... life within ovum

Fertility Consultants Group
What is OVUM and what we do

We are a group of consultant gynaecologists, biologists and midwives that have been working in the field of infertility with a special interest in egg donation programmes.

OVUM runs one of the largest egg donation programmes in Greece, collaborating with IVF centres that fully comply with Greek legislation and the Greek Authority for Assisted Human Reproduction service standards.

The OVUM mission

The traditional concept of motherhood where the genetic (giving her DNA) physical (giving birth) and social (raising) mother is one and the same person is gradually evolving. Women and couples who reach the difficult decision to use donated eggs (or sperm), are persons determined to become parents “at all costs”.

OVUM aims to assist and support these women and couples in their attempt of having a healthy child, paying particular attention to the welfare of the child.

Who needs donated eggs and why

Some women need to receive donated eggs to become pregnant.

> Women who, despite treatment with maximal doses of infertility drugs in IVF, are unable to produce enough eggs to go through a reasonable chance of pregnancy.
> Women whose ovaries stop functioning at a much earlier age than might be expected (less than 40 years old). These are women with premature ovarian failure (premature menopause) and have no eggs.
> Women who are carriers of diseases such as hemophilia or Duchenne’s Dystrophy.

These diseases are passed on by women to male children. For men to have healthy, unaffected children a woman may need to donor eggs.

> Women older than 45 years old.

> Women with repeated failure in previous IVF treatments.

Fertility Treatments available

- ICSI (Intracytoplasmic sperm injection).
- Donor sperm.
- Surgical sperm retrieval.
- Egg freezing.
- Embryo freezing using the vitrification method.
- Pre-implantation genetic diagnosis (PGD).
- Embryo donation. Surrogacy.
What are the extra advantages of OVUM?

Fertility Consultants Group

Our work is fully orientated and tailored around patients seeking treatment abroad.

We offer:

- Direct contact with our team 24h a day, 7 days a week.
- Experienced nurse coordinator.
- Counselling service.
- Travelling service for transport and accommodation.
- Treatment for particular circumstances for which the Greek legislation is more flexible compared to other countries (such as single women, women over the age of 40).
- Very competitive costs.

Results

A regularly updated page with detailed results organized by age group may also be found on our website: www.ovum-inf.com

Egg donation is well acknowledged in international literature as the form of fertility treatment providing the best results compared to standard IVF/ICSI.

Since success mainly depends upon the age of the donor and the accuracy of cycle co-ordination, OVUM has excellent results to report, well above the national average of several European countries. To date, we have reported 95% success rate in more than 150 treatment cycles.

A regularly updated and structured copy of our results is enclosed in each information pack.

Mr/Dr Anastasios Sykoutris  Ph D, MD, MSc

Consultant Obstetrician & Gynaecologist. Fertility Specialist;

Trained in the UK for a long time in various hospitals;

GMC registered in the specialists register.

Certificate of Completion of Specialist Training (CCST)

Masters degree in Human Reproduction from the University.

Clinical and Research Fellow,

MF Unit of Chelsea and Westminster Hospital in London (1989).

Consultant and Clinical Director in 3 Hospitals in Greece:

Consultant in the MF Units of RSA Private Maternity Hospital and METEPA MF Unit, Athens, Greece.

One of the Responsible Consultants of OVUM FERTILITY CONSULTANTS GROUP in Athens, with a special interest in the egg donation program.

Married, father of two sons & a daughter.
OVUM’s IVF Unit

OVUM’s IVF unit is a state-of-the-art unit which implements the most sophisticated in vitro and in vivo medical science techniques for the treatment of infertility problems. The team of the unit consists of highly specialized medical and nursing staff as well as clinical embryologists who have high success rates in assisted reproduction.

The competitive advantage of OVUM’s IVF unit is the time-lapse technology, which is used in the embryo culture and allows for continuous monitoring of embryo development, thus ensuring best selection during the embryo transfer.

OVUM’s IVF laboratory equipment supports all the latest techniques of an embryological laboratory, thus ensuring an integrated approach for the treatment of infertility problems. Specifically, all operating parameters of the laboratory are controlled through software that are connected to a server, so that potential malfunctions can be avoided.

Most importantly, OVUM’s IVF unit places emphasis on the personalized treatment of infertility problems in full respect of the need of every couple for confidentiality.

When a couple should seek medical advice?

A couple who experience infertility problems despite unprotected sexual intercourse for a year or more, should seek medical advice from their obstetrician/gynecologist. Furthermore, couples with infertility-related indications or of an advanced maternal age (over 35 years old), should seek medical advice from their obstetrician/gynecologist immediately.

Indications for men are:
> Erectile disorders
> Low sperm count or motility
> Azoospermia

Indications for women are:
> Menstrual cycle disorders
> History of inflammation in the reproductive system (salpingitis, endometritis, etc.)
> History of operations on the reproductive tract (tubes removal, cyst removal on the ovaries, etc.)
> Previous miscarriages
> Advanced maternal age (over 40 years of age or FSH >12)
Assisted Reproductive Treatments at the pre-IVF stage

The oocyte is harvested from the follicles and fertilized in vitro. The embryo is then cultured for 3-5 days before transfer to the uterus. This technique is used for couples with low sperm count or female infertility.

