IVF INJECTION CLASS
IVF Cycle Overview

- Pre-Cycle Suppression
  - Birth Control Pills / Luteal Lupron

- Baseline Appointment
  - Ultrasound / Estradiol

- Begin Stimulation Medications day 1
  - Gonal-f (FSH) & Menopur (LH/FSH)

- In-Cycle Ovulation Suppression
  - Luteal Lupron or Microdose Lupron or Antagon
IVF Cycle Overview...

- Cycle monitoring appointments
  - day 4: blood draw, day 6: blood/ultrasound, day 7-10: possible blood/ultrasound daily
- Trigger Shot
  - HCG or Lupron
- Oocyte Retrieval Surgery
  - doxycycline/ methylprednisolone/Percocet
- Progesterone Supplementation
  - Endometrin or Progesterone in Oil
- Embryo Transfer
- Progesterone support x 8wks gest.
IVF Cycle timing

- Baseline – Retrieval ~2wks
- Baseline – Embryo transfer ~3wks
Medication protocol will vary with each patient. Your injections are tailored to your needs.
Pre-cycle suppression

- Take active pills continuously until you are instructed to stop.

**DO NO STOP PILLS UNTIL INSTRUCTED!!!**

There are 21 active pills and 7 placebo pills per pack.

- Birth control pills (aka. BCPs or OCPs)
  - Call with cycle day 1 of your period, we will have you begin BCPs on day 2 or 3
  - You must be on BCPs a minimum of 2-3wks (max 6-7wks) prior to your baseline IVF appointment
  - If you finish a pack of active pills begin a new pack
  - In rare instances you may be unable to take BCPs, your nurse will advise you in these cases
Which type of Ovulation suppression medication will I use?

- Your IVF Doctor will choose the type of medication for you.
- Based on your infertility history and prescreening testing you will be prescribed either Antagon, Microdose Lupron or Luteal Lupron.
- You will get your medication instructions & cycle calendar at your Baseline Visit.
## IVF sample Calendar (Antagon)

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thur</th>
<th>Fri</th>
<th>Sat</th>
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<tbody>
<tr>
<td></td>
<td>Baseline – Blood &amp; US 0645 @ GYN clinic</td>
<td>Take NOTHING today</td>
<td>Take NOTHING today</td>
<td>Cycle day 1- Start stimulation meds: Gonal-f &amp; Menopur, as directed</td>
<td>Cycle day 2 Continue meds as directed</td>
<td>Cycle day 3 Continue meds as directed</td>
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<tr>
<td></td>
<td>Take last BCP</td>
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<tr>
<td>Cycle day 4- Blood test only</td>
<td>Cycle day 5 Continue meds as directed</td>
<td>Cycle day 6- Blood/US Continue meds as directed</td>
<td>Cycle day 7 Possible Blood/US Continue meds as directed</td>
<td>Cycle day 8 Possible Blood/US Continue meds as directed</td>
<td>Cycle day 9 Possible Blood/US Continue meds as directed</td>
<td>Cycle day 10 Possible Blood/US Continue meds as directed</td>
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<tr>
<td>Cycle day 11- Tentative trigger day</td>
<td>Cycle day 12- Post HCG blood draw</td>
<td>Cycle day 13- Tentative retrieval day (2wks gestation)</td>
<td>Day 1</td>
<td>Day 2</td>
<td>Day 3</td>
<td>Day 4</td>
</tr>
<tr>
<td>Day 5 Embryo transfer</td>
<td>Day 6</td>
<td>Day 7</td>
<td>Day 8</td>
<td>Day 9</td>
<td>Day 10</td>
<td>Day 11</td>
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<tr>
<td>Day 12</td>
<td>Day 13</td>
<td>Day 14 Tentative pregnancy test (4wks gestation)</td>
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Lupron

- Luteal Lupron – leuprolide acetate
  - Kit – insulin syringes & medication
  - Multi-dose vial
  - Given subcutaneously
  - Store at room temperature
- Suppresses ovulation
Microdose Lupron

- MDF Lupron
  - Multi-dose vial
  - Given subcutaneously with insulin syringe
  - Must be REFRIGERATED
  - Suppresses ovulation
  - Supplied by Walter Reed Pharmacy or Freedom Fertility Pharmacy @ 1800-660-4283
Subcutaneous Injections

- Needle length about ½”
- Into the subQ tissue
- Pinch the tissue and insert needle at 90 degrees
Gonal-f

- FSH – follicle stimulating hormone
  - Stimulates multiple follicle production
  - Multi-dose pen
  - Given subcutaneously
  - Refrigerate unused pens/ Once open store at Room Temperature up to 28days
  - 450 unit or 900 unit pens available
  - Keep track of amount used
Subcutaneous Injections

- Needle length about 1/2”
- Into the subQ tissue
- Pinch the tissue and insert needle at 90 degrees
Menopur

