

## IN VITRO FERTILIZATION PATIENT EDUCATION HANDBOOK

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Thank you for choosing the Center for Women's Reproductive Care at Columbia University (CWRC) as your fertility care provider. In our ongoing attempt to make the fertility treatment process as stress free as possible we have designed this handbook to help you understand and familiarize yourself with the IVF program at the CWRC.

Portions of the handbook's contents will be reviewed with you during your office visits and consultations. We understand that there is a considerable amount of information to absorb and process. Please take the time to read the handbook carefully, and feel free to ask any questions you may have about its contents.

After you have read the handbook, please keep it with you at home and refer to it as you undergo your IVF cycle at the CWRC. We hope this handbook will be a helpful resource to you and will assist you in making this endeavor pleasant and successful!

Be sure to check out Freedom Med Teach for useful videos, offered in multiple languages, about medication mixing and injection. These useful videos are offered in multiple languages and can be found at [freedommedteach.com](http://freedommedteach.com).

Another great resource for information is [www.reproductivefacts.org](http://www.reproductivefacts.org) from the American Society for Reproductive Medicine.

## COMMUNICATION

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For urgent issues, please call our main line at 646-756-8282. An after-hours service is available weekdays from 4 pm to 8 am, as well as all weekends and holidays. To reach the after-hours service, please call our main number, 646-756-8282, and further instructions will be provided. If you believe you are having a medical emergency, please go to the nearest Emergency Room.

The IVF Nurse Coordinators are your primary contact for all questions and concerns regarding requisitions, checklist requirements, medications, and the IVF treatment cycle. Please call or email your Nurse Coordinator with any questions throughout the process.

To schedule appointments, please call or email your **Care Coordinator**.

For questions related to your insurance coverage and out of pocket cost, please call or email your **Patient Financial Coordinator**. You should obtain financial clearance at least 2 weeks prior to starting your IVF cycle.

For medication authorization and medication ordering only, please call **(212) 314-8802**. When leaving a message, please slowly state and spell your first and last name, your date of birth, your phone number, your insurance company, and pharmacy contact information. Please note that your insurance company may require authorization be obtained and this process may take up to two weeks.

Two questions to ask your prescription benefits plan:

1. Does this medication require prior authorization? (Gonal F, Follistim, Menopur, Cetrotide, or Ganirelix (see pg. 9 and 10 for other examples).
2. Am I required to use a mail order pharmacy? If yes, which one (including phone number)?

To leave a message for a physician, please call (646) 756-8282, Monday through Friday from 8:00 am - 4:00 pm.

## **AN OVERVIEW OF PATIENT CARE AT CWRC**

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We encourage that follow-up consults are scheduled with your primary physician to provide continuity of care; however, as a patient at the CWRC, you will likely meet with a number of physicians during your treatment during a process called morning monitoring. Vaginal ultrasounds, egg retrievals, and embryo transfers will be performed by the physician scheduled to do those procedures on that given day, and not necessarily by your primary physician.

## **THE IVF TREATMENT CYCLE**

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The following pages give an overview of each phase of the IVF cycle.

### **Cycle Start**

Once preliminary checklist testing and financial requirements are completed, your treatment cycle can begin. Most IVF treatment cycles begin on Day 3 of your menstrual cycle, with Day 1 defined as fresh flow with red blood before 4 pm. Spotting does not constitute Day 1 of your menstrual cycle.

When your period starts, please call 646-756-8282 to schedule your appointment for day 3. After hours, on weekends, and Holidays leave a message and someone will get back to you. If you do not hear back from our office, please note you can walk in any morning between 7:30 and 8:30am (7 days a week/365 days a year).

Please arrive on Day 3 of your menstrual cycle at your scheduled time (between 7am and 8:30am). You will have blood work and a vaginal ultrasound.

