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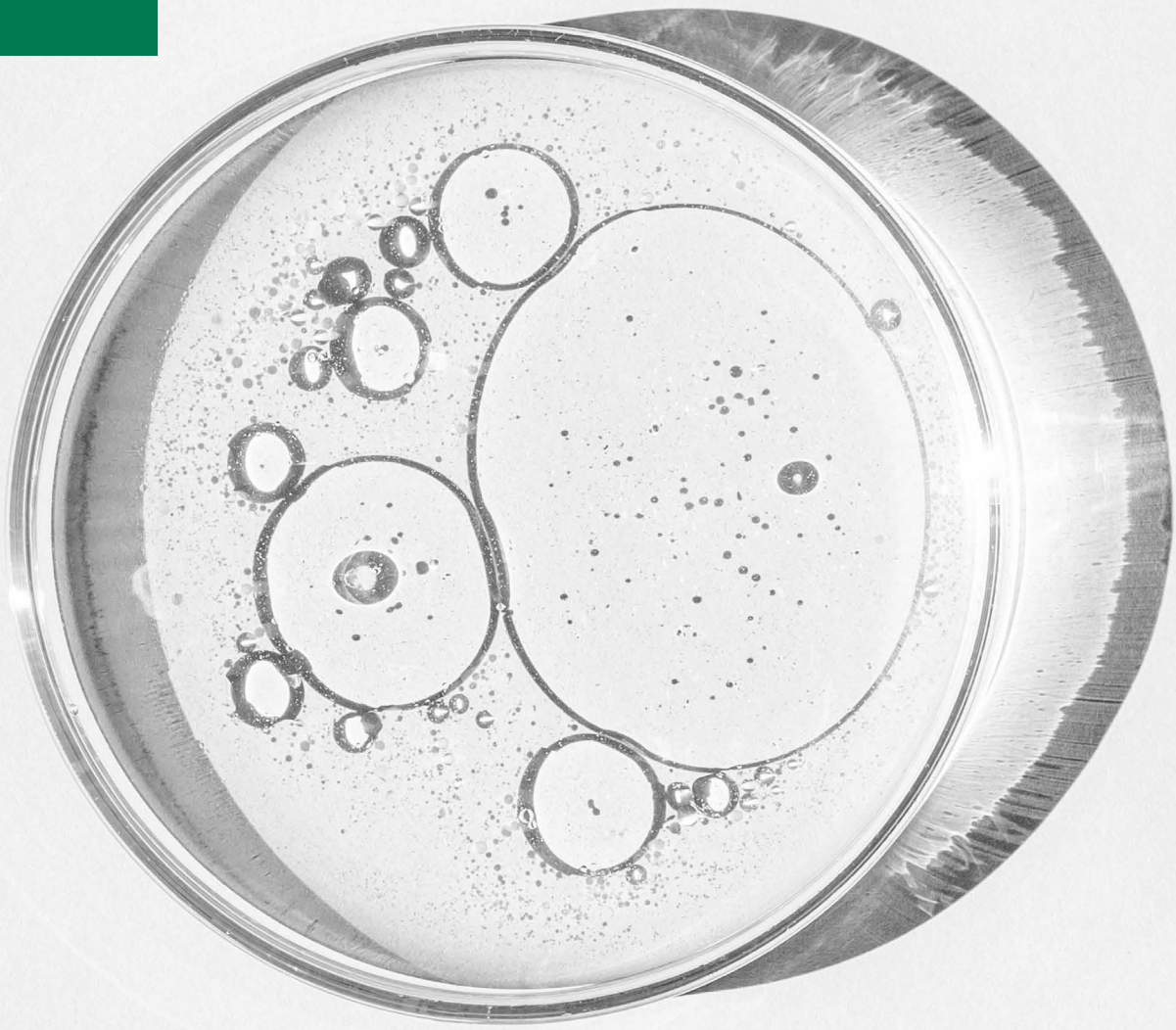

YOUR *Introductory Guide* TO IN VITRO FERTILIZATION


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The IVF journey can seem overwhelming, particularly if you're just starting out. As you and your fertility specialist develop your treatment plan, you'll likely be introduced to unfamiliar terminology and treatment options to consider. We've developed this guide with firsthand insights into the process, to help you to feel better prepared for what lies ahead.

How to Use this Guide

This guide is designed to give you a step-by-step overview of the IVF process and what to expect at each stage of the IVF journey. We've included sample appointment schedules and lists of some of the common medications prescribed, but keep in mind that everyone's fertility journey will be a little different. Every patient is unique, and each clinic has its own operational protocol designed to give you the best chance of achieving a healthy pregnancy.

Overview of the IVF Process and Timeline

The following is a general overview of the steps to IVF treatment and an approximate timeline: (Keep in mind that your personal timeline may not exactly reflect what's presented in this guide.)

1 *Pre-cycle Fertility Testing and Analysis*

1-TO-4 WEEKS

Before treatment can begin, a series of tests are done to better understand your fertility status, as well as administer any necessary pre-treatment protocols to bring your hormones into balance.

2 *Ovarian Stimulation and Cycle Monitoring*

1-TO-3 WEEKS

A regimen of injectable medications is administered over a two-week period to induce the production of multiple eggs in one cycle.

3 *Egg Retrieval*

1 DAY

An outpatient surgical procedure is performed to extract the mature eggs from your ovaries.

4 *Lab Work (Fertilization, Embryo Development, Freezing, Testing, Selecting Embryos)*

1-TO-2 WEEKS

Your eggs will be fertilized by the provided sperm sample, and the resulting embryo closely monitored by an embryologist for about five days. PGT will also be done at this stage, if applicable.

5 *Preparing for Embryo Transfer*

1 DAY

Hormone medications continue to be administered to prepare the uterine lining for implantation. This may be accompanied by regular appointments to monitor development of the endometrium.

6 *Embryo Transfer and Implantation*

1 DAY

Once your embryos have adequately matured in the lab, there is another outpatient procedure to transfer an embryo into your uterus for implantation.

7 *The Two Week Wait (2WW)*

ABOUT 2 WEEKS

It takes approximately two weeks for pregnancy hormones to reach high enough levels to consistently test positive on at-home and clinical pregnancy tests.

8 *Pregnancy Monitoring*

VARIES BY CLINIC

If IVF is successful, at this point you'll be referred to an obstetrician-gynecologist (OBGYN) for ongoing prenatal care.

9 *After an Unsuccessful Cycle*

VARIES BY CLINIC

If your treatment does not result in pregnancy, your fertility specialist will schedule an appointment to go over your results and to discuss the next steps and potential changes to your treatment plan. If you have remaining viable embryos, then you can discuss scheduling for your next embryo transfer. If you don't have any remaining embryos then you may want to consider another round of egg retrieval.

1

Pre-Cycle Fertility Testing and Analysis

The very first step in the IVF process is to assess your fertility needs and establish your baseline. This involves a comprehensive series of blood tests, as well as physical examinations of both you and your partner. If you are using donated gametes, they will be screened for viability at this stage. You will also be asked to provide a detailed medical history. Once your baseline has been established, your fertility specialist will create a personalized protocol for your IVF treatment.

Testing

Fertility testing is always completed before starting treatment. If you have received an infertility diagnosis from your primary doctor, you may need to repeat some of the tests with your fertility specialist. Expect to have bloodwork and a transvaginal ultrasound to get an overall picture of your ovarian reserve, and the condition of your reproductive organs. If you have a male partner, or sperm donor, they may also be asked to provide a sperm sample for analysis.

Bloodwork

Blood tests are done to check your levels or screen for the following:

- Estrogen (E2)
- Progesterone (P4)
- Luteinizing Hormone (LH)
- Follicle Stimulating Hormone (FSH)
- Anti-mullerian Hormone (AMH)
- Thyroid Hormones (TSH, T3, T4)
- Prolactin
- Testosterone
- Infectious diseases (Hep B, Hep C, RPR, HPV, HIV, etc)
- Red blood cell count
- Other blood tests specific to your medical history

Your hormones levels will provide insight into your reproductive health, your ovarian reserve, as well as which medications are likely to be most effective for you.

Physical examinations (male and female)

Physical exams are conducted to assess your reproductive health and identify potential physiological issues that may prevent successful pregnancy. Female reproductive examinations can consist of the following (although not all exams are required, depending on the patient):

- Ultrasound to count the number of follicles in each ovary
- Pelvic exam
- Sonohysterography with or without saline infusion to evaluate your uterus for any abnormalities such as fibroids, polyps, or scarring
- Hysterosalpingography to check if the fallopian tubes are open; it's more commonly done prior to intrauterine insemination (IUI)
- Hysteroscopy to evaluate the uterine cavity and remove any abnormalities that could affect embryo implantation such as polyps; less commonly ordered
- Laparoscopy which is a surgical procedure typically done for endometriosis diagnosis or treatment
- Male reproductive exams involve blood tests and semen analysis to determine sperm count, motility, and whether there is DNA fragmentation.
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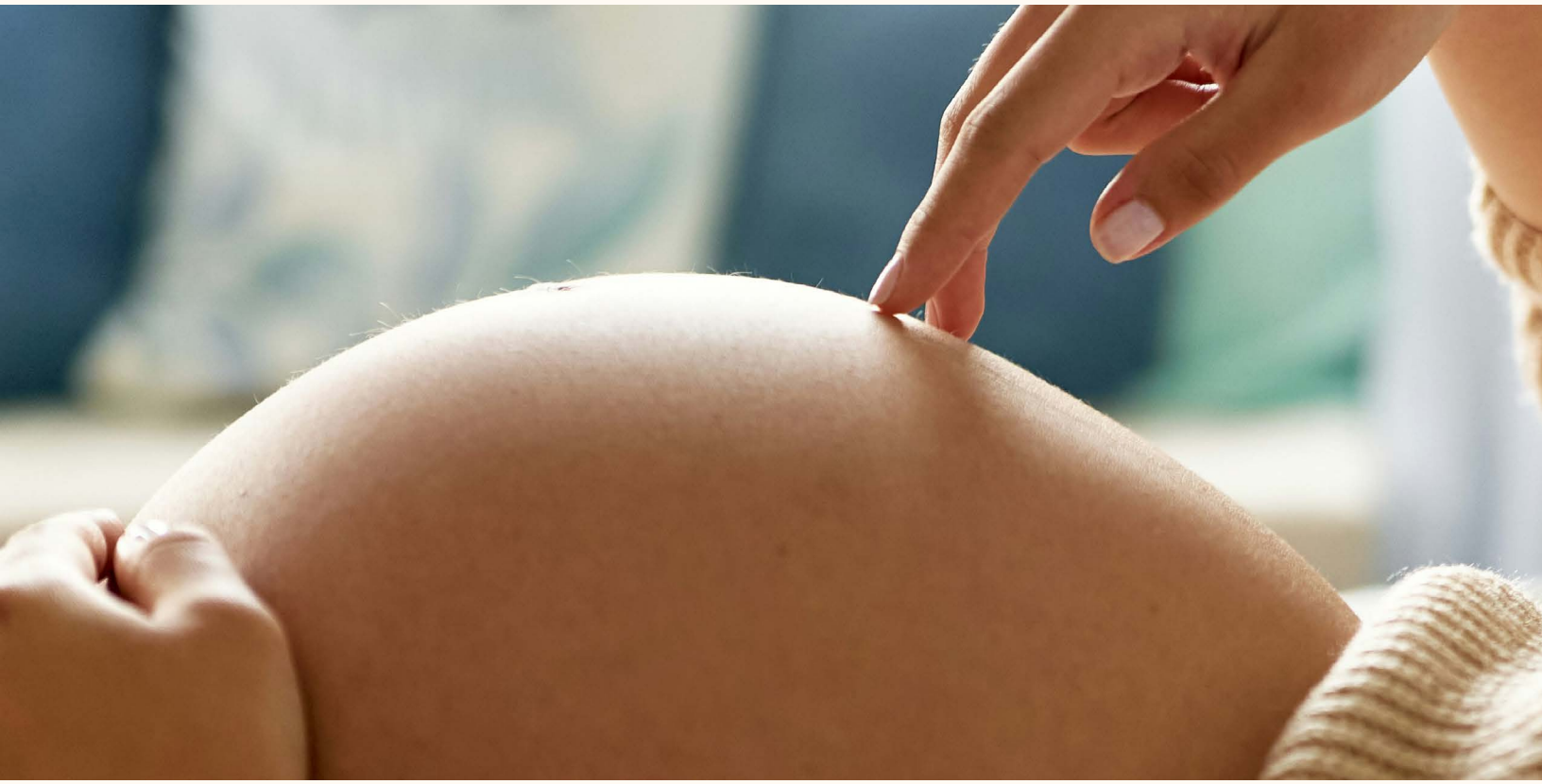


Pre-treatment protocol

Depending on the results of your fertility screening and blood tests, your fertility specialist may recommend a pre-treatment medication protocol to bring your hormones into balance. Doing so will help prime you for your treatment cycle. This protocol will be prescribed based on your current hormone levels and may include a combination of progesterone, testosterone, and estrogen.

Commonly used medications during pre-retrieval

Your clinic may recommend pre-stimulation preparation for 21 days with estrogen, testosterone, and progesterone to bring your body into balance before you begin ovarian stimulation.

NAME	PROTOCOL	DURATION	PURPOSE
Birth control pills, estrogens, or progesterone pills	Daily or twice daily	1 to 3 weeks prior to IVF treatment	Typically taken for around 2-4 weeks before the IVF cycle to prepare the endometrium for embryo transfer.
Testosterone (Androgel)	1 pump of gel rubbed on upper arm in PM	17 days	In certain cases, testosterone supplementation may be prescribed to improve ovarian response, regulate hormone levels, or address specific hormonal imbalances that could affect fertility. The duration of testosterone use can vary but is usually administered for a few weeks before starting ovarian stimulation, typically around 2-4 weeks.

2

Ovarian Stimulation and Cycle Monitoring

Ovarian stimulation involves using hormonal medications that stimulate your ovaries to produce multiple eggs within the cycle. During a natural menstrual cycle, several ovarian follicles will be primed, but only one will mature into an ovum. When undergoing ovarian stimulation, instead of only one ovum being produced, most of those follicles will mature. It's a common misconception that ovarian stimulation will exhaust your ovarian reserve more quickly. This is not true. Your body primes a set number of ovarian follicles every cycle, this procedure simply ensures that most, if not all follicles can become mature eggs.

What to expect

During this period, you'll undergo regular blood tests and transvaginal ultrasounds as part of cycle monitoring to track hormone levels and follicle growth. This will involve appointments at your clinic, typically occurring every couple of days.

If working from home is not an option during this time, you may wish to speak to your boss or supervisor about workplace accommodations. If your clinic doesn't open before you start work, you may need to arrive late on appointment days. You may also experience side effects from your medications like fatigue that could impact your work performance.

Once your follicles have sufficiently matured, you will have your "trigger" shot. This is medication that will trigger the ovulation process and is administered 34-36 hours before your scheduled retrieval appointment.

Commonly used medications during ovarian stimulation

These medications will be administered by you or someone you trust. While some are taken orally, some are also injections. Expect to get comfortable with frequent injections, as you may have to do them more than once a day throughout the stimulation period.

Ovarian stimulation

These are the primary medications designed to stimulate the production and maturation of ovarian follicles.

MEDICATION (GANIRELIX ACETATE) BRAND NAME	PROTOCOL	DURATION	PURPOSE
Clomiphene®*	Tablet taken orally, daily	8-to-14 days	Induces ovulation by stimulating the release of follicle-stimulating hormone (FSH) and luteinizing hormone (LH) from the pituitary gland, promoting the growth and maturation of ovarian follicles.
Gonal-F®	Taken daily with injection into abdomen	8-to-14 days	A follicle-stimulating hormone preparation administered for around 8-14 days during the ovarian stimulation phase. Provides exogenous FSH and LH to stimulate the development of multiple ovarian follicles during ovarian stimulation, increasing the chances of successful egg retrieval.
Menopur®	Taken daily with injection into abdomen	8-to-14 days	A follicle-stimulating hormone preparation administered for around 8-14 days during the ovarian stimulation phase. Provides exogenous FSH and LH to stimulate the development of multiple ovarian follicles during ovarian stimulation, increasing the chances of successful egg retrieval.

Ovarian stimulation continued

MEDICATION (GANIRELIX ACETATE) BRAND NAME	PROTOCOL	DURATION	PURPOSE
Pergovaris®	Taken daily with injection into abdomen	8-to-14 days	Similar to Gonal-F and Menopur, administered for around 8-14 days during ovarian stimulation. It is a medication containing both FSH and LH, used for ovarian stimulation to promote follicle development and improve egg quality.
Rekovelle®*	Taken daily with injection into abdomen	8-to-14 days	Recombinant FSH used for ovarian stimulation to stimulate follicle growth and development in preparation for egg retrieval. Duration of Rekovelle use can vary but is generally administered for around 8-14 days during ovarian stimulation.

*Clomiphene® is always taken, in combination with one of either Gonal-F®/Menopur®, Pergovaris®, or Rekovelle®

Cycle LH inhibitor

Cycle LH inhibitors are used to ensure that you do not ovulate prematurely.

MEDICATION	PROTOCOL	PURPOSE
Orgaluton®	Prefilled syringe taken in abdomen in the morning	To prevent the early release of an egg.
Antagon®	Prefilled Syringe injected in the abdomen daily	To prevent the early release of an egg.

Ovulation trigger

Also known as the “trigger shot”, ovulation triggers are medications that will start the process of ovulation in the immediate lead up to your egg retrieval procedure.