- FSH & LH – follicle stimulating hormone and lutenizing hormone
  - Stimulates multiple follicle production & growth
  - Given subcutaneously
  - Must be reconstituted with 1ml of NaCl
  - Store at Room Temperature
  - 1, 2, or 3 vials – use only 1ml of NaCl for mixing
Subcutaneous Injections

- Needle length about ½”
- Into the subQ tissue
- Pinch the tissue and insert needle at 90 degrees
Antagon

- **Ganirelix**
  - Prevents ovulation
  - Normally started after day 6 of cycle
  - Prefilled syringe given subcutaneously
  - Continue daily @ 0800 until told to stop
  - Store at room temperature
HCG trigger

- Human Chorionic Gonadotropin
  - Finalizes maturation of the oocyte
  - Allows the oocyte to release from the side of the follicle
  - Given IM- intramuscularly
  - Must be given at EXACT TIME as directed by physician
  - Must be reconstituted with 1ml of water
  - Must retrieve oocytes within 36 hours of injection
  - No more IVF medications

- Male partner – if you haven’t had an ejaculate within 2-3 days, have an ejaculate the day of HCG trigger
Intramuscular Injection

- Needle length about 1 1/2 “
- Into the muscle
- Insert the needle at 90 degrees
- Draw back to check for blood
- Redirect if necessary
Intramuscular injection alternate site

- The thigh:
  - Inject into the Vastus lateralis muscle
Lupron Trigger

- Alternative to an HCG trigger (if directed by MD)
- 80 units or 0.8ml of Lupron given subcutaneously
  - Finalizes maturation of the oocyte
  - Allows the oocyte to release from the side of the follicle
  - Must be given at EXACT TIME as directed by physician
  - Must retrieve oocytes within 36 hours of injection
  - No more IVF medications

- Male partner – if you haven’t had an ejaculate within 2 -3 days, have an ejaculate the day of HCG trigger
Oocyte Retrieval

A needle is inserted through the wall of the vagina, into the ovary and follicles to aspirate the eggs.
Post-Retrieval Medications

- Doxycycline
  - Antibiotic given as prophylaxis
- Methylprednisolone
  - Steroid given in preparation for assisted hatching (day 1-4 after egg retrieval)
- Percocet
  - Narcotic pain relief
Progesterone

- Endometrin or Progesterone in Oil
  - Supplements progesterone after retrieval
  - Prepares uterine lining for implantation
  - Vaginal insert -vs- Intramuscular injection
  - Continue until 8wks of Gestation
  - Can cause constipation
Intramuscular Injection

- Needle length about 1½ “
- Into the muscle
- Insert the needle at 90 degrees
- Draw back to check for blood
- Redirect if necessary
OHSS
ovarian hyperstimulation syndrome

- This can be an Emergency!
- Ovaries are growing and becoming more vascular
- The vessels can become “leaky” causing fluid to leak into the abdomen
- Seek medical care or notify us if you have the following symptoms:
  - Rapid weight gain
  - Shortness of breath
  - Difficult or decreased urination
  - Nausea/vomitting
  - Low blood pressure
Embryo Transfer

The embryos are transferred into the uterus with ultrasound guidance.

You will be asked to fill your bladder prior to transfer.
FYI for the Ladies

In cycle-

- No NSAIDS - advil, motrin, aspirin, aleve
- Tylenol is OK
- No high impact exercise - running, horseback riding (walking, swimming are OK)
- No intercourse once stimulation meds begin
FYI for the Guys

To maximize sperm production we recommend:

- No saunas, hot tubs
- No supplements (testosterone, creatine, etc)
- Have an ejaculate every 3 days if possible
- If you smoke- STOP
Medication information/videos -
General Subcutaneous Injection -
http://www.freedommedteach.com/eng/videos.html?play=general_sq

General Intramuscular Injection -
http://www.freedommedteach.com/eng/videos.html?play=general_im

Gonal-F Redi-ject Pen -
http://freedommedteach.com/eng/videos.html?play=gonal_f_rff_rediject_pen

Menopur -
http://www.freedommedteach.com/eng/videos.html?play=menopur_draw_up_qcap%2Cmenopur_sq

Antagon -
http://www.freedommedteach.com/eng/videos.html?play=ganirelix_acetate

Lupron -
http://www.freedommedteach.com/eng/videos.html?play=leuprolide_acetate

Lupron Trigger -

hCG - http://www.freedommedteach.com/eng/videos.html?play=novarel-hcg_draw_up%2Chgeneral_im

Progesterone in Oil -
IVF Nurses

- Darshana Naik - 301-400-2151
- Kristy Zolandz – 301-400-2326
- Michell Hovastak – 301-400-2146
- Christine Richardson – 301-400-2331

Front desk – Ms. Thompson
301-400-2144

Office hours:
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0700 – 1500