Medrol for 5 days.

Keep using estradiol and progesterone until we tell you to stop.

When pregnant, you will keep using estradiol and progesterone until you are at least 10 weeks pregnant.

What happens to the embryos during this process?

Embryos are frozen at different times: the day after fertilization (day 1), at cleavage stage (day 3), or when they become blastocysts (day 5).

Your embryos were frozen either one at a time or in groups. They were frozen inside small vials or straws. The number of vials or straws that will be thawed for the FET depends on:

- Your age
- The quality of your embryos
- The number of embryos frozen in each vial or straw
- Other factors that were present when your embryos were frozen

Depending on when and how your embryos were frozen, they may need time to grow in the lab after thawing, before they can be placed into your uterus. Your FET team will tell you if extra steps are needed and how they affect your FET cycle. These extra steps, if needed, will add more cost.

We will thaw a certain number of embryos for transfer. This number is based on how many give you the highest chance of pregnancy but the lowest chance of multiple gestation (being pregnant with more than 1 baby at the same time).
We will also take into account that some embryos will not survive being frozen and then thawed. After talking with you, your provider will recommend how many embryos will be thawed and transferred.

**What are the benefits of FET?**

You might receive these benefits from FET:

- Pregnancy
- Being able to control how many embryos are transferred into your uterus

Please know that University Reproductive Care (URC) doctors and staff **cannot** guarantee that:

- Any of the steps in the process will succeed
- The treatment process will result in pregnancy
- The pregnancy will result in delivery of a healthy full-term newborn

**What risks or problems can occur with FET?**

- It is possible that none of your frozen embryos will survive being frozen and thawed. This will mean there are no embryos to transfer.

- Using hormones such as estradiol may increase your risk of blood clots. If you get blood clots, you may need to take blood-thinning medicines (*anticoagulants*) for a few months. Very rarely, blood clots cause more serious problems such as *pulmonary embolus* (blood clots in the lungs), stroke, or even death.

- The embryo transfer procedure may cause some cramping, discomfort, and a small amount of bleeding. Rarely, infection occurs from the catheter. If this occurs, you may need to take antibiotics.

- *Multiple gestation* (being pregnant with more than 1 baby at the same time) is a risk of FET. This risk increases when more embryos are placed into your uterus. The risks of multiple gestation include:
  - You may have preterm labor.
  - Your babies may be born premature and need intensive care.
  - Your babies may have long-term problems from being born too early. Or, they may not survive.
  - Preterm labor and delivery may place you at higher risk for Cesarean section, bleeding, and infection.
- Problems may occur for the mother during pregnancy. Two of these problems are:
  - **Gestational diabetes**, which causes high blood sugar in the mother and can affect the baby’s health
  - **Preeclampsia**, a serious condition that includes a sudden rise in blood pressure
- Sometimes it takes longer than we expect for your endometrium to thicken after you start taking hormones. This may change the expected date of your FET. Extra hormones and more monitoring may be needed.