In vitro fertilization (IVF) involves the combination of eggs and sperm outside the body, allowing for greater control over the fertilization process. This is particularly useful for couples with male infertility or for those who wish to have a baby at a later stage in their lives.

The IVF procedure is structured as follows:

1. **Stimulation of Multiple Follicular Growth**
   - Depending on the needs of the couple, the specialist physician selects the appropriate protocol for follicle stimulation. Once the appropriate stimulation protocol is chosen, the physician will monitor follicular growth with ultrasound and may recommend changes to the drug dosage. Once the follicles reach the desired stage, a small dose of HCG is administered to induce ovulation.

2. **EGG COLLECTION**
   - During the egg collection, the follicular fluid is aspirated from the follicles with a long needle. The procedure is done under local anesthesia. The eggs are identified and collected in the embryology laboratory and then transferred immediately into the culture medium. They are evaluated for their developmental stage and quality. At the same time, the sperm of the partner is processed and the fertilization technique is chosen, which may be the Classical IVF or Intracytoplasmic Sperm Injection (ICSI).

3. **IN VITRO FERTILIZATION**
   - The next day, after egg collection, the fertilized eggs are moved to a specialized culture medium and are monitored for cleavage (the process by which the fertilized egg divides into multiple cells).

4. **EMBRYO TRANSFER**
   - At this stage, the embryos are placed in the uterus through a flexible catheter. The procedure is painless and not of paramount importance for the final result. The probability of success generally increases as more embryos are transferred; this also increases the risk of multiple pregnancy. Under the Greek law, the maximum number of embryos transferred is three for women up to 40 years and four for women aged over 40 years.
OVUM’s Fertility Unit uses the most modern in vitro fertilization methods for treatment of infertility problems, based on the highest international specifications. Specifically, the methods used are:

- Assisted hatching, which is a process applied before embryo transfer and involves the thinning of the zona pellucida, a thin shell surrounding the embryo during early development. The objective is to assist the embryo during the process of hatching, during which the transparent zona is ruptured to allow the embryo to adhere to the endometrium.

The culture of the blastocyst stage, i.e., until the fifth or sixth day, has increased the chances of success under certain conditions. Not all embryos reach the blastocyst stage, often less than half. Thus, the number of good quality/blastocysts, which are available for transfer or cryopreservation, is considerably smaller than the original number of embryos.

Why choose OVUM’s fertility unit

- Responding to the growing demand for medical treatment of infertility problems, OVUM has invested in creating a state of the art IVF unit that meets the strictest international quality and safety standards and is equipped with cutting edge high tech laboratory equipment. The main competitive advantages of OVUM’s IVF unit are:

SAFETY
- Dedicated facilities at OVUM Unit which is built according to the highest international standards,
- Two high tech operation theatre rooms, which are fully equipped with the most technologically advanced medical equipment, thus providing maximum safety.

STATE OF THE ART LABORATORY INFRASTRUCTURE
- A special air filtering system, that maintains higher pressure than the adjacent rooms, achieving air purity well above class 1000 specifications according to EU standards.
- All operating parameters (temperature, humidity) as well as the proper operation of all the laboratory equipment are controlled continuously with an individual alert system to prevent cases of malfunction.
- A specially designed room with negative pressure for embryo genetic analysis (CGS), so that the process is done without affecting the culture conditions in the embryological laboratory.
Ovum’s IVF laboratory uses the most modern and innovative techniques. Specifically, these techniques are:

- IMSI technique (intracytoplasmic morphologically-selected sperm injection) is used during ICSI. The spermatozoon to be injected is visualized in very high magnification, a technique which has been shown to improve pregnancy rates, especially in male factor infertility.

Using the Time Lapse technique, continuously monitoring embryo development during culture via a camera installed inside the incubator. Embryo development is checked without affecting culture conditions, thus allowing optimal selection of the embryos present in the uterus.

- The cultivation of embryos up to the blastocyst stage, until the fifth or sixth day of culture, is a technique that can under certain conditions increase the chances of success.

- The laser system, used in the process of embryo biopsy for preimplantation diagnosis and selection (PGD & PGS), and during assisted hatching, reduces the risk of harm to the embryo and facilitates implantation.

- Finally, the technique of vitrification, used exclusively in the cryopreservation of embryos, with success rates approaching those of a “fresh” cycle.

The same technique is used for the cryopreservation of eggs, with good results. Thus, the ethically-revulsive task of preserving female fertility in advance reproductive age can be achieved.

Your care at OVM’s IVF Unit is provided in a personal and respectful environment.

Individual and couple counseling offer the chance to talk to an experienced professional who will help sort out your feelings, identify coping mechanisms, and help you find solutions to your problems.
Clinical Infertility

**IMMUNOLOGY OF REPRODUCTION**
- Clinical and laboratory immunological investigation of infertility factors and investigation of immunological reasons for repeated failures in IVF Assessment & treatment of immuno-mergology problems.

