## Information Sheet for IVF Patients at Herzliya Medical Center

Dear patients,
Welcome to Herzliya Medical Center's IVF Unit
The desire to bear children is universal. No other experience can compete in its significance and importance with the birth of a child. The inability to conceive spontaneously is a common problem, affecting both men and women. According to estimates, up to $20 \%$ of couples will encounter difficulties when trying to conceive.

Many couples are forced to undergo fertility treatments due to being unable to conceive naturally. The decision to undergo these treatments is usually reached after a year of continuous attempts to conceive. It is at this stage, that medical experts begin attempting to diagnose the reasons for the couple's infertility. Depending on the results, and, usually, only following other unsuccessful treatments, the couple agrees to try IVF - one of the most effective treatments available today.

The IVF (in vitro fertilization) Unit at Herzliya Medical Center was founded in 1987, with the goal of using advanced technologies to assist couples who are unable to conceive. Since its creation, the IVF Unit has employed top fertility experts that utilize that same innovative techniques, which helped revolutionize the field over the past decade.

To this day, more than 9,000 babies have been born to couples who underwent fertility treatments at Herzliya Medical Center, making the Center's IVF Unit one of the global leaders in the field.

The Unit is equipped with state-of-the-art equipment and offers all globally available fertility treatments. The Unit's entire staff is up-to-date with the most recent developments in this dynamic and ever-evolving field.

The Unit's staff is very flexible in scheduling appointments, follow-up tests, and will make every effort to accommodate patients when scheduling treatments. The nursing staff has been trained to work in all IVF facilities, including clinics, operating theater, hospital wards (recovery rooms), and will remain by your side throughout the entire treatment process.

Information and guidance materials are available in several languages: Hebrew, Arabic, Russian, French, and English.

The Unit's Directorial Staff:
Dr. Ettie Maman
Dr. Micha Baum
Prof. Ariel Horowitz
Senior Nurse: Irina Mindlin

## IVF Stages

Hormone Drug Therapy: Stimulates the ovaries to produce a large number of follicles so as many fertilized eggs as possible may later be collected. Please note that in certain cases IVF is performed without hormone stimulation. In such cases a single mature egg is specifically selected for collection.

The specific ovarian stimulation protocol is chosen according to a large number of variables, such as the woman's age, her hormonal profile, past treatments, availability of the required medications in the Ministry of Health list of subsidized medicines (please note that medications used as part of this treatment can be very expensive), and the patient's and treating staff's schedules. In general, stimulation is performed according to one of the two following protocols: "the long protocol" and "the short protocol".

The Short Protocol: Begins on day 2 or 3 of the menstrual cycle.
The Long Protocol: Usually begins on day 21 of the menstrual cycle (approximately one week after ovulation).

Communication between the patient and the treating physician is usually carried out through the Unit's nursing staff. Your treating physician's instructions will be passed to you by a member of the nursing staff over the phone. Please make yourself available to receive these phone calls.

Blood tests (on an outpatient basis / at an HMO): The patient is responsible for forwarding US scan and blood tests results to the IVF unit immediately upon their reception.

You are advised to perform the hormone injections at the same time every day, during evening hours, unless otherwise specified.

Egg Retrieval: Retrieval of a number of eggs from the ovaries (or of a singular egg, depending on the type of treatment selected) into specialized test tubes under laboratory conditions. Egg retrieval usually takes place one and a half days after the hormone's administration (trigger) has been administered, and is performed intravaginally, under general anesthesia, by means of inserting a needle into an ovary.

Sperm Preparation: Sperm preparation refers to the process by which only the best sperm cells from a sample provided by the patient's partner are selected. This is done in order to increase the likelihood of in vitro fertilization procedure being successful. In order to further improve their odds of successfully penetrating and fertilizing the egg, sperm cells are washed to remove the seminal fluid and their protective capsules.

If you are using a sperm donor, you are responsible for obtaining a portion of the donor's sperm stored at an external sperm bank before your treatment.