MEDICATION	PROTOCOL	PURPOSE
Decapeptyl®	Single injection	GnRH Agonist — Used as an alternative to hCG trigger for ovulation induction. The specific timing of Decapeptyl® administration varies depending on the chosen protocol and individual patient factors.
Lupron®	Single injection 1 hour after Trigger shot (Pregnyl, or ovirdrel) Second dose taken 12 hours later	GnRH Agonist — Used as an alternative to hCG trigger for ovulation induction. The specific timing of Decapeptyl® administration varies depending on the chosen protocol and individual patient factors.
Pregnyl®	Single injection 36 hours before scheduled egg retrieval into glute muscle	Human Chorionic Gonadotropin — Administered when the ovarian follicles are mature, typically around 10-14 days after starting ovarian stimulation.
Ovidrel®	Single injection 36 hours before scheduled egg retrieval	Human Chorionic Gonadotropin — Administered when the ovarian follicles are mature, typically around 10-14 days after starting ovarian stimulation.

Adjuncts

Adjuncts are medications designed to enhance the effects of primary ovarian stimulation medications.

MEDICATION	PROTOCOL	DURATION	PURPOSE
Eltroxin® (Levothyroxine)	Taken orally each morning until the .day of egg retrieval	Daily from day 1 of ovarian stimulation to day of egg retrieval	Administered as long-term thyroid hormone replacement therapy to treat hypothyroidism, ensuring optimal thyroid function, which is important for reproductive health.
Dexamethasone®	Taken orally each evening between 5-8pm	Taken each day until day of Trigger	Used as an adjunct to ovarian stimulation protocols to reduce inflammation and immune response, potentially improving implantation and pregnancy rates, particularly in cases of immunological infertility.
Saizen® (Somatropin)	Injection every other day into belly	Protocol varies by clinic	Growth hormone therapy duration may vary but is often administered for several days to weeks during ovarian stimulation. This may be used to improve ovarian response and follicle development, particularly in individuals with poor ovarian reserve or diminished ovarian function.

3

Egg Retrieval

Egg retrieval is an outpatient surgical procedure that will take place at your clinic. The procedure itself is relatively straightforward. A needle-tipped ultrasound wand is inserted through the vagina and guided to each ovary using an ultrasound. The follicular fluid collected from your ovaries contains your eggs, which will then be examined by embryologists. The retrieval operation usually takes about 20-to-30 minutes.

Commonly used medications during egg retrieval

Retrieval day sedation

Most of the following medications are administered as needed. If you have concerns about any of them, you can discuss alternatives with your care team ahead of your retrieval procedure.

MEDICATION	PROTOCOL	PURPOSE
Ativan	Dissolved under tongue	Administered shortly before or during the egg retrieval procedure as needed for pain management and relaxation.
Midazolam®	IV	Administered shortly before or during the egg retrieval procedure as needed for pain management and relaxation.
Fentanyl	IV	Administered shortly before or during the egg retrieval procedure as needed for pain management and relaxation.
Xylocain + Epinephrine	IV	Administered as a local anesthetic during the egg retrieval procedure.

Post-retrieval

MEDICATION	PROTOCOL	PURPOSE
Letrozole®	Taken in tablet form for 5 days following egg retrieval	Sometimes used post-retrieval to reduce estrogen levels and minimize the risk of ovarian hyperstimulation syndrome (OHSS) for a few days after the procedure.
Cabergoline	Taken vaginally or orally for 8 days after day of trigger or retrieval	Used to reduce the risk of OHSS (Ovarian Hyper Stimulation Syndrome).

What to expect during your egg retrieval appointment

The following is a timeline of what to expect in the day before and of your egg retrieval:

01
PREPARATION
You'll receive instructions to refrain from food and drink for at least 8-12 hours before your scheduled appointment. Upon arrival at the clinic, you'll be required to change into a gown and fill out consent forms.

02
ANXIETY MANAGEMENT
To help manage nerves, you may be given a mild anti-anxiety medication such as Ativan.

03
ADMINISTRATION OF MEDICATIONS
Your nurse will administer an IV with antibiotics and Gravol to prevent infection and manage nausea. These medications may make you feel drowsy.

04
PRE-PROCEDURE PREPARATION
Before the procedure, your nurse will escort you to use the restroom to empty your bladder.

05
INTRODUCTION TO OPERATING ROOM
Once in the operating room, you'll be placed on an operating table with stirrups. You'll be introduced by name to the care team, which typically includes an anesthesiologist, technician, and the doctor performing the procedure. Operating rooms are kept at cooler temperatures, so a warmed blanket may be provided for your comfort. You may also wish to wear warm socks.

06
ADMINISTRATION OF SEDATIVES
Your IV will be switched to sedative medications to ensure your comfort during the procedure. Common medications include a combination of Propofol, Fentanyl, and Midazolam. You'll likely be awake but not alert during the 20-minute procedure.

07
RECOVERY
After the procedure, you'll be brought back to the recovery area for about an hour as the medication wears off. Your designated person responsible for picking you up will arrive to take you home to rest. Your nurse will offer you some nutrition and water for energy, along with post-operative care instructions to be shared with your companion.

08
POST-PROCEDURE RECOMMENDATIONS
It's recommended that you try to rest and sleep for the remainder of the day following the procedure.

09
OUTCOME
You'll be informed of the number of eggs retrieved. The following day, the embryology team will contact you to provide information on the number of eggs that were mature enough to be fertilized.

4

Lab Work

(Fertilization, Embryo Development, Freezing, Testing, Selecting Embryos)

After egg retrieval, the retrieved eggs are taken to the laboratory for fertilization. Sperm samples, either provided by a partner or obtained from a sperm donor, are prepared and combined with the eggs.

- The retrieved eggs will be fertilized in the embryology lab on the same day as retrieval.
- Successfully fertilized eggs will be cultured and grown to Day 5-7 embryos before being considered for freezing.
- In some cases, embryos on day 3 may be frozen or considered for transfer.
- These embryos may undergo preimplantation genetic testing (PGT) to assess their genetic health and viability.
- Embryologists and clinicians will collaborate to select the best-quality embryo with the highest chance of resulting in a successful pregnancy based on various factors including morphology and genetic testing results.

