

# Patient Education

## Pre-Cycle Training

### In Vitro Fertilization (IVF) Fresh Cycle with Microdose Lupron

CHR's patient education for IVF using Microdose Lupron consists of the following components:

1. [What is an IVF?](#) - a brief description of the procedure
2. [Pre-cycle checklist](#) - a list of pre-cycle tests and preparations
3. [Timeline of IVF with Microdose Lupron](#) - what needs to be done and when
4. [Medications](#) - pharmaceutical company's instructions and information on medications used
5. [Consent Forms](#)
6. [FAQs](#)
7. [Completion/Question Form](#) - let CHR know you've read it, and ask questions

Please read each item carefully, and make a list of questions you might want to ask. This way, you will be more prepared when you meet with your nurse coordinator for your training session. When you are unsure about something along the way, you can always come back to this page to refresh your memory.

#### 1. What is IVF?

IVF is a procedure that can offer a chance of parenthood to women who have blocked or absent fallopian tubes, or men with low sperm counts. In an IVF cycle, you will take hormone injections/medications to encourage your ovaries to produce more than one mature egg. You will be closely monitored using ultrasound and blood tests while you take your medications to determine when your eggs are mature. Once your doctors have determined that your eggs are almost ready, you will use an additional medication to allow their full development and your retrieval will be scheduled. Retrieval is a short in-office procedure for which you will be given light sedation. After your eggs are retrieved, they will be mixed with sperm (inseminated). The following day, our embryologists will check to see if the eggs accepted the sperm and are fertilized. Three to five days later, some of the resulting embryos will be placed in your uterus (embryo transfer), bypassing the fallopian tubes. Two weeks after the embryo transfer, you will find out if you have achieved pregnancy by having a blood test for pregnancy.

Go to <http://www.centerforhumanreprod.com/ivf.html#ivfhowwork> to read about IVF.

#### 2. Pre-Cycle Checklist

A series of tests are required before an IVF cycle can take place, on both female and male partners. You should discuss your specific checklist requirements with your clinical-coordinator who will be responsible for guiding through this process.

Go to [http://www.centerforhumanreprod.com/pdf/ivf\\_checklist.pdf](http://www.centerforhumanreprod.com/pdf/ivf_checklist.pdf) to download the Pre-Cycle Checklist.

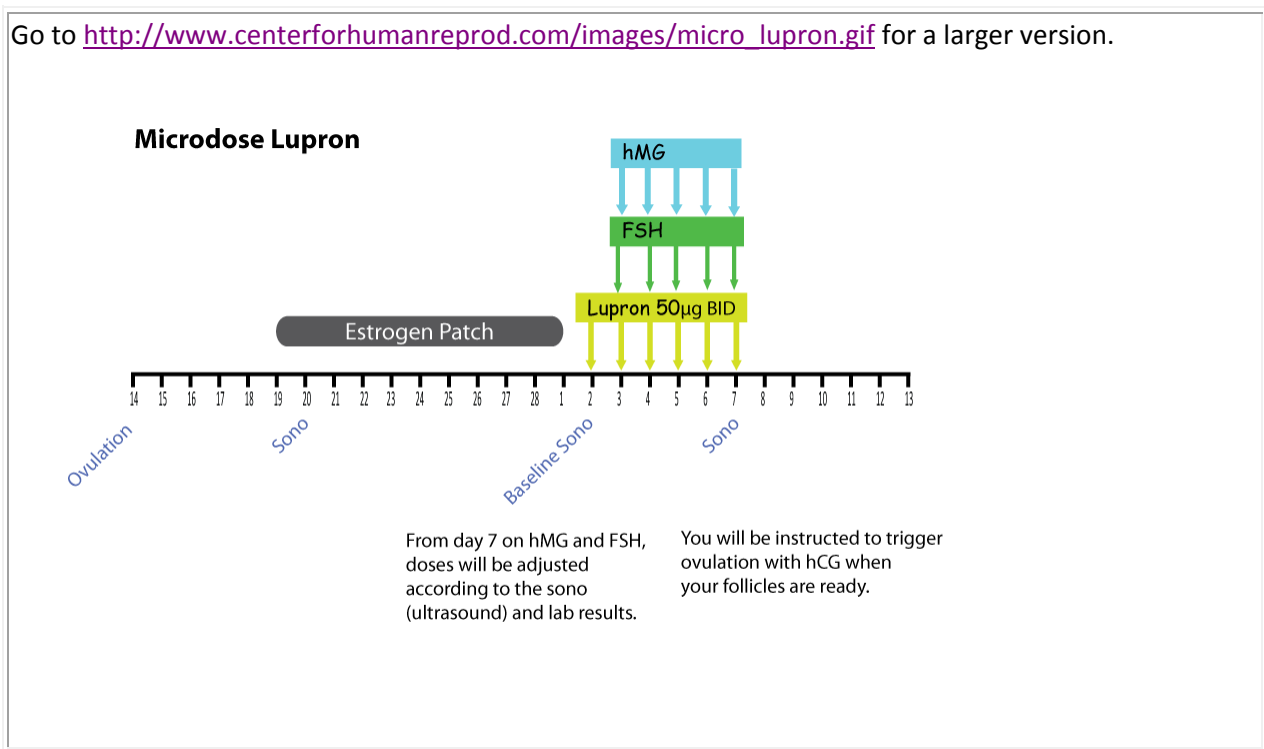
#### 3. Timeline of Microdose Lupron IVF at CHR

After the initial consultation with a physician (which determines the type of treatment you will be undergoing), you will need to complete all the required pre-cycle tests (please refer to [the Pre-Cycle Checklist](#), linked above). Once your checklist is complete you will be ready to start your cycle. At CHR, if you are having a "Microdose Lupron," cycle you will return for a blood test and sonogram about 10 days before your next anticipated menstrual period (about day 18 to 19 of a normal 28 day cycle). If your tests confirm that you have ovulated, you will begin using estrogen patches (see [Medications section](#) below for more detail).

During this 10 day interval, you should carefully review the material on this page and schedule an appointment with one of our clinical nurse coordinators to review instructions for preparing and injecting your medications. This appointment will be an opportunity for you to address any questions that you may have after studying the information provided on this page. For this appointment, please bring a copy of the completed questionnaire at the end of this material. This visit will also be an opportunity for you to receive necessary prescriptions and to initiate any required pre-authorization from your insurance carrier, if applicable.

About 10 days after beginning your estrogen patches, you will begin your normal menstrual period. On day 1 of flow, you will call CHR to schedule another sonogram and blood test for the following day.

Go to [http://www.centerforhumanreprod.com/images/micro\\_lupron.gif](http://www.centerforhumanreprod.com/images/micro_lupron.gif) for a larger version.




Step 0	10 days before the start of your next period	<ul style="list-style-type: none"> <li>• Visit CHR for a blood test and ultrasound to confirm that you have ovulated.</li> <li>• Start your estrogen patch as directed.</li> <li>• If you do not have regular menstrual cycles, we may start your estrogen patch even if you have not ovulated.</li> </ul>
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Step 1	Day 1 of your next period	<ul style="list-style-type: none"> <li>Call 212-994-4400 to make an appointment for baseline tests, on the next day.</li> </ul>
Step 2	Day 2 or 3 of your next period <u>in the morning:</u>	<ul style="list-style-type: none"> <li>Visit CHR for baseline ultrasound and blood work.</li> <li>You will meet with your nurse coordinator to go over the medications.</li> <li>This is also the time to review your informed consents with the nurse coordinator, ask questions and sign the forms.</li> </ul>
Step 3	Day 2 or 3 of your next period <u>in the afternoon:</u>	<ul style="list-style-type: none"> <li>When your results of this testing are complete, your physician will determine the dosage of medications you will use.</li> <li>The nurse coordinator will call you to confirm the medication dose.</li> <li>Start Microdose Lupron 50 micrograms (0.1mL) twice a day, as instructed (see <a href="#">Medications section</a> below for more detail).</li> </ul>
Step 4	The following day	<ul style="list-style-type: none"> <li>Start your FSH and/or hMG as instructed (see <a href="#">Medications section</a> below for more detail).</li> </ul>
Step 5	After 4-5 days of FSH/hMG injections	<ul style="list-style-type: none"> <li>Return to CHR for ultrasound and blood work.</li> <li>Your physician will adjust the dosage depending on your response to the medications.</li> </ul>
Step 6	8-14 days after the start of FSH/hMG injections	<ul style="list-style-type: none"> <li>You will be instructed to trigger ovulation with an hCG injection (see <a href="#">Medications section</a> below for more detail).</li> </ul>
Step 7	1 day after hCG injection	<ul style="list-style-type: none"> <li>Visit CHR at 8 am for egg retrieval.</li> <li>Your husband (who will accompany you) will produce a semen sample.</li> <li>Your eggs will be retrieved through ultrasound-guided needles.</li> <li>Retrieved eggs will be fertilized with the semen sample.</li> <li>Appointment for embryo transfer is given at this time.</li> <li>You will need to rest for 1-2 hours at CHR, then 2 days at home.</li> </ul>
Step 8	2 days after egg retrieval	<ul style="list-style-type: none"> <li>Visit CHR at 8 am for embryo transfer.</li> <li>You will need to be accompanied by your partner or friend.</li> <li>Embryos will be transferred to your uterus through a catheter.</li> <li>You will need to rest for 1 hour at CHR, then 1 day at home.</li> </ul>





		<ul style="list-style-type: none"> <li>• Appointment for pregnancy test is given at this time.</li> <li>• Start progesterone injections today.</li> <li>• Start Prometrium and Estrace pills (both vaginally) today.</li> </ul>
Step 9	16 days after the embryo transfer	<ul style="list-style-type: none"> <li>• Visit CHR for pregnancy test.</li> </ul>


#### 4. Medications

For IVF cycles using the Microdose Lupron Protocol, there are five main medications. The five main medications are followed by six support medications that you may be instructed to take. Brand names of the medications you use will vary, so we've listed the generic name on the left-hand column, with general information on each medication at the top of the right-hand columns. Listed after the five main medications are six support medications that you may be instructed to take. For links to the brand-name medications, please revisit the IVF Micro Lupron training page at [http://www.centerforhumanreprod.com/ivf\\_training\\_micro\\_lupron.html](http://www.centerforhumanreprod.com/ivf_training_micro_lupron.html).

Estrogen Patch	<p>Estrogen patches are used in IVF cycles to thicken your uterine lining (endometrium), so that your uterus is ready to welcome the transferred embryo(s).</p> <p>▶ Use 1 patch every other night.</p>		
Leuprolide Acetate	<p>In IVF cycles, Leuprolide Acetate (often called Lupron, even though it's a brand name--a bit like Band Aid and Hoover) is used to prevent premature ovulation. Because Leuprolide Acetate does this by suppressing the estrogen production in your body, you will need Follicle Stimulating Hormone (FHS) and/or Human Menopausal Gonadotropin (hMG) to encourage follicular development.</p> <p>▶ Leuprolide Acetate is taken as subcutaneous injections.</p> <p>▶ Inject 50µg twice a day.</p>		
	Brand Name	Printable Instruction	Video Instructions
	Lupron		N/A
Follicle Stimulating Hormone (FSH)	<p>Follicle Stimulating Hormone (FSH) is used in IVF cycles to stimulate your ovaries to produce multiple mature eggs.</p> <p>▶ FSH is taken as subcutaneous injections daily.</p> <p>▶ Take FSH as directed.</p>		

	Brand Name	Printable Instruction	Video Instructions	Prescribing Information
	<a href="#">Bravelle®</a>	N/A		
	<a href="#">Follistim®</a>			
	<a href="#">Gonal-f®</a>			
Human Menopausal Gonadotropin (hMG)	<p>hMG contains natural follicle-stimulating hormone (FSH) and luteinizing hormone (LH). In IVF cycles, hMG is used to regulate ovulation and encourage growth of multiple eggs when clomiphene citrate did not work well.</p> <ul style="list-style-type: none"> <li>▶hMG is taken as subcutaneous injections daily.</li> <li>▶Take hMG as instructed.</li> </ul>			
	Brand Name	Printable Instruction	Video Instructions	Prescribing Information
	<a href="#">Repronex®</a>			
	<a href="#">Menopur®</a>	N/A		
Human Chorionic Gonadotropin (hCG)	<p>hCG is similar to LH. In an IVF cycle, one-time injection of hCG is used to trigger ovulation to get your mature eggs ready for insemination. You should wait until you are instructed specifically to administer this injection.</p> <ul style="list-style-type: none"> <li>▶Take one injection of 10,000 units when instructed.</li> <li>▶Timing for this injection is critical!</li> </ul>			
	Brand Name	Printable Instruction	Video Instructions	Prescribing Information
	<a href="#">Novarel™</a>	N/A		
	<a href="#">Pregnyl</a>			
	Profasi	N/A	N/A	N/A
	<a href="#">Ovidrel</a>			
Progesterone	Progesterone is used to thicken your endometrium (lining of the uterus) so that the implantation of fertilized egg(s) will be easier.			

	<p>Medications used in ovarian stimulation can suppress progesterone levels in your body, so it is important to supplement it with exogenous progesterone. You will be taking both Progesterone injections and Prometrium vaginally.</p> <ul style="list-style-type: none"> <li>▶ Inject 50 µg Progesterone once a day.</li> <li>▶ Insert 2 capsules (200mg) Prometrium in your vagina 3 times a day.</li> </ul>			
	Brand Name	Printable Instruction	Video Instructions	Prescribing Information
	<a href="#">Prometrium®</a>		N/A	
	<a href="#">Progesterone</a>		N/A	N/A
Micronized Estradiol	<p>Micronized estradiol helps maintain and build your uterine lining so that the transferred embryos will find a comfortable environment there.</p> <ul style="list-style-type: none"> <li>▶ Insert a 2mg tablet in your vagina 3 times a day.</li> </ul>			
	Brand Name	Printable Instruction	Video Instructions	Prescribing Information
	<a href="#">Estrace</a>	N/A	N/A	
Micronized DHEA	<p>DHEA improves the quality of eggs and embryos.</p> <ul style="list-style-type: none"> <li>▶ Take one 25mg pill orally, 3 times a day with meals.</li> <li>▶ Continue until the positive pregnancy test.</li> </ul>			
Baby Aspirin	<p>Aspirin helps increases blood supply to your uterus and ovary. It also prevents clotting.</p> <ul style="list-style-type: none"> <li>▶ Take one 81mg pill daily.</li> </ul>			
Prenatal Vitamins	<p>Prenatal vitamins, such as Folate, will help prevent neural tube defects. Iron will build up your blood count. Calcium helps build your babies' bones and will help you maintain yours.</p> <ul style="list-style-type: none"> <li>▶ Take one pill a day.</li> </ul>			
Prednisone	<p>Prednisone suppresses male hormones and immune function.</p> <ul style="list-style-type: none"> <li>▶ Take one 10mg pill daily until further instructions.</li> </ul>			
	Brand Name	Printable	Video	Prescribing

		Instruction	Instructions	Information
	<a href="#">Prednisone</a>	N/A	N/A	
Doxycycline	Doxycycline is an antibiotic used to prevent infection after the egg retrieval. ▶ Take one 100mg pill twice daily, for 5 days. ▶ Wait for specific instructions.			

## 5. Consent Forms

All signed informed consent documents are required prior to any procedures performed at CHR. Please read through the following informed consent forms according to your planned treatment(s) so that you are well informed by the time you meet with your nurse coordinator for further explanation and signing of the form(s). You should NOT sign the consent form(s) until you meet with your nurse coordinator.

