



In Vitro Fertilisation - IVF Step by Step

 **embryoland**
Bringing your dreams to life

Step 1

**First visit to the center:
What you should have with you
when you come.**

For better time management, schedule your first visit to Embryoland two weeks before the onset of your menstrual period.

Step 2

Basic Examinations

In order to improve the outcome, a diagnostic investigation is carried out, including a full medical history and a diagnostic work up for:

a. Male partner: Sperm analysis, blood tests for Hepatitis B, C, HIV I & II, syphilis, blood type, rhesus and haemoglobin electrophoresis.

b. Female partner: blood tests for Hepatitis B and C, HIV I & II, syphilis, blood type, rhesus, haemoglobin electrophoresis, hormone profile, cystic fibrosis mutation carrier state.

Additionally, hysterosalpingography (to check the patency of the fallopian tubes) and a transvaginal ultrasound of the uterus and the ovaries and an electrocardiogram are performed.



Egg injection under ICSI method, enlarged X 200

Step 3

**First stage of treatment
(1-3 weeks)**

At this stage, the ovaries are stimulated to produce many eggs. This requires frequent monitoring with blood tests and ultrasound scans (every 2-3 days). These results will determine the optimal dose of the drugs during the treatment.

The aim of the ovarian stimulation is:

- The development of multiple follicles with a size of more than 16mm.
- To achieve satisfactory endometrial thickening.
- To reach ideal level of estradiol level in blood.

When all requirements are met, final egg maturation is induced with the injection of Pregnyl or Ovitrelle 32 to 36 hours prior to egg retrieval.

Step 4

**Egg retrieval, sperm collection
and fertilization (1 day)**

The egg retrieval is a short painless procedure. It is performed under light sedation. Your doctor will aspirate the follicles with a needle under ultrasound guidance. The aspirated fluid is given to the embryologists, who identify the eggs under the microscope. On the day of the egg retrieval, the man provides his sperm in a sterilized urine collector. For best sperm quality, it is advised to abstain from sexual intercourse for 3-4 days prior to the egg retrieval. After that, sperm and eggs placed and mixed in a dish with culture medium in the incubator.

The following morning, the eggs are inspected for signs of fertilization by the embryologists.

Step 5

Embryo transfer (1 day)

Embryo transfer is scheduled for 2 or 3 days after egg retrieval. It is a simple and painless procedure, takes only few minutes and is done under ultrasound guidance. The embryos are placed in the uterus through the cervix with a thin catheter.

The number of embryos to be transferred is depended on different factors including the current Greek Law for Assisted Conception and the informed decision of the couple.

Embryo transfer is also possible at the blastocyst stage on the fifth or sixth day after the egg retrieval.

Step 6

Waiting for the pregnancy test (2 weeks)

Pregnancy test is done 12-14 days after the embryo transfer with a blood test.

Next step

If the pregnancy test result is positive, an ultrasound of the embryo is performed 2 weeks later.

If the pregnancy test result is negative, you will discontinue the progesterone suppositories and a follow up consultation with the doctors is scheduled to fully analyze every stage of the procedure to identify possible cause of failure in order to take the appropriate decisions for the future planning.