According to Israel's Health Ministry's guidelines, standardized containers filled with liquid nitrogen are to be used for transporting sperm from a sperm bank (whether private or public). The patient shall collect the container at a date and time agreed upon with the IVF Unit. The container shall be returned to the IVF Unit within 5 hours of it being taken out. Containers can be obtained at our Unit. You will be required to deposit a collateral, which will be returned to you upon return of the container.

Fertilization: Once the preparation stage has been completed, the sperm cells are transferred into a test tube containing a single egg. At this point the fertilization stage begins (hence, why the treatment is also referred to as "test tube fertilization"). Tens of thousands of sperm cells are placed around each egg. The conditions inside the test tube are manipulated to resemble as much as possible the natural conditions inside the female body. These are required for a normal fertilization to occur.

At Herzliya Medical Center, fertilization can be performed using the micromanipulation technique, which is recommended in cases of male infertility. When this technique is used, treated sperm is injected directly into an egg located inside a test tube. This increases the odds of conception. A member of the nursing staff will contact you 24 hours after the fertilization procedure in order to notify you of the number of embryos created and the scheduled embryo transfer date. During this period, you are to continue hormone therapy, the aim of which is to assist the embryo to implant in your womb, as prescribed by your treating physician.

## Transfer of Fertilized Eggs into the Womb

Once the fertilization stage has been successfully completed, the final stage - implantation of the fertilized eggs into the patient's uterus - can begin. The fertilized eggs are implanted directly into the womb and the embryo continues its natural development inside it.

Embryos are transferred into the uterus approx. 48-72 hours from the time of their retrieval, or, alternatively, after 5 or 6 days. The presence of the patient's partner on the day of the transfer is vital. You are to arrive at the Unit at the scheduled date and time. If you are supposed to receive an injection or treatment with a vaginal gel or suppository, please bring the necessary medications with you. You are to arrive with a full bladder, as this will assist the visualization of the uterine space on the US scan, and make the procedure faster and easier. Do not void your bladder until after the procedure has been completed.

At this stage the partners, together with their treating physicians, and in line with The Israeli Ministry of Health's guidelines, decide on the number of fertilized eggs that are to be transferred into the womb. In other words, on the number of embryos that will develop simultaneously. The decision regarding the number of fertilized eggs to be transferred is influenced by a number of factors: the patient's age, her physical condition, and the couple's wishes.

Since not all eggs will develop inside the womb, 1-3 eggs are normally transferred (be means of a noninvasive procedure that does not require anesthesia). It is important to note that transferring a large amount of fertilized eggs at once may result in a multifetal pregnancy, which is considered high-risk. Many physicians perform embryo reduction in such cases, a procedure that may harm the entire pregnancy.

On day 12-14 after the embryo transfer you will be asked to undergo a pregnancy test. Should its result be positive, you are to continue the hormonal maintenance therapy, which will have been prescribed to you by your treating physician. Additionally, a member of the nursing staff will provide you with instructions for further follow-up and treatment.

## Follow-Up and Improving the Chances of Pregnancy

During the first few weeks you will continue hormone therapy aimed at assisting your pregnancy to develop properly. Among other medications, you will be receiving an increased dose of progesterone, which is responsible for creating suitable physiological conditions in
the uterine mucosa. During this period, you are advised to drink a lot of water (2-3 litres per day) and avoid strenuous physical activities, which may harm your embryo's development. Taking the above into account, and contrary to popular belief, no link has up to date been found between complete rest and IVF success rates.