Fertilization

During egg fertilization in the lab, viable eggs that have matured undergo a meticulous selection process for fertilization. In the case of Intra-Cytoplasmic Sperm Injection (ICSI), a single sperm is injected directly into an egg to facilitate fertilization. This precise technique ensures fertilization by bypassing potential barriers to natural fertilization, whereas in non-ICSI methods, eggs and sperm are combined in a dish for natural fertilization to occur. This method allows for fertilization to take place without direct intervention and is often used when there are no known fertility issues or when sperm quality is not a concern.

Embryo grading

Following fertilization, the embryos undergo a critical evaluation known as embryo grading. This evaluation is essential in determining the quality and viability of the embryos for successful implantation. Embryo grading is based on the Gardner Embryo/Blastocyst Grading System, which assesses various aspects of the embryo's development, including cell number, appearance, and stage of development. Embryos are graded on two key stages: the day-three embryo, also known as the "cleavage stage," and the day-five blastocyst stage. Day-three embryos are graded based on cell appearance and number, while day-five blastocysts are evaluated based on blastocyst expansion, inner cell mass (ICM) quality, and trophectoderm epithelium (TE) quality.

GRADING		PREGNANCY RATE	LIVE BIRTH RATE
Excellent	3AA 4AA 5AA	65.0%	50.0%
Good	3AB 4AB 5AB 3BA 4BA 5BA	59.3%	49.7%
Average	3BB 4BB 5BB	50.3%	42.3%
Poor	4BC 5BC 2CB 5CB	33.3%	25.0%

Pre-implantation genetic testing

Embryo genetic testing may also be conducted to screen for genetic abnormalities or diseases through techniques like Preimplantation Genetic Testing (PGT-A or PGT-M). This is an additional service that is optional. Parents who only have a few embryos or know that they are carriers of certain genetic diseases or disorders may wish to screen their embryos before selecting which to implant. Certain types of aneuploidies will result in miscarriage.

PGT-A (formerly PGS)

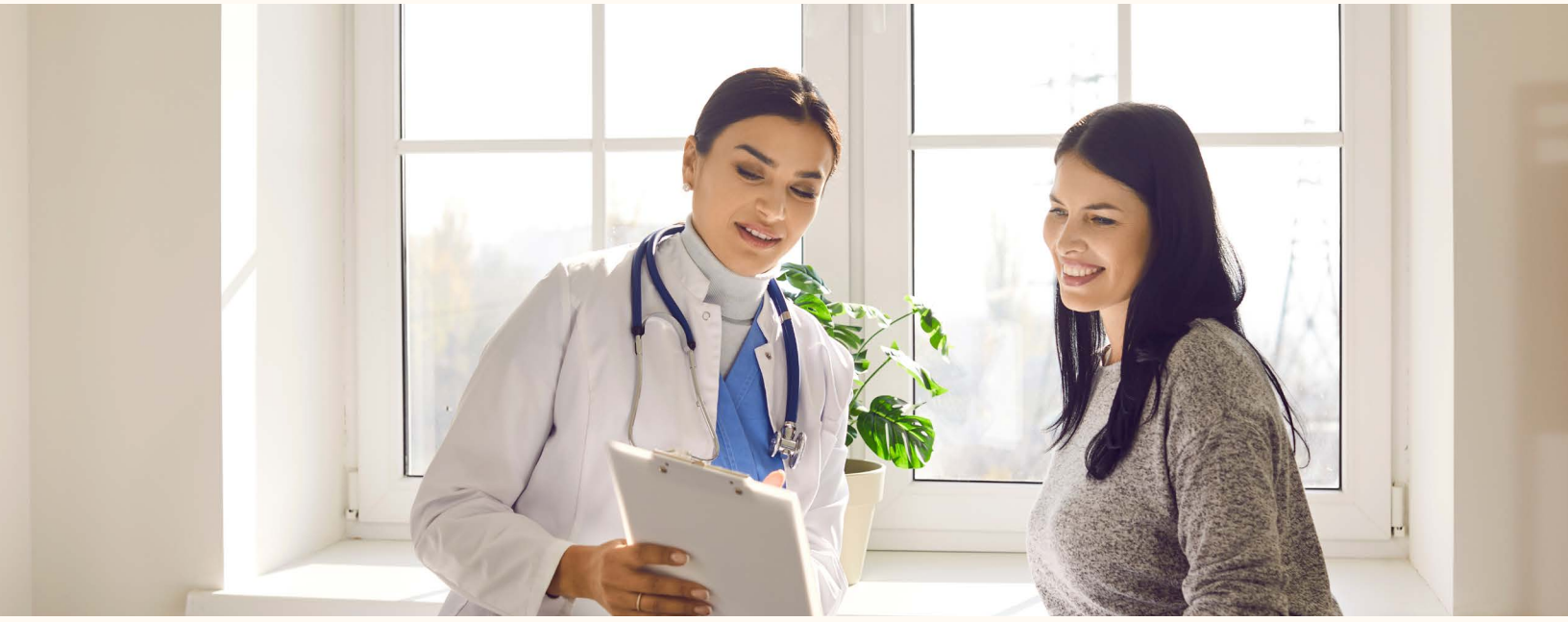
Preimplantation genetic testing for aneuploidy (PGT-A), as the name suggests, is designed to screen for aneuploidies. This is a genetic disorder where the total number of chromosomes doesn't equal 46. This most commonly happens when the number of chromosomes a child acquires from their biological parents doesn't equal 46 due to an error in the creation of egg or sperm. The two types of aneuploidies are trisomy, where there is an extra chromosome, and monosomy, where there is a missing chromosome. For example, Down Syndrome or Turner Syndrome.

PGT-M (formerly PGD)

Preimplantation genetic testing for monogenic/single-gene diseases is a type of genetic screening that looks for the presence of specific disease-causing genes. PGT-M is ideal for parents who are concerned about being carriers of specific genes that cause disease. Additionally, parents using donated eggs, sperm, or embryos who don't know the donor's medical history may wish to do PGT-M before the embryo transfer process. For example, thalassemia, cystic fibrosis, Spinal muscular dystrophy, BRCA.