**HYSTEROSCOPY AND Hysteroscopies**
- Diagnostic and intervention hysteroscopes and hysteroscopies to investigate infertility problems in FDA control operating rooms by the treating physician.

**PHYSICAL EXAMINATION**
- Clinical physical examination of the couple.
- Pelvic ultrasound for ovulation induction.
- Andrological examination, detection, treatment & monitoring of men with sperm problems.
- Sterilization.
- Surgical sperm extraction from the epididymis or testicle (MESA-TESE).
- Egg collection: embryo transfers.
- Check and treatment of endocrinological problems in couples with infertility problem.
- Ovulation disorders (clinical and laboratory investigation).
- Polycystic ovaries, clinical & laboratory investigation of treatment & ovulation regulation or ovulation induction.

**ULTRASOUND**
- Simple or 4D transvaginal ultrasound.
- Using fetal ultrasound for ovulation monitoring.
- Transvaginal colour Doppler ultrasound of ovaries, fetus, endometrium.
- Transvaginal colour Doppler ultrasound to investigate endometrial receptivity in cases of infertility.
- Ultrasound-guided transvaginal aspirations.
- Ultrasound test of follicles, preovulatory, clinical work-up, and Doppler of the strumum to infertile men.
- Reproductive endocrinology, investigation of endocrinological disorders of the couple, treatment & regulation taken an attempt.

---

## Services

**Laboratory**

**EMBRYOLOGICAL**
- Classic in vitro fertilization.
- Intracytoplasmic sperm injection (ICSI).
- Laser Assisted Hatching.
- Blastocyst Magic Culture.
- Preamplification Diagnosis and Screening (PGD and PGS).
- Intracytoplasmic morphography-selected sperm injection (MSI).
- Cryopreservation of embryos with vitrification technique.
- Cryopreservation of eggs with vitrification Technique.
- DARDYSTERIL: hPSC. Live monitoring of embryos during culture incubation that allows for a more reliable assessment and selection of best embryos for embryo transfer.

**ANDROLOGICAL**
- Sperm analysis.
- Microbiological and biochemical tests.
- Antisperm antibodies test.
- Sperm DNA fragmentation test.
- FISH.
- Intracellular immunosurgery (IIS).
- Testicle biopsy in cases of azoospermia.
- Cryopreservation of sperm and testicular tissue.
Mr/Dr. Anastasios Sykoutris
PhD, MD, MSc, BRISTOL University UK, Gynaecologist - Surgeon - Obstetrician, Master in IVF by the University of BRISTOL, UK - Clinical Director of OVUM Specialized In Hysteroscopy and Laparoscopic Surgery (Contact Number: 0030 6976 649484 email: ovumgreece@gmail.com)
In 1994 I gained my degree in Medicine with “Excellent” grade, University of L’Aquila, Italy. During the 2nd year of my studies after examinations I became assistant to Human Anatomy Department. Served my rural service in the Artificial Kidney Unit General Hospital of Chania, Crete. Served as a doctor in the Navy in particular in the Navy Hospital of Crete. Worked as an SHO in Obstetrics and Gynaecology in GHC-Crete for 3 years. Since 2000 I’ve worked in various hospitals in U.K such as Doncaster Royal Infirmary, University Hospital Hull and East Yorkshire. I worked as a Registrar at the Department of Obstetrics / Gynaecology PILGRIM Hospital BOSTON U.K. In 2003 I have got a CCST as a Specialist in Obstetrics-Gynaecology. Also, I worked as a Clinical Research Fellow in the IVF Unit of the University Hospital CHELSEA and WESTMINSTER, London. In October 2005, I acquired my Masters Degree in Human Reproduction and Development from the University of BRISTOL, U.K. On 2006 I have got the license of Gynaecological-Obstetric ultrasound from the University of Athens, Greece. Since 2006, I am working as a Consultant in different IVF Unit in Athens, Greece. Also, since 2010 I am working as a Responsible Clinical Director of egg donation program in OVUM Fertility Consultants Group (DFCG).

Economou Emanuel
Assistant Professor (email: eveconom@pharmagenetix.net)

Routsis Stavros
BSc in Natural Sciences (Skype: stavros.routsis email: stavrosroutsis@yahoo.gr)

Dimitris Papadopoulos
Was born in Russia and raised in Giannitsa. He studied biology at science department of the Aristotle University of Thessaloniki. Then he continued his studies at Larissa Medical University, to get his postgraduate degree in biology of reproduction having as his supervisor Professor of obstetrics Mr. John Messinis. He prepared his thesis at the University Hospital of Larissa entitled "Vitrification of ova and embryos, prospects and problems of the method". In the context of the postgraduate program he was trained in assisted reproduction techniques. His training continued at the IVF unit IAKENTRO in Thessaloniki. From October 2006 and for 3 years he worked at "Mother" maternity hospital as a Clinical Embryologist. Since October 2012 he has been working with the IVF clinic of "REA" maternity hospital. He is a member of Panhellenic Association of Clinical Embryologists, of Hellenic Association of Bioscientists, and of the ESHRE (European Association of Human Reproduction and Embryology).