

Life's Little Miracles Happen Here



IVF Overview &
Cycle Management



Thank you for choosing Texas Fertility Center for your IVF cycle. We are excited to work with you and are committed to helping you grow your family.

WHAT WE OFFER

Texas Fertility Center has been offering in vitro fertilization (IVF) since 1984. Since that time, numerous advances in IVF have occurred, and we have actively participated in this evolution.

An integral part of any successful IVF program is an excellent embryology laboratory. We are excited to partner with Ovation Fertility, a network of premier IVF laboratories nationwide.

WHO MIGHT BE HELPED BY IVF?

IVF is a complex process that can be overcome many different fertility issues:

- Abnormal sperm production
- Endometriosis
- Pelvic scar tissue
- Blocked fallopian tubes
- Diminished ovarian reserve
- Abnormalities involving the uterus or cervix
- Ovulation disorders
- Unexplained infertility
- Recurrent miscarriage

In addition to standard IVF, we also offer access to special services for patients who need them:

- 1) **Microsurgical Epididymal Sperm Aspiration (MESA), Testicular Sperm Extraction (TESE) or Percutaneous Epididymal Sperm Aspiration (PESA)** In conjunction with urology specialists, we offer access to sperm extraction procedures for our patients with severe male factor infertility.
- 2) **Preimplantation Genetic Testing (PGT)** Patients who are of advanced maternal age or who have had recurrent miscarriage, or a family history of a genetic disorder may benefit from this type of testing.
- 3) **Donor Oocytes or Embryos** The use of donor eggs or donor embryos can allow patients who are not able to use their own eggs and/or sperm to achieve a healthy pregnancy.
- 4) **Oocyte Cryopreservation** Patients can freeze their eggs for future fertility or before undergoing cancer treatments that can impact their egg supply.
- 5) **Gestational Surrogacy** Patients who cannot carry a pregnancy to term due to health or uterine issues may use this option to grow their family.

IN VITRO FERTILIZATION OVERVIEW

Preparation of the Ovaries for Stimulation

Your doctor may prescribe medication prior to gonadotropin injections to better prepare the ovaries for stimulation. A short course of pills (birth control or estrogen) is commonly utilized. The goal of this pretreatment is to increase the number of eggs (oocytes) that will mature in the next phase of treatment. The birth control pill can also help to prevent ovarian cysts and increase the flexibility of scheduling.

Stimulation of the Ovaries

Ovarian stimulation starts with a menstrual period. A baseline ultrasound is performed to confirm there are no ovarian cysts. Injectable hormones will be prescribed to stimulate the growth of multiple follicles. These hormones are called gonadotropins and examples are:

- 1) Gonal-F® or Follistim® (FSH hormone)
- 2) Menopur® (FSH/LH hormone)

A follicle is a fluid filled sac within the ovary. Each follicle ideally contains one developing egg. Most women need ~ 8-14 days of ovarian stimulation to optimally mature their eggs, but this can vary.

Ovulation Prevention

During IVF, we do not want ovulation to occur – rather we want to retrieve the mature eggs directly from the ovaries before they spontaneously ovulate.

There are 2 types of medications used to prevent ovulation:

- 1) Lupron® (leuprolide acetate) is started prior to ovarian stimulation and is continued until 2 days prior to the oocyte retrieval.
- 2) Ganirelix® (ganirelix acetate) or Cetrotide® (cetrorelix acetate) is taken during ovarian stimulation, usually once the biggest follicle is 14-15 mm in diameter. It is continued until 2 days prior to the oocyte retrieval.

Monitoring of Ovarian Stimulation

It is important to have close monitoring with bloodwork and ultrasound during IVF. Blood work must be drawn by 8:30 am so that we receive same day results. This allows your doctor to adjust the hormone doses to optimize your stimulation.

Monitoring usually begins on the 4th or 5th day of injections and is repeated every 2 or 3 days. Once the largest follicles are ~ 20-22 mm, a trigger hormone is given to complete the maturation process and prepare the eggs to be retrieved.

Egg Retrieval

The removal of eggs from the follicles is a minor outpatient surgical procedure performed at Austin Fertility Surgery Center. This procedure occurs ~36 hours after the trigger injection. The egg retrieval is performed with IV sedation with an anesthesiologist and takes approximately 15 minutes. During the retrieval, your doctor will place a needle through the vagina into each of the large follicles and drain the fluid. The embryologist will then locate the microscopic eggs in the follicular fluid.

Timeline of Events in the IVF Laboratory: Ovation Fertility

Day 0 (Egg Retrieval)

On this day, the eggs will either be acquired through an egg retrieval or thawed. The sperm will either be acquired through a fresh collection or thawed. The eggs and sperm will be combined for the purpose of fertilization. Fertilization occurs 4-6 hours after the egg retrieval through either insemination or intracytoplasmic sperm injection (ICSI). With insemination, many moving sperm are placed near each egg. In ICSI, an individual sperm is directly injected into each egg.

After insemination or ICSI, each culture dish containing the eggs and sperm is placed into an incubator, where the temperature, humidity, pH, and other environmental conditions can be tightly controlled.



Day 1:

The day after the egg retrieval, the eggs will be checked to see how many have fertilized normally. Fertilized eggs are called embryos. A normally fertilized embryo will have 2 pronuclei – one from the egg and one from the sperm.

YOU WILL RECEIVE A PHONE UPDATE FROM THE IVF LAB



Day 2:

The embryos remain in the incubator and are not disturbed.

Day 3:

The embryos remain in the incubator and are not disturbed.

Day 4:

The embryos remain in the incubator and are not disturbed.

Day 5:

Possible freezing of suitable embryos without embryo biopsy for patients undergoing a “Freeze All Cycle”

Possible embryo biopsy for genetic testing of embryos followed by freezing for patients undergoing a “PGT-A/Freeze All Cycle”

Possible fresh embryo transfer for patients undergoing a “Fresh Embryo Transfer Cycle”

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Day 6:

Possible freezing of suitable embryos without embryo biopsy for patients undergoing a “Freeze All Cycle”

Possible embryo biopsy for genetic testing of embryos followed by freezing for patients undergoing a “PGT-A/Freeze All Cycle”

YOU WILL RECEIVE A PHONE UPDATE FROM THE IVF LAB

Day 7:

Possible freezing of suitable embryos without embryo biopsy for patients undergoing a “Freeze All Cycle”

Possible embryo biopsy for genetic testing of embryos followed by freezing for patients undergoing a “PGT-A/Freeze All Cycle”

Possible fresh embryo transfer for patients undergoing a “Fresh Embryo Transfer Cycle”

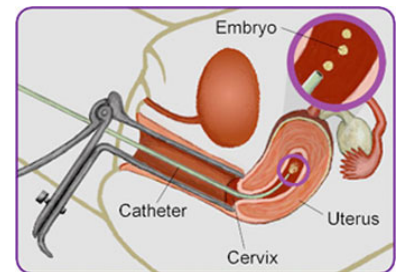
YOU WILL RECEIVE A PHONE UPDATE FROM THE IVF LAB

Any embryos still in culture on Day 7 that DO NOT meet the criteria for biopsy or freeze WILL be discarded. Genetic testing samples are sent out on Tuesday and Thursday; results usually take about 7 business days. Patients will be called with the genetic testing results when they are released from the genetics laboratory.

Embryo Transfer

Fresh embryo transfers were much more common in the past. However, with the advances in cryopreservation techniques and improved maternal and neonatal outcomes with frozen embryos, most patients freeze their embryos and proceed with a frozen embryo transfer (FET) in a subsequent month.

Due to many changes in technology, the majority of embryo transfers at Texas Fertility Center are with 1 embryo. We abide by the guidelines set forth by the American Society of Reproductive Medicine (ASRM) to optimize maternal and baby health.



When it comes time for your embryo transfer, the embryo is loaded into a small catheter and gently placed into your uterus. This procedure does not require anesthesia, and a partner can be present for the embryo transfer. You may leave immediately after the transfer. If you take Valium before the transfer, you must have someone that you know drive you home.

Freezing Embryos

Embryos can be frozen (cryopreserved) and stored at Ovation Fertility until you are ready to do an embryo transfer.

Before the IVF process starts, patients will be asked to sign a Consent Form for Cryopreservation. Legally, all frozen embryos are the property of the patient or couple undergoing the procedure.

During the consent process, all patients must indicate what they will do with their frozen embryos in the event of death, divorce, dissolution of the relationship, or loss of contact with Ovation Fertility.

Each embryo in our IVF laboratory is treated with the utmost care and respect. All viable embryos are either transferred or frozen. Only embryos that have fertilized abnormally, stopped dividing, or have completely fragmented are discarded by Ovation Fertility.

Texas Fertility Center and Ovation Fertility strictly follow the guidelines for infectious diseases developed by the Society for Assisted Reproductive Technology (SART) and the Federal Food and Drug Administration (FDA). If a patient or couple decides to donate excess embryos, additional blood testing may be required at the time of donation.

WHAT IS THE CHANCE OF SUCCESS?

A patient's chance of success is directly related to the quality of the IVF program they select as well as their specific fertility issues. A variety of medical conditions, such as poor sperm quality, abnormal egg production, and advanced maternal age can have a negative effect on success.

As members of SART, Texas Fertility Center and Ovation Fertility are legally required to submit our pregnancy data to the Centers for Disease Control (CDC) every year. The CDC gathers and publishes the statistics for IVF programs in the United States for public review.

At Texas Fertility Center and Ovation Fertility, we are especially proud of the fact that our success rates have consistently remained above the national average.

TREATMENT COST

The cost of an IVF cycle may vary significantly because of individual characteristics. Patients who require more medication than average or who take a longer time to stimulate will incur more expense.

There are charges for additional procedures, such as ICSI, embryo biopsy, genetic testing, and embryo freezing if they are needed.

Please speak with your financial counselor if you have questions regarding costs.

PAYMENT AND BILLING POLICY

Please check with your insurance company or your employer's human resource department to verify your coverage for IVF treatment. Many insurance companies cover only diagnostic testing for infertility and not infertility treatment itself. Treatment should only be undertaken if you have the ability and intention of assuming responsibility for the total cost.

Please understand that your IVF treatment will involve the collaboration of multiple different entities. Payment is required prior to the start of service:

- **Austin Fertility Surgery Center** (facility fee for egg retrieval and embryo transfer)
- **Texas Fertility Center** (physician charges for ultrasounds, egg retrieval, and embryo transfer)
- **Ovation Laboratory** (embryology lab)
- **Clinical Pathology Laboratory** (bloodwork lab)
- **Austin Anesthesiology Group** (anesthesia provider for egg retrieval)

Texas Fertility Center works with independent companies that offer financing for IVF procedures. Please let us know if you need this additional information.

HOW DO I START AN IVF CYCLE?

If you are interested in IVF, **please contact your nurse team**. Your nurse team will collaborate with your doctor to determine if additional testing is necessary and what stimulation protocol will be used.

Please notify your nurse team of any dates that you are not available due to your travel or work schedule. As you can imagine, IVF scheduling is a complex process and cycles need to be carefully coordinated for optimum results. Rarely, an IVF start will need to be postponed due to regularly scheduled laboratory maintenance. We will try to accommodate your schedule as much as possible. However, we prefer not to "rush" a cycle as this may put additional stress on you.

EMOTIONAL SUPPORT THROUGHOUT THE TREATMENT CYCLE

We recognize the strong emotional impact of infertility and its treatment. Please let us know if you are interested in further emotional support. We can connect you with therapists and support organizations that have extensive experience with patients and couples who are undergoing fertility treatment.

IVF CHECKLIST

All patients who are undergoing an IVF cycle are required to have certain tests performed prior to their IVF procedure. **Patients will not be able to start IVF until ALL requirements have been completed.**

- ☐ **SEMEN ANALYSIS** This is done at Ovation Fertility and must be updated every 12 months. You may schedule this test by calling (512) 610-7474. If there is any anticipated difficulty in collecting on the day of your egg retrieval, this is also an opportunity to freeze a backup specimen. (If a patient is using anonymous frozen donor sperm, this testing is not required.)
- ☐ **INFECTIOUS DISEASE SCREENING (IDS):** Texas Fertility Center and Ovation Fertility policies require infectious disease screening (IDS) every 12 months. We are unable to make any exceptions to this policy. Check with your insurance company to see if the tests will be covered. The required tests and their corresponding CPT (procedure) codes are listed below:

• Blood Type & RH	86900/86901
• HIV 1 & 2 Antibody	86703
• Hepatitis B Surface Antigen (HbsAg)	87340
• Hepatitis B Core Antibody (Anti-HBc)	86704
• Hepatitis C Core Antibody (Anti-HCV)	86803
• RPR	86592
• Rubella (female only)	86762
• Varicella (female only)	86787

The diagnosis codes that we use for this testing are Z11.4, Z11.3, Z01.83. If your insurance carrier does not cover these tests, please check with TFC regarding discounted prepayment options.

- ☐ **FINANCIAL CONSULTATION:** A representative from both TFC and Ovation will contact you via regarding fees, your benefits, and payment. Nurses do not discuss financial information regarding your insurance benefits or fees.
- ☐ **NURSE CONSULT APPOINTMENT:** Prior to IVF, you will have a nurse consult to discuss:
 - **IVF Cycle Plan**
 - You will review the overall schedule and estimated time for egg retrieval
 - Injection videos **MUST** be viewed at www.freedommedteach.com **prior** to your nurse consultation
 - Your nurse will review the timeline of your injectable medications and answer questions you may have about injection administration
 - **Consents**
 - It is very important to review all consent forms **prior** to this appointment.
 - You and your partner will need to sign all appropriate consent forms.
 - A notarized consent form may be used if your partner is unable to attend.
- ☐ **AUSTIN FERTILITY SURGERY CENTER:** Pre-registration is required for your procedures. Austin Fertility Surgery Center will send you the required paperwork to complete prior to your arrival for your procedure.
- ☐ **PRENATAL VITAMINS:** Please make sure that you are taking at least 400 mcg of folic acid daily prior to starting your IVF cycle. (This is typically found in a prenatal or multi-vitamin.)

Do's and Don'ts

PLEASE:

- **DO NOT** smoke cigarettes or vape at all and avoid all second-hand smoke.
- **DO NOT** use aspirin or antiprostaglandins (Motrin, Advil, Aleve or Ibuprofen) for pain. You may continue to use Tylenol as needed.
- **DO CHECK** with your doctor or nurse about any over the counter or prescription medications.
- **DO TAKE** a multiple or prenatal vitamin containing at least 400 micrograms of folic acid.
- **DO MINIMIZE** all caffeine intake, including caffeinated coffee, tea, sodas, energy drinks, some over-the-counter medications (i.e. Midol, Excedrin) and chocolate.
- **DO STOP** your intake of foods and beverages sweetened with artificial sweeteners.
- **DO WATCH** for constipation. Stool softeners are ok throughout the IVF process.
- **DO TAKE** your medications at a consistent time each day – ideally within a 1-hour window.
- **DO HAVE** your bloodwork done by 8:30am on the days of your monitoring appointments.
- **DO WEIGH** yourself close to the time of your egg retrieval. Report any rapid weight gain (4 pounds or more per day) to your IVF nurse or physician.

Frequently Asked Questions

- **Why are my partner and I both given antibiotics?**

Antibiotics are given to both partners during IVF cycles to eliminate bacteria that could be present in the genitourinary tract that could decrease the chance for pregnancy.

- **Is it normal to have spotting while on birth control pills?**

It is not unusual to have spotting while on birth control pills. You should not stop the pills because of spotting. The spotting usually resolves within a few days.

- **How long does the IVF process take?**

A typical IVF cycle with frozen embryo transfer takes about 2½ months from start to finish.

- **Do I have to have a menstrual flow before I start my stimulation medications? If I have not started my flow by the date of my baseline sonogram, do I keep the appointment?**

Some patients will start their menses prior to the baseline sonogram, but if you have not started, you will still need to keep the appointment. Your physician will give you further instructions after the sonogram.

- **When will I learn how to give the injections? Who gives the injections?**

An injection lesson is given at the nurse consultation visit. Your nurse will review the entire plan with you including all important dates and medications that you will be given. You will need to view the injection training videos by going to freedommedteach.com

- **What do I do if my partner is concerned, he won't be able to collect a specimen on the day of retrieval?**

Freezing a specimen for back up is always an option. This is strongly recommended if there is any concern about challenges with collecting a specimen on the day of retrieval.

- **Where do the retrieval and transfer take place?**

Retrievals and transfers are done in building 3 at the Austin Fertility Surgery Center. This is in the same office complex as our main office at 6500 North Mopac Expressway, close to Far West Blvd.

- **When will I know when my embryo transfer will be?**

Your nurse will make your transfer plan when you call with menstrual flow after the egg retrieval.

- **When do I take a pregnancy test?**

The pregnancy test is typically done 9-10 days after a frozen embryo transfer.

- **Why does a blood test have to be done to check for pregnancy?**

Blood tests are much more accurate than urine tests. It is very important for the pregnancy hormone levels to be monitored frequently to determine if the pregnancy is progressing normally. Also, by monitoring the blood levels, we can adjust your progesterone and estrogen supplementation medications if necessary.

- **If I am spotting or bleeding, do I still need to take the pregnancy test?**

Spotting or bleeding in early pregnancy is not unusual so you must take the pregnancy test.

- **How do I get more medication if I need it?**

Your medications are ordered with several refills in case you need them. You will need to keep track of how much medication you have left so you can call the pharmacy for a refill before you run out of medications. This is especially important prior to weekends and holidays as pharmacy hours and delivery service may be limited.

- **What are the most common side effects of the medications?**

Lupron - fatigue, leg pain, moodiness, mild headaches, mild hot flashes

Gonal F/Follistim/Menopur - bloating, moodiness, cramping

HCG or Lupron trigger - breast tenderness, cramping

- **What is Ovarian Hyperstimulation Syndrome (OHSS)?**

OHSS is characterized by enlarged ovaries and accumulation of fluid in the abdomen. This typically occurs within 7 days of the oocyte retrieval. The mild form occurs in 10-20% of cycles and results in some discomfort but almost always resolves without complications. The severe form occurs approximately 1% of the time. By being monitored closely with blood work and sonograms, your risk of developing OHSS is very low.

- **What are the symptoms of OHSS?**

Rapid weight gain (4-5 lbs.) within 24 hours, abdominal pain, abdominal distension, decreased urine output, shortness of breath, excessive fatigue and nausea.

- **What is the process of retrieving the oocytes?**

The retrieval is done under IV sedation. A needle attached to the vaginal ultrasound probe is passed through the top of the vagina and into each of the ovaries. The eggs are then suctioned from the ovarian follicles. The eggs are retrieved vaginally so no incision is made in your body.

- **Is there pain after the retrieval?**

Bloating and discomfort from enlarged ovaries is common. Tylenol or prescription pain medication may be used to help with the discomfort.

Helpful Phone Numbers

- Texas Fertility Center (512) 451-0149
- Texas Fertility Center (fax) (512) 451-0977
(512) 610-7485
- Clinical Staff: (512) 451-0149, x 4000
- On-Call Nurse (512) 695-2530

Weekdays: 6:00-8:30 am, 4:00-10:00 pm

Weekends and Holidays: 6:00 am-10:00 pm

(Although we do not have regular weekend or holiday office hours, the office will be open on weekends and holidays for established patients who need to be seen. If you need to reach one of our medical staff on a weekend or holiday, please try the office number before you call our on-call nurse.)

- Texas Fertility Center Billing Department (512) 451-0149, option #8
- Ovation Fertility (512) 610-7474
- Ovation Financial Counselor (512) 610-7474 option # 3
- Austin Anesthesiology Group (512) 343-2292
- Austin Fertility Surgery Center-Preadmissions (512) 614-4830



Texas Fertility Center

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