Fresh vs. frozen embryo transfer

The decision between using fresh or frozen embryos depends on various factors including the woman's reproductive health, timing of the cycle, and personal preferences, with each option carrying its own set of advantages and considerations. In fresh embryo transfer cycles, ovarian stimulation to collect eggs, fertilization of eggs with sperm to form embryos, and embryo transfer are all done in the same cycle. Unlike fresh embryo transfer, frozen embryo transfer utilizes embryos that were previously fertilized and frozen. Once thawed, the embryos are then transferred. In frozen embryo transfer cycles, the focus is on growing and preparing the uterine lining for the embryo implantation process.



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Preparing for Embryo Transfer

Preparing for embryo transfer involves several steps after the eggs have been retrieved, fertilized, and if indicated, tested. First, the patient's uterus is prepared for implantation through hormonal medication to create an optimal environment for embryo attachment. This may involve taking oral contraceptives during the lead up, followed by estrogen supplementation to build up the endometrial lining and then progesterone supplementation to support the uterine environment. Based on the results of embryo grading and genetic testing, one or more embryos are selected for transfer. In the case of frozen embryos, they are thawed and prepared for transfer according to a carefully timed schedule. For fresh embryo transfer, the best embryo is replaced back to the womb 3 or 5 days after egg retrieval procedure (within the same menstrual cycle)

What to expect during the preparation for embryo transfer

The following are some of the things you should expect as you prepare for your embryo transfer:

- **Hormone/Medication Regimen**

  Leading up to embryo transfer, you may continue with hormone medications to prepare the uterine lining for implantation. These medications may include estrogen to thicken the uterine lining and progesterone to support embryo implantation.
- **Additional Testing**

  Depending on your medical history and previous IVF outcomes, additional tests such as an endometrial receptivity test may be conducted to provide insight into your WOI for future IVF cycles.
- **Appointment Schedule**
  Regular appointments will be scheduled during this phase to monitor hormone levels and the development of your uterine lining. These appointments typically occur every few days and may involve blood tests and ultrasounds. Appointments usually take place in the morning to align with the timing of the embryo transfer procedure.
- **Communication with Medical Team**
  Your medical team will guide you through the preparation phase, providing instructions on medication administration, dietary considerations, and activity restrictions.
- **Emotional Support**
  The preparation phase can be emotionally challenging as you anticipate the embryo transfer. It's essential to stay connected with your support system and practice self-care.

Commonly used medications preparing for embryo transfer

The following are common medications prescribed to help create the ideal uterine conditions for embryo implantation:

Lead-in Phase Medication

In some cases, your doctor may recommend an additional lead-in phase of up to 30 days for more predictable hormonal and uterine conditions. During this phase, you may be prescribed birth control pills, with or without the addition of Lupron.

Estrogen Phase Medication — Follicular

NAME	PROTOCOL	PURPOSE
Estradiol (Estrogen)	Orally or vaginally Take up to 3W x daily (depending on doctors' protocol)	Typically taken for around 12-28 days before the start of progesterone to prepare the endometrium for embryo transfer. It is typically continued after progesterone starts.

Progesterone Phase Medication — Luteal

NAME	PROTOCOL	PURPOSE
Prometrium (Progesterone)	200 mg tablets inserted vaginally twice daily (AM & PM)	Used in the luteal phase after ovulation is triggered to support the uterine lining and prepare the body for embryo transfer. This is typically continued until 8-10 weeks of pregnancy if the pregnancy test is positive.
PIO medication	Intramuscular injection taken in the PM	Used to prepare the endometrial lining for an embryo transfer. Usually taken for 5 days prior to an embryo transfer and continued until 8-10 weeks of pregnancy if the pregnancy test is positive.

Fresh vs. frozen embryo transfer

The decision between using frozen or fresh embryos involves several factors. Before you decide, consult with your fertility specialist, who can provide personalized guidance and recommendations to help you make an informed decision that maximizes your chances of success. Both fresh and frozen embryo transfers have their benefits. One is not necessarily better than the other in terms of success rates, it's more about which is best for you. Whichever you choose, you can expect to follow a specific medication schedule, and to come into your clinic for regular monitoring. Once your endometrium reaches adequate thickness (about 7-8mm or greater), you'll schedule your embryo transfer.

Endometrial receptivity testing and mock cycles

In the journey to successful pregnancy through IVF treatment, it's important to note that many patients may require more than one cycle to achieve successful implantation. For some, an Endometrial Receptivity Test (ERT) could prove beneficial, especially for those who have experienced one or more failed implantations or have a limited number of viable embryos.

Endometrial receptivity testing generally involves a "mock cycle", which mirrors the process and medication regimen of a standard Embryo Transfer. However, instead of proceeding with embryo transfer, a sample is taken on the designated day. This could be a simple blood sample in the case of ORA™, or an endometrial tissue biopsy for other ERTs. This sample is then analyzed to determine the patient's personal Window of Implantation (WOI). In a subsequent full treatment cycle, the embryo transfer is timed according to the test results. This approach tailors the treatment to the individual patient, potentially increasing the chances of a successful pregnancy.

For first-time IVF patients, a blood sample can be taken on the day of embryo transfer and analyzed later if implantation fails, eliminating the need for a mock cycle.

6

Embryo Transfer and Implantation

On the day of embryo transfer, you can expect a carefully planned procedure aimed at maximizing the chances of successful implantation. Your embryo(s) will have been graded and selected, and your endometrial lining will be at the ideal thickness to receive them at the time of trigger (natural cycles) or progesterone start (controlled cycles).

The success of implantation depends on various factors, and patients can anticipate a follow-up appointment in approximately 8 - 14 days after the transfer for a pregnancy test. These are usually blood tests to get an exact value rather than urine tests done at home.

Mock cycle

If you have undergone a mock cycle in preparation for endometrial receptivity testing, “embryo transfer day” will instead be “sample collection day.” No embryo will be transferred and, depending on the test you and your doctor have chosen, you will either have a simple blood sample drawn (ORA™) or undergo an endometrial biopsy procedure. In the case of an endometrial biopsy, a small tissue sample will be removed from the lining of your uterus. Though it is a low-risk procedure that generally takes less than 15 minutes, it can cause mild-to-severe cramping and discomfort. Ask your doctor what pain medication is safe to use if desired.

What to expect during embryo transfer and implantation

The following are the steps to expect during your embryo transfer:

01

PREPARATION

On the day of embryo transfer, you'll arrive at the clinic with a full bladder, as this helps with ultrasound visualization during the procedure. You'll be taken to a procedure room where you'll change into a gown and lie on an examination table.

02

INTRODUCTION TO CARE TEAM

The embryologist will prepare the selected embryos for transfer, while the fertility specialist will perform the procedure. You'll be introduced to the care team, which may include nurses and technicians.

03

PROCEDURE

The fertility specialist will transfer the selected embryo(s) into your uterus using a thin catheter. The procedure is usually painless and does not require anesthesia. You may feel slight discomfort or pressure during the transfer, similar to a Pap smear.

04

POST-TRANSFER REST

After the transfer, your clinic may recommend rest for a brief period before emptying your bladder and being discharged to go home. It's advisable to take it easy for the rest of the day to give the embryos the best chance of implantation.

05

EMBRYO NUMBER

Your medical team will inform you of the number of embryos transferred and any remaining embryos that may be frozen for future use.

06

AFTERCARE INSTRUCTIONS

You'll receive aftercare instructions, including recommendations for activity level, dietary considerations, and medication administration. It's essential to follow these instructions carefully to optimize the chances of successful implantation.

7

The Two-Week Wait (2WW)

Following embryo transfer, you'll await results of the procedure during the two-week wait. The reason for this waiting period is that it takes about two weeks for pregnancy hormones to reach high enough levels in your system to return consistent results. This period can be emotionally challenging as you anticipate the outcome. It is advised that you maintain a similar lifestyle leading up to embryo transfer day. You may also be asked to continue with progesterone and estrogen treatment to help support the first few weeks of your pregnancy. It's essential to remain grounded and take care of yourself both physically and emotionally during this time.

Commonly used medications during the Two Week Wait

You will continue taking some hormone supplements to support your uterine conditions in the weeks immediately following embryo transfer.

NAME	PROTOCOL	PURPOSE
Prometrium (Progesterone)	200 mg tablets inserted vaginally twice daily (AM & PM)	Used after the implantation to support uterine conditions for several weeks into pregnancy.
Estrogen Patches	3 x / day	Taken 3 times per day during first several weeks after implantation, to support the uterine conditions.

8

Pregnancy Monitoring

It is possible that a pregnancy test is initially positive, but will plateau or fail, indicating a biochemical pregnancy. This means that implantation occurred successfully, but the pregnancy did not progress.

For this reason, pregnancy tests are usually repeated one to three times, every 48-72hrs after the initial test. These subsequent tests evaluate levels of hCG, a hormone produced by the placenta. A rise in hCG levels indicates that the pregnancy is progressing adequately. If your hCG is positive and rising, then you'll be scheduled for an OB sonogram.

Eventually, you'll transition to the care of an obstetrician-gynecologist (OBGYN) for ongoing prenatal care.

9

What Happens if a Cycle Fails?

It isn't uncommon for an IVF cycle to fail, and this can be due to a variety of reasons or circumstances. If this happens, it can provide your doctor with more insights into how to adjust protocol for subsequent treatment cycles, as well as identify a likely cause for the failed pregnancy. After receiving negative pregnancy results, your fertility specialist will schedule an assessment appointment to talk through how your cycle went, as well as what your doctor learned from your results. During this appointment, your doctor may also recommend additional tests like ORA™ to gain greater insights into your reproductive cycle. Depending on your case, your doctor may need to check the uterus to make sure that no scar tissue is present, and that the pregnancy has passed. Plan to transfer remaining embryo, if available.

Even if you feel ready to start a new round of IVF right away, it may be wise to wait. You will have just experienced significant hormonal changes, emotional uncertainty, and heartbreak; it's important that you give yourself some time to bring your life back into balance before your next round. At this time, you may also want to revisit your financial budget for your next treatment cycle.

Speak to your doctor to determine when your body may be physically ready again, as well as your loved ones to support you through this time.

Other Important Considerations

Undergoing IVF treatment is no small feat. While you prepare yourself emotionally and physically for this journey, it can be very helpful to develop a game plan. The following are some important considerations that come along with IVF treatment:

- **Choosing a Clinic**
  IVF is a long and involved process. When evaluating clinics, keep in mind that you will be spending a lot of time there. It's important that you feel safe in that environment and are comfortable with the staff. It is important that you trust your physician as they will be helping you to make important decisions in this process. Consider visiting another clinic if you are not comfortable with the first one you visit.
- **Consent Forms**
  Before starting the IVF process, you'll be required to sign various consent forms outlining the procedures, risks, and responsibilities involved. As well as providing direction for discarding embryos, these will also need to be signed by your partner, if you have one.
- **Transportation**
  Arrange transportation for procedures such as egg retrieval and embryo transfer, as you may be sedated or advised not to drive afterward.
- **Payment**
  Understand the financial aspects of IVF, including insurance coverage, payment plans, and any out-of-pocket expenses. Medications are non-refundable.
- **Self-care**
  Practice self-care throughout the IVF journey, including adequate rest, healthy nutrition, and emotional support.
- **Expectations**
  Manage your expectations realistically, understanding that success rates vary and that multiple cycles may be needed to achieve pregnancy. Stay informed, communicate openly with your medical team, and seek support from loved ones throughout the process.

Appendix *& References*

Sample Schedules

Egg retrieval

These schedules are samples. The details and protocol for your schedule may differ depending on your individual needs and circumstances.

PHASE	CYCLE DAY	APPOINTMENT TIME & PURPOSE	MEDICATION	SYMPTOMS/ NOTES
Pre-stimulation Prep	1	8:00 am Clinic Appointment for Ultra Sound + Blood Work - Hematology (Blood Group, Blood Count, Hb Electrophoresis) - Autoimmune Screen (Varicella Zoster, Rubella) - Thyroid Screen (TSH, anti-thyroid AB, anti-thyroglobulin AB) - Vitamin D - Medication Pick Up Day	Begin taking Oral Contraceptive in the Evening	
	2 - 12		Continue Oral Contraceptive in the PM	Increased hunger levels
	13	9:15 am Clinic Appointment for Baseline Sonogram	Last day of Oral Contraceptive	
	14 - 16			May expect a period this week
	17	9:00 am Virtual Injections class		
Ovarian Stimulation	18	Day 1 of Ovarian Stimulation	Gonal-F injection 300IU + Menopur 150 IU in the evening	May experience bruising at injection site
	19 - 21		Continue Gonal - F &. Menopur	
	22	10:00 am Clinic Appointment for Bloodwork & Sonogram	Continue Gonal - F &. Menopur Start: Ganirelix Acetate 250 mcg in the evening	

PHASE	CYCLE DAY	APPOINTMENT TIME & PURPOSE	MEDICATION	SYMPTOMS/NOTES
Ovarian Stimulation	23		Continue Gonal - F &. Menopur Ganirelix Acetate 250 mcg in the evening	
	24	7:15 am Clinic Appointment for Bloodwork & Sonogram	Continue Gonal - F &. Menopur Ganirelix Acetate 250 mcg in the evening	
	25	Blood Work and Ultrasound	8:30am Clinic Appointment for Bloodwork & Sonogram	Continue Gonal - F &. Menopur Ganirelix Acetate 250 mcg in the evening
	26	7:45 am Clinic Appointment for Bloodwork & Sonogram	Final Dose of Ganirelix Acetate 250 in evening	
			9:45PM Ovulation Trigger 9:45 Lupron and/or hCg	Trigger taken 36 hrs. before scheduled egg retrieval
Egg Retrieval	27	Possible Lab-Only Appointment to Ensure the Trigger Injection Worked Properly Nothing To Eat or Drink after Midnight		
	28	9:00am Egg Retrieval Surgery and Sperm Collection		Arrive 1 hr before scheduled appointment
	29		Fertilization Report	
	30 - 34	Possible Embryo Biopsy for Grading		

Frozen embryo transfer (controlled cycle type)

DAY	TIME	APPOINTMENT	MEDICATION	NOTE
1		Day 1 of Menstruation		Inform Clinic Today's Date
2 to 11			Estrace 2mg - 1 pill by mouth, 3 x / day for 12 days	Estrogen may also be given vaginally, by patch, or by injection
12	9:15 AM	Uterine Lining Check and Bloodwork	Estrace 2mg - 1 pill by mouth, 3 x / day	
13				
14 to 18			Start Progesterone medication: Vaginal insertion + Intramuscular Injection for 6 days	
19	10:00 AM	Embryo Transfer Day	Continue with estrogen and progesterone supplementation for 8 weeks	
28	10:15 AM	Possible First Pregnancy Test		

Questions to ask your fertility doctor

At various milestones along your fertility journey, you'll have corresponding questions. We have created a simple list of common questions to ask your doctor at each stage of the journey.

If you're still on the hunt for a clinic, check out our blog "How to Find the Right Clinic" so that you can equip yourself with the right questions to determine if they're a good fit for you.

Questions to ask your clinic before testing, analysis, and preparation

- What services are covered through health care benefits?
- Does your clinic coordinate directly with insurance companies?
- Does your clinic have an afterhours phone number that I can call in case I have any questions about my medications or symptoms?
- Does your clinic only do ICSI as a protocol? If both methods of insemination are used, what are the cases in which ICSI might not be used, how is this determined?
- Does your clinic have mandatory PGT-A or PGT-M testing?

Pre-cycle fertility testing and analysis, and preparation – 1-to-4 weeks

- Are my hormone levels balanced?
- Based on my AMH levels, how many eggs can you predict will be retrieved in a given cycle?
- Based on my age and AMH levels, how many rounds of egg retrieval should I prepare for?
- When should my partner come for their semen analysis, will the clinic be coordinating with them directly?
- Can you tell me if I have any fibroids, cysts, or other irregularities, and can we monitor these throughout my cycle monitoring?
- What measures can I be taking to help support my fertility treatment journey?
- Should I be avoiding exercise or certain foods?
- What happens if I miss a cycle monitoring appointment?
- I'm interested in endometrial receptivity testing, can you please provide information about how this can improve my chances of implantation success?

Ovarian stimulation and cycle monitoring – 1-to-3 weeks

- What Medications need to be refrigerated?
- If a medication accidentally rises to room temperature, will I need to replace it?
- What happens if I miss a medication? Should I take a double dose?
- What if I miss the timing of my 'trigger shot', will this delay the egg retrieval time?

Egg retrieval – 1 day

- What are the side effects of the sedation?
- Will my doctor be performing the procedure?
- How many eggs were retrieved?

Labwork (Fertilization, Embryo Development, Freezing, Testing, Selecting Embryos) – 5-to-7 days

- How many embryos were created?
- When do the embryos get PGT-A/ PGT-M tested?
- Does the embryo testing happen in the lab or are they sent to another lab for testing?
- How do we decide whether to do a frozen or fresh embryo transfer?

Preparing for embryo transfer – 1-to-3 weeks

- What is the ideal thickness of uterine lining?
- What medications do I take to support implantation?
- How do you determine the best date to transfer the embryo?
- Is there a non-invasive test that I can take to determine the optimal Window of Implantation for an embryo?
- Is the embryo transfer procedure painful, if so, how will pain be managed??
- Will my doctor be performing the embryo transfer?
- What medical instruments and tools are available to support implantation (embryo glue etc)?

Embryo transfer and implantation – 1 day

- Can I eat or drink on these days?
- How long will I be recovering in the clinic before I can be taken home to rest?

The Two Week Wait (2WW) – about 2 weeks

- When will my follow up appointment be?
- Will I experience spotting?
- What do you recommend I do to manage my anxiety?

If IVF treatment was unsuccessful

- What are symptoms that can indicate that implantation was unsuccessful?
- How long should I wait until my next embryo transfer?
- What are some of the causes for implantation failure or miscarriage?
- Are there any tests that I can take for my next cycle that can support successful embryo implantation?

Pregnancy monitoring

- If IVF is successful, at this point you'll be referred to an obstetrician-gynecologist (OBGYN) for ongoing prenatal care.


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