IN VITRO FERTILIZATION (IVF)



OUR SPECIALISTS

Board Certified in Reproductive Endocrinology

Robert A. Skaf, M.D.



Dr. Skaf is the Medical Director. He founded South Jersey Fertility in 1989. He is currently the Division Head of Reproductive Endocrinology at the Virtua Health System.

Peter G. Van Deerlin, M.D.



Dr. Van Deerlin is the Director of Reproductive Surgery at South Jersey Fertility Center. He joined the practice in 1997. His expertise is in Robotic Surgery and Laparoscopic Microsurgery.

Stephen W. Sawin, M.D.



Dr. Sawin is the Director of the IVF Program. He joined South Jersey Fertility Center in 2002. His special interest is In Vitro Fertilization and Pre-Implantation Genetic Screening.

Gary S. Packin, D.O.



Dr. Packin is the Director of the Pregnancy Loss Program. He is a former National Chairman of the Osteopathic OB/GYN Society. Currently, he is the Division Head of

Reproductive Endocrinology at the Kennedy Health System.

Oumar Kuzbari, M.D.



Dr. Kuzbari is the
Director of the
Diminished Ovarian
Reserve Program. He
joined South Jersey
Fertility Center in
2013. His special

expertise is in egg freezing and diminished ovarian reserve

Tracy Krause, APN, MSN



Tracy completed her Master of Science in nursing from the University of Pennsylvania. She joined South Jersey Fertility Center in

2005 after nearly six years in private practice specializing in women's health care where she had a dedicated following of patients. Her clinical approach has always been characterized by empathy and compassion.

Dana Dionot, APN, MSN



Dana completed her Master of Science, Women's Health Nurse Practitioner degree from Thomas Jefferson University. Prior to joining South

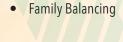
Jersey Fertility Center, she worked as a registered nurse at Thomas Jefferson University Hospital on the high-risk antepartum unit for 2 years, followed by 5 years on Labor and Delivery.

OUR PROGRAM

South Jersey Fertility Center is the longest continuously running IVF program in South Jersey, with a proven track record of success. We have been helping patients build their families for over twenty five years, and we strive every day to bring this tradition of excellence to our patients to help them succeed. In Vitro Fertilization (IVF) includes all of the various methods of assisting human reproduction through the process of retrieving a woman's eggs from her ovaries and fertilizing them outside of the body. The fertilized eggs are incubated for several days to grow to the embryo stage and then replaced to the uterus. An exciting new technology called Preimplantation Genetic Screening (PGS) allows selection of chromosomally normal embryos to dramatically increase pregnancy rates.



- · Absence or blockage of the fallopian tubes
- Functionally damaged tubes
- Male factor infertility
- Long standing infertility despite conventional therapy
- Endometriosis
- Unexplained infertility
- Egg freezing
- Recurrent miscarriage



ABOUT IVF

IVF is a process by which eggs are fertilized outside of the body. The eggs are retrieved from a woman's ovaries after medications are administered to make them grow. If the male partner has a low sperm count, then fertilization is achieved by injecting a single sperm into each egg in a process called Intra-Cytoplasmic Sperm

Injection (ICSI). If the sperm count is normal, then the usual procedure is to place thousands of sperm around each egg, to allow the best sperm to fertilize the egg. Successfully fertilized eggs are called embryos. A select number of embryos are placed into the uterus for implantation and establishment of pregnancy. For many patients we are able to select the single best embryo for transfer, thereby essentially eliminating the chance of a



multiple pregnancy. Prior to implantation, embryos can be tested for their genetic competence through PGS, and a normal embryo can be implanted with a high probability of success. Any excess embryos can be frozen and stored for later use. Sometimes it is best to freeze all of the embryos during an IVF cycle and one to two months later replace an embryo when the body is optimally ready for implantation.

Preparing for your IVF Cycle

1. Consultations: During your initial consultation, one of our specialists will go over the basics of IVF and recommend what options will give you the best chance of becoming pregnant. Information regarding costs will be discussed and within two weeks one of our financial counselors will send you the status of your insurance coverage and what your financial responsibility will be. During a subsequent IVF consult, you will meet with one of your Nurse Practitioners to learn the details of your IVF journey, and answer any questions you may have. Screening tests will be ordered and your schedule will be outlined.

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2. Insurance Payment and Referrals: You must contact the financial counselor in our billing office prior to the screening tests. The billing office will contact

your insurance company to see if they will cover all or part of the IVF cycle. If your insurance company does not cover the cycle, you will be sent an itemized list of the procedures and fees. Full payment is to be made when you come in for your baseline visit to start your cycle. Financing programs are available for those who need a loan to pay for the cycle. We also have a money back guarantee program and a military discount program.

Patients who do have coverage for IVF must obtain the appropriate referrals for the treatment cycle. You will be advised by the billing office to this effect. It is your responsibility to obtain these referrals in order to be seen for your visits. A copay will be collected at each visit, as required by the Insurance company.

- **3. Consent Forms:** Your signed IVF consent forms and embryo cryopreservation (freezing) forms must be returned to our office at the time of your first visit during your treatment cycle.
- **4. Medications:** Your medications should be purchased prior to the start of the IVF cycle. It is important that you order your medications in advance to ensure that you have them by the start of your stimulation. These medications come from a mail order pharmacy and it will take time to process your order and ship the medications to you. If your insurance company requires authorizations for medications, this can take several days. Bring your injectable medications with you the day of your first visit so that our team can instruct you on their use.

Screening Tests

All of your required testing for IVF and coordinating your cycle, takes approximately one to two months. Screening tests should be current (within 12 months of the IVF cycle). All screening tests MUST be completed before beginning a treatment cycle. The following screening tests are required:

- Semen Analysis
- Pelvic Ultrasound
- Evaluation of the uterine cavity by ultrasound or hysteroscopy (within 6 months of the IVF cycle)
- Day 3 FSH, Estradiol and AMH Blood Test
- Infectious Disease Screening (blood testing)
- Current Pap smear

IVF CYCLE STEPS

What to Expect at the Start of Your Stimulation Cycle

- 1. Ultrasound and bloodwork
- 2. Instruction on how to administer your medications
- 3. Consent forms will be collected
- 4. Payment will be collected for your cycle and embryo cryopreservation (if applicable)

1. Ovarian Stimulation

It is necessary to obtain multiple eggs to have the best chance of success with IVF. This is accomplished by taking injectable fertility medications daily for about 8-10 days. These medications contain Follicle Stimulating Hormone (FSH), that stimulates the follicles that contