

## **Medications to produce multiple eggs.**

The medications you will take in preparation for the egg retrieval are referred to as the drug “protocol”. Each patient’s protocol is unique, and determined by Dr. Donahue based on previous medical history. Possible medications include:

**A. LUPRON** (Luprolide acetate 2-week kit) Lupron acts upon the pituitary gland in the brain to alter the secretion of FSH and LH (the two hormones responsible for egg development and ovulation). Initially, Lupron will cause increased secretion of the two hormones, with a subsequent rise in estrogen secretion. Continual administration of Lupron, however, will lead to a suppression of the pituitary hormones, with subsequent drop in estrogen production. When we perform the baseline ultrasound exam on day 1 - 3 of the cycle we assess the degree of suppression by measuring the LH and estradiol levels. Occasionally we cancel a cycle if the estradiol level remains elevated for an extended period. In ART stimulations, Lupron will allow the ovaries to produce more eggs without the fear of premature ovulation. **Microdose Lupron** is a low dose preparation that has the ability to stimulate rather than suppress the ovaries. This is used for ‘poor responders’.

**Administration:** Lupron is taken as a subcutaneous injection, once per day, beginning on or about cycle day 21 in the month prior to egg retrieval.

**Side effects:** headaches, fatigue, mood-swings, hot flashes, delayed onset of your period, bruising or irritation at the injection sites

**B. GONADOTROPINS** (Repronex, Gonal-F, Follistim, Bravelle and Menopur) These drugs will act upon the ovaries, to cause the oocytes (eggs) to develop and grow. Usually, several oocytes develop on each ovary. They contain either pure FSH or FSH and LH.

	<u>FSH</u>	<u>LH</u>
Repronex	75 IU	75 IU
Gonal-F, Follistim	75 IU	---
Bravelle	75 IU(97%)	3%
Menopur	75 IU	75 IU

**Administration:** Gonadotropins must be administered by intramuscular injection or subcutaneously once or twice per day, according to your particular protocol. They are started when baseline tests (ultrasound and blood tests) indicate that the ovaries are in a resting, non-productive state.

**Side effects:** mood-swings, discomfort around the ovaries, abdominal fullness, soreness at the injection sites.

**C. HCG** (Profasi, Pregnyl, Novarel) This hormone is taken once testing indicates the oocytes on the ovaries are ready to be released. It performs two functions: structural changes inside the eggs to make them able to be fertilized and expansion of the fluid inside the follicles (egg sacs) that would eventually lead to rupture and ovulation. Ovulation normally occurs between 36-42 hrs. after HCG administration.

**Administration:** HCG must be taken as an intramuscular injection. You will be given a specific time to take this injection- approximately 36 hours before your scheduled time for egg retrieval. The powder is mixed with **2cc’s ONLY** of saline prior to injection.

**Side effects:** discomfort around the ovaries, soreness at the injection site.