### **Ovarian Stimulation**

In order to obtain oocytes (eggs) for IVF, a medication regimen is used to stimulate the ovaries to grow and mature a group of oocytes (follicles). These injections should be given at approximately the same time every evening, at a chosen time between 4:00 pm. and midnight. The ovarian stimulation phase lasts approximately 8-12 days, depending on your response.

### **Morning Monitoring**

During the ovarian stimulation phase, ovarian response is monitored by a series of vaginal ultrasounds and blood tests, which are valuable in tracking follicular growth. Blood tests are used to monitor hormonal response. An average of six (6) to eight (8) office visits are necessary.

The results of morning monitoring during the stimulation phase are used by the physician to determine if modifications are necessary in your medication dosages. You will see a physician during morning monitoring. Later in the day, after your physician reviews the blood results, you will receive your medication instructions and details of your next appointment via a phone call or e-mail from a nurse.

### **Pre-Retrieval**

When the physician determines that follicular development has reached the appropriate size (largest follicles typically 18mm and bigger), instructions will be given regarding the injection of the hormone human chorionic gonadotropin (hCG) in preparation for ovulation. HCG is given as an intramuscular injection, and serves as the "trigger" for the final maturation of the eggs. Sometimes leuprolide (Lupron) is given in addition to or instead of hCG for trigger. The egg retrieval is scheduled for approximately 36 hours after hCG is injected, prior to the release of the eggs. Antibiotics are also routinely prescribed the day before, the day of, and the day after egg retrieval to minimize the risk of infection. You will be supplied with instruction by a nurse regarding these events.

## **Egg Retrieval**

For the day of your procedure, please remember to:

- Arrive on time.
- Leave valuables such as jewelry, money, and credit cards at home. A wedding band may be worn.
- Wear comfortable clothes.
- Not wear contact lenses, perfume, or powder.
- Have a sperm source available (frozen or fresh) if fertilization is planned

Please arrive at the CWRC at the designated time for your retrieval. After signing in, please have a seat in the waiting room. A staff member will then escort you to the recovery room, where you will be given a locker and a gown.

The anesthesiologist will discuss with you issues related to your procedure, and you will be required to sign procedure-related consent forms. You will be escorted into the operating room, where sedation will be given through an intravenous (IV) infusion, which the anesthesiologist prepares, lasting throughout the retrieval.

During the oocyte (egg) retrieval, oocytes (eggs) are aspirated from follicles using a transvaginal aspiration technique performed with ultrasound guidance. This is a minor procedure and requires light sedation. The egg retrieval takes approximately 15 to 20 minutes. Following the procedure, you will be taken into the recovery room. You will be informed of how many oocytes were retrieved. There, you will rest for approximately an hour and vital signs will be taken every 15 minutes. After this time, you will be permitted to go home accompanied by an adult. Please ensure that another adult will be available to take you home and be with you after the procedure.

## **Semen Production**

Your husband or male partner, where applicable, must arrive with you on the date of egg retrieval for the purpose of semen production. Actual insemination of the eggs takes place a few hours after the retrieval.

## **Donor Sperm**

If you would like to use donor sperm, the CWRC uses commercial sperm banks, such as California Cryobank and Reprolab, which have a New York State tissue bank license and with whom we have positive working experiences. However, you are free to research and use any sperm bank you would like, given that the bank has a New York State tissue bank license. If you are ordering sperm from a bank, please have it delivered to the CWRC prior to the start of your cycle.

It is recommended that you have two vials of donor sperm in our office at all times. We recommend "ICI washed sperm."

## **Post-Retrieval**

Following your retrieval, you should rest at home comfortably. You may resume normal (not strenuous) activities the following day if you feel up to it.

Follow the instructions given to you by the Nurse who discharges you.

## **Embryo Transfer**

Embryo transfer takes place five days after egg retrieval. The day of the embryo transfer is determined by a physician and embryologist, who assess the embryos.

The decision of how many embryos to transfer is made on the transfer day, but should be discussed ahead of time. The embryo transfer is a simple procedure that does not require anesthesia. You will be instructed to have a full bladder for the transfer.

## **Embryo Freezing**

Excess embryos of good quality can be frozen (cryopreserved). Embryos can be stored for several years, thawed at a later date, and transferred into the uterus.

## **Post-Transfer**

You may return to work the day of your transfer, provided you are not required to do heavy lifting or strenuous exercise/activities. Flying on planes is discouraged on the day of the transfer but permitted in the following days.

## **Pregnancy Testing**

You will come to the CWRC for a pregnancy blood test 9-12 days after the transfer. If you get a period DO NOT stop your progesterone supplement and do not cancel your pregnancy blood test.

A nurse will contact you on the day of your blood pregnancy test with the results.

If the test indicates that you are pregnant, you will continue to stay under the CWRC's care. If blood pregnancy test results are negative, we will recommend you schedule a follow up to discuss next steps with your physician.

## RECOMMENDED PHARMACIES

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Fertility medications cannot be obtained from most pharmacies. There are several local specialty pharmacies stocked with fertility medications listed here.

Most insurance companies require that patients use the insurance plan's participating pharmacy. Please contact your insurance to see if a specialty mail order pharmacy is required.

### **Apthorp Pharmacy**

2201 Broadway (at 78<sup>th</sup> Street) New York, NY 10024  
Tel: (212) 877-3480  
Fax: (212) 769-9095  
Hours: M-F 8am-9pm, SAT 9am-7pm, SUN 9am-6pm

### **Dobbs Ferry Pharmacy**

18 Cedar Street Dobbs Ferry, NY 10522  
Tel: (914) 693-3100  
Fax: (914) 693-4981  
Hours: M 8am-5pm, T-F 8am-6pm, SAT 9am-2pm, SUN CLOSED

### **Freedom Pharmacy (Mail Order)**

12 Kent Way Suite 120 A-B Byfield, MA 01922  
Tel: 1 (800) 660-4283  
Fax: 1 (888) 660-4283  
Hours: M-F 8am-9pm SAT 9am-6pm, SUN 9am-4pm

### **Kings Pharmacy**

1619 3<sup>rd</sup> Avenue (between 90<sup>th</sup> and 91<sup>st</sup> Street) New York, NY 10128  
Tel: (212) 534-6000  
Fax: (212) 534-6300  
Hours: M-F 8am-9pm, SAT 9am-7pm, SUN 10am-5pm

### **Kings Pharmacy**

357 Flatbush Avenue (between 7<sup>th</sup> and 8<sup>th</sup> Avenue) Brooklyn, NY 11237  
Tel: (718) 230-3535  
Fax: (718) 230-0596  
Hours: M-F 9am-9pm, SAT 9am-8pm, SUN 9am-6pm

### **Rockville Centre Pharmacy**

30 Hempstead Avenue Rockville Ctr., NY 11570  
Tel: (516) 764-6161  
Fax: (516) 678-3246  
Hours: M-F 9am-8pm, SAT 9am-5pm, SUN 9am-2pm

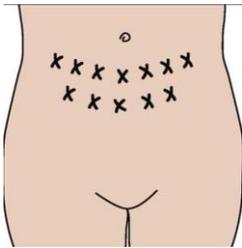
### **Schraft's Pharmacy**

3 Wing Drive, Suite 102 Cedar Knolls, NJ 07927  
Tel: 855-724-7238  
Fax: 844-876-4545  
Hours: M-F 8am-8pm, SAT 8am-3pm, SUN CLOSED

## SUBCUTANEOUS INJECTIONS (SHORT NEEDLE)

**Site:** 1 inch down from the center of your belly button AND 1 inch to the left or the right of the abdomen.

**Examples of subcutaneous injections:** Follistim, Gonal F, Menopur, Ganirelix, Cetrotide, and Lupron.



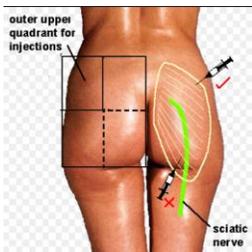
**Preferred injection time: 6-10pm** (Keep to the same time every night)