- Go to [http://www.centerforhumanreprod.com/pdf/affirmation\\_consent.pdf](http://www.centerforhumanreprod.com/pdf/affirmation_consent.pdf) to download the Affirmation of Sexual Intimacy Form.
- Go to [http://www.centerforhumanreprod.com/pdf/ivf\\_consent.pdf](http://www.centerforhumanreprod.com/pdf/ivf_consent.pdf) to download the Informed Consent for IVF.
- Go to [http://www.centerforhumanreprod.com/pdf/ivf\\_consent\\_addendum.pdf](http://www.centerforhumanreprod.com/pdf/ivf_consent_addendum.pdf) to download the Addendum to Informed Consent for IVF.
- Go to [http://www.centerforhumanreprod.com/pdf/med\\_consent.pdf](http://www.centerforhumanreprod.com/pdf/med_consent.pdf) to download the Informed Consent for Fertility-Enhancing Medications.
- Go to [http://www.centerforhumanreprod.com/pdf/cryo\\_consent.pdf](http://www.centerforhumanreprod.com/pdf/cryo_consent.pdf) to download the Informed Consent for Cryopreservation of Embryos.
- If you are using donor sperm, go to [http://www.centerforhumanreprod.com/pdf/sperm\\_donor\\_consent.pdf](http://www.centerforhumanreprod.com/pdf/sperm_donor_consent.pdf) to download the Informed Consent for Sperm Donor Insemination.

## 6. FAQs

### ▶ What is IVF?

-- IVF is a procedure that can offer a chance of parenthood to women who have blocked or absent fallopian tubes, or men with low sperm counts. In an IVF cycle, you will take hormone injections/medications to encourage your ovaries to produce more than one mature egg. You will be closely monitored using ultrasound and blood tests while you take your medications to determine when your eggs are mature. Once your doctors have determined that your eggs are almost ready, you will use additional medication to allow their full development and your retrieval will be scheduled. Retrieval is a short in-office procedure for which you will be given light sedation. After your eggs are retrieved, they will be mixed with sperm (inseminated). The following day, our embryologists will check to see if the eggs accepted the sperm and are fertilized. Three to five days later, some of the resulting embryos will be placed in your uterus (embryo transfer), bypassing the fallopian tubes. Two weeks after the embryo transfer, you will find out if you have achieved pregnancy by having a blood test for pregnancy.

▶ Why am I using Microdose Lupron?

-- If you are a woman who is over age 40, or has premature ovarian aging (POA), then you are especially sensitive to ovarian suppression. When Lupron is used as supplied from the manufacturer, it will profoundly suppress your own hormonal function. We use Microdose Lupron (highly diluted leuprolide acetate) to avoid suppressing your system too much.

▶ How long will my Microdose Lupron cycle take from the start to finish?

-- You will begin preparation for your cycle with estrogen patches about 10 days before your menstrual period (See the [timeline section](#) above). Once you begin using Microdose Lupron, your retrieval will be 8-18 days later. Your embryo transfer will follow three to five days later. In other words, from preparation to embryo transfer, it will take approximately four weeks.

▶ How many visits should I expect to make?

-- Approximately 5-8 visits.

▶ What if my husband/partner will be out of town during the treatment?

-- We can freeze his sperm for back-up, in case he is not in town on the day of your IVF procedure. If he turns out to be in town on the day of the procedure, he can always provide fresh sample.

▶ What are the most common side effects of the hormone medications?

-- Symptoms similar to PMS (Premenstrual Syndrome) are the most common. You may experience bloating, mood swings, cramping and headache. It is okay to take Tylenol as needed. Symptoms from these medications may continue for up to two weeks after your last dose. In fact, some women continue to experience symptoms for the first few weeks of pregnancy.

## 7. Completion/Question Form

If you need to complete the online pre-cycle training, your last step is to go to [http://www.CenterForHumanReprod.com/training\\_ivf\\_micro\\_quiz.php](http://www.CenterForHumanReprod.com/training_ivf_micro_quiz.php) to fill out the Completion/Question Form and print it out. Please take the printout to your next appointment with your physician.