

## Oocyte Cryopreservation

To cryopreserve mature eggs (oocytes), your ovaries are stimulated by a series of hormone shots. In a normal menstrual cycle, you produce only 1 egg. The hormone shots cause your ovaries to produce multiple eggs. The eggs are then retrieved (harvested) from your ovaries during a surgical procedure. This is done by inserting a needle through your vagina and into the ovary. An ultrasound is used to see the area during the procedure.

Once retrieved, the mature eggs are frozen. A rapid-freeze process (cryopreservation via vitrification) instantly preserves the eggs. The eggs remain frozen until you decide to thaw, fertilize and transfer them.

### Ovarian Stimulation

Ovarian stimulation starts with an ultrasound and blood tests. You will receive medicines called gonadotropins to stimulate your ovaries to produce multiple eggs. The common names for these medicines are Gonal-F<sup>®</sup>, Follistim<sup>®</sup> and Menopur<sup>®</sup>.

The stimulation phase lasts between 8 and 12 days. As your ovaries respond to the medicines, blood tests to check your estrogen levels and vaginal ultrasounds are done. When your ovaries are ready for egg retrieval, an injection called a trigger shot is given to help mature the eggs. The egg retrieval is usually scheduled about 35 hours after the trigger injection.

### Oocyte Retrieval

The oocytes are removed through your vagina. An ultrasound helps guide the procedure. The eggs are identified under a microscope. The procedure takes 15 to 30 minutes. You are asleep for the procedure but breathe on your own. This is called conscious sedation.

You must take off work the day of your retrieval. Have someone with you to drive you home.

### Cryopreservation

All mature oocytes are cryopreserved by vitrification (a rapid freeze technique). This method shows better survival rates than other methods.

### Oocyte Freeze Cycle Steps

1. First, you visit with your fertility doctor.
2. Lab work and ovarian testing are completed.
3. Attend an “IVF Orientation or Teaching” visit with your doctor and/or nurse. You learn how to give medicines and review your treatment calendar. You will also sign consent forms.

4. You may begin birth control pills or estrogen patches. This depends on your cycle protocol. A suppression check with a baseline ultrasound is scheduled.
5. You start stimulation medicines or fertility shots. If you have a hormone-sensitive tumor, a medicine called letrozole may also be used to lower estrogen levels.
6. Regular ultrasounds and lab work are done to help adjust your medicine dosages and determine when the follicles are mature. These occur every 1 to 4 days and depend on your ovarian response. When the eggs are ready, you will give a trigger shot which starts the final maturation of the eggs.
7. Egg retrieval is done about 34 to 36 hours after the trigger shot.
8. Mature eggs are cryopreserved for later use.

Note: This is just an example of a treatment cycle. Depending on your clinic, you may use a different protocol.

### **Key Points to Consider**

- Cryopreserving oocytes is not a guarantee of future pregnancy. It is possible for the oocytes to not survive the thaw or not successfully fertilize. Even if high quality embryos are produced and transferred, they may not implant or lead to a successful pregnancy.
- Children conceived using cryopreserved oocytes do not show a higher rate of health problems or chromosomal defects.