1. Eliminate any air bubbles by flicking on syringe. GENTLY push plunger up to expel air pocket that may have resulted at top of syringes
2. Re-Cap needle and twist off. Replace with subcutaneous needle 26 or 27 gauge 1/2"
3. If necessary, you may place ice on injection site for 2 minutes.  
ABDOMEN: An inch to the side and an inch below the umbilicus (belly button).  
Alternate sites- from right side to left each evening
4. Clean injection site with an alcohol pad and allow alcohol to dry (air dry).
5. Uncap needle and hold syringe in your dominant hand. Hold Syringe from the barrel like a pencil. DO NOT Position finger on plunger.
6. Pinch the skin and insert the ENTIRE needle quickly and lightly at a 90- degree (straight) angle. Let go of the pinch and with your free hand slowly push plunger to release the full amount of medications. Remove the needle quickly and lightly.

## INTRAMUSCULAR INJECTIONS

**Site:** Outer upper quadrant of the buttocks.

**Example of intramuscular injections:** HCG (Trigger Shot such as Novarel or Pregnyl), Progesterone in Oil



**Preferred injection time:** You will be assigned a specific time for HCG trigger injection. Progesterone in oil should be injected every 24 hours.

1. Eliminate any air bubbles by flicking on syringes
  2. Re-Cap needle and twist off. Replace with intramuscular needle 25 gauge 1 1/2". Gently push plunger up to expel air pocket and release first drop of medication from tip needle. If necessary, you may place ice on injection site for 2 minutes.
- Alternate from right side to left each evening.
  - Clean injection site with an alcohol pad and allow alcohol to dry.

- Uncap needle and hold syringe in your dominant hand. Hold syringe from the barrel like a pencil. DO NOT Position on plunger.
- Pinch the skin and insert the ENTIRE needle quickly and lightly at 90- degree (straight) angle. Let go of the pinch and with your free hand slightly draw back on the plunger. If blood appears in the syringe, withdraw the needle. Apply a new needle and repeat. If there is no blood, slowly push plunger to release the full amount of medication. Remove the needle quickly.

**NOTE:** If blood leaks from injection site, gently apply pressure with clean gauze

\*\*Never re-use syringes/needles. Discard syringes/needles into sharps container or coffee can. If your community does not have a hazardous waste disposal area, bring your full sharps container to the office for disposal. \*\*

## MEDICATIONS FOR IVF CYCLE

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The following medications may be prescribed during the IVF cycle. You will be given detailed information regarding the timing and administration of the medications. When you begin a treatment cycle, the nurse will order your medications for the entire cycle with a refill in case your dosage is increased.

Freedom Pharmacy offers free instructional videos demonstrating the mixing and injecting of fertility medications. These useful videos are offered in multiple languages and can be found at [freedommedteach.com](http://freedommedteach.com).

### 1. Gonadotropins

*Follistim:* Used for stimulation of follicular growth.

*Gonal F:* Used for stimulation of follicular growth.

*Menopur:* Used for stimulation of follicular growth.

### 2. Gonadotropin-Releasing Hormone (GnRH) Antagonist

*Cetrotide:* Prevents early ovulation.

*Ganirelix:* Prevents early ovulation.

### 3. Human Chorionic Gonadotropin (hCG)

*Novarel/Pregnyl/Ovidrel:* Completes final maturing process of oocytes. Trigger administered 36 hours prior to planned egg retrieval.

*Lupron Trigger:* Completes final maturing process of oocytes. Trigger administered 36 hours prior to planned egg retrieval.

### 4. Antibiotics

Doxycycline: Used prophylactically to prevent infection from oocyte retrieval or minor surgery.

### 5. Progesterone

*Endometrin, Progesterone capsules (Vaginal Suppositories):* Support uterine lining

*Crinone gel:* Supports uterine lining

Progesterone in oil intramuscular injections to support uterine lining