## Embryo Cryopreservation

In most cases, IVF treatments result in a large number of embryos (fertilized eggs in advanced stages) being created. The couple may choose to cryopreserve some of their embryos in order to avoid having to undergo further IVF cycles in the future. Provided cryopreservation is performed, and should the couple be interested in another pregnancy in the future, the embryos will need to be thawed and transferred into the patient's uterus.
Recommendations for Treatment:
$\checkmark$ Be optimistic and patient; you can contact the treating staff should you have any questions or requests
$\checkmark$ Take folic acid according to your treating physician's recommendations
$\checkmark$ Make a copy of the prescriptions provided to you by your treating physician when purchasing your medications at a pharmacy
$\checkmark$ Make sure the original prescriptions are easily accessible
$\checkmark$ Administer your daily stimulation injection at the same time every day, during evening hours
$\checkmark$ When using ampules, you may use 1 container of thinning liquid for up to 3 containers of powder
$\checkmark$ Request a new prescription if you believe you have an insufficient number of ampules or injectors to complete the prescribed treatment
$\checkmark$ Inform the treating staff of any issues related to your drug therapy, and of any allergic responses, such as rashes or pruritus
$\checkmark$ Void your bladder before any follow-up US scans
$\checkmark$ Inform the Unit's staff of any changes to your address and/or phone number Be available on follow-up days and to receive instructions

IVF Unit's Schedule:

| Activity | Days | Hours |
| :--- | :--- | :--- |
| Hours of operation | Sunday - Thursday | $06: 30-20: 00$ |
| Hours of operation on <br> Fridays and holiday eves | Friday | $06: 30-17: 00$ |
| Hours of operation on <br> Saturdays and holidays | Saturday | Depending on procedures <br> in the operating theatre; <br> no lab or clinic services <br> provided |
| Blood work-up and US <br> scans | Sunday - Friday | $06: 30-08: 30$ <br> Address: 8 HaHoshlim St.. |
| Herzliya Pituach, 2nd floor, <br> C wing, IVF Department |  |  |
| Provision of instructions <br> for further treatment | Sunday - Friday | From 13:00 |
| Provision of instructions <br> before egg retrieval | Sunday - Friday | Sunday - Thursday: from <br> $19: 00$ <br> Fridays: from 15:00 |

Shabbat-observing patients will not have their procedures scheduled for Friday evenings and Saturdays.
If you observe the Shabbat, please inform the Unit's secretary or nursing staff to this extent. On Fridays instructions to Shabbat-observing patients will be provided prior to beginning of the Shabbat.
Should your egg retrieval take place on a Friday, you will be informed of the outcome of the fertilization procedure the following Sunday, during morning hours.
The IVF Unit at Herzliya Medical Center fully and successfully cooperates with Puah and Bonei Olam Institutes.

How to Contact Us

We make every effort to respond to your queries in a swift and efficient manner. If the person you've requested is unavailable, please leave your contact details with the Unit's secretary, and we will get back to you as soon as possible.
We will be glad to answer your questions over the phone during our hours of operation.
Common Drugs Used During IVF Treatments

| Ovarian Stimulation |
| :--- |
| MENOPUR |
| GONAL-F |
| PERGOVERIS |
| MENOGON |
| PUREGON |
| ELONVA |
| Prevention of Spontaneous Ovulation |
| CETROTIDE |
| ORGALUTRAN |
| SYNAREL |
| Ovulation Drugs (Preparation for Egg Retrieval) |
| DECAPEPTYL |
| OVITRELLE |
| PREGNYL |
| Hormonal Maintenance Therapy (Preparation for Embryo Transfer) |
| ENDOMETRIN |

## UTROGESTAN

CRINONE
PROGYNOVA
ESTROFEM

## Pre-Egg Retrieval and Embryo Transfer Information and Instructions

Egg Retrieval: An invasive procedure that takes place inside an operating theatre using a needle attached to a regular US scanner. It is usually performed under general anesthesia. The performing specialist will extract the follicles located inside the ovary under US guidance. The needle will pull the liquid that contains the eggs from within the follicles into a test tube that has your personal details printed on it. This test tube will then be transferred to a laboratory located in the immediate vicinity of the operating theatre.

Detailed pre-retrieval instructions will be provided to you by a member of the clinic's nursing staff two days prior to your scheduled egg retrieval date. Please write these instructions down. You will be informed of the exact hours at which you are to inject yourself with ovulation drugs.

One of or a combination of several of the following drugs will be used for the injections. A nurse will provide you with the relevant instructions and the exact dosages.
Ovulation Drugs (Preparation for Egg Retrieval)

DECAPEPTYL
OVITRELLE
PREGNYL

You are required to begin fasting (including not drinking water) 6 hours before the scheduled egg retrieval time. Please also avoid chewing gum and smoking during this time. Please arrive for your procedure at the scheduled time, accompanied by your partner or another adult. Once you have signed in and your commitment form has been reviewed, you will be received by a nurse, who will identify you using your name and ID, and will place a bracelet with your personal details on your arm. The nurse will question you about any drug sensitivities you may have, the date and time of your ovulation drugs' injections and will make sure that you have been fasting for at least 6 hours prior to the anesthesia. The nurse will also take your vital signs and ensure that you are not wearing a prosthetic of any kind, lenses, etc.

Additionally, the nurse will verify your partner's personal details (if you are not using donor sperm), and will transfer his sperm sample to the laboratory, as required. As driving is prohibited following the procedure, it is important to have someone accompany you.

Sperm Preparation: Your partner can provide the sperm on the morning of the scheduled retrieval (in a specialized room inside the Unit's facilities) or, alternatively, bring it with him in a sterile cup. If your partner is known to be unable to ejaculate on demand, it is possible, in coordination with your treating physician and the Unit, to cryopreserve a sperm sample at a laboratory in advance, so that it can be used as backup on the day of the retrieval.

Preparation for Egg Retrieval: The nurse will help you locate your bed, and show you around the room in which you will be hospitalized, and will ask you to void your bladder prior to the start of the procedure. You will then be examined by the anesthesiologist and the OB/GYN who will be performing the retrieval, and will be asked to sign consent forms for both the procedure and the anesthesia.

Egg retrieval under anesthesia usually takes around 20 minutes. During that period you will be receiving intravenous fluids.

Egg retrieval is performed under general anesthesia. Although the period of time you will be under general anesthesia is short, it is important to be informed as to the possible side effects, as well as common post-retrieval symptoms:
$\checkmark$ Due to difficulty concentrating, which may occur due to the medications used during general anesthesia, driving is prohibited for 12 hours following the procedure
$\checkmark$ A small amount of vaginal discharge (brown or the colour of blood) may be seen
$\checkmark$ You may note abdominal bloating and stomach pain
$\checkmark$ You may use analgesics such as Acamol or Optalgin every 4-6 hours, provided you do not have sensitivities to these medications
$\checkmark$ Should you develop a fever or stomach pain that does not respond to analgesics, or in case of any other abnormal symptoms, please seek immediate medical attention or visit a gynecological emergency room, and bring the discharge summary with you
$\checkmark$ It is recommended to drink a lot of water and have a light meal following the procedure
$\checkmark$ A member of the Unit's staff will contact you or your partner on the day following your egg retrieval in order to inform you of the outcome of the fertilization procedure, and to provide pre-embryo transfer instructions.
$\checkmark$ Rest is recommended; resume your usual activities according to how you are feeling. You will be able to obtain a sick leave letter from your treating physician upon presenting your discharge summary

Embryo Transfer: On the day of the embryo transfer, please arrive with your partner at the scheduled time. Upon arriving, please obtain a referral from the secretary so that stickers can be printed.

The transfer is performed without fasting and without anesthesia. You will be asked to fill your bladder prior to the procedure. No monitoring is required following embryo transfer and you will be discharged upon its completion.

## Instructions for Further Treatment:

You will receive an explanation and a set of instructions for treatment with hormone drugs from a physician or a nurse at the time of your discharge. Usually, hormonal maintenance therapy involves the following medications:

Hormonal Maintenance Therapy (Preparation for Embryo Transfer)
ENDOMETRIN
UTROGESTAN
CRINONE
PROGYNOVA

## ESTROFEM

It is vital to continue taking the prescribed medications even if you develop bleeding! In cases when early symptoms of ovarian hyperstimulation (such as stomach pain, abdominal bloating, weakness, difficult urination / small urine volume) develop, please, seek
medical attention or visit a gynecological emergency room, and bring the discharge summary with you.

## Herzliya Medical Center's IVF Unit's Staff is at your service We wish you the best of luck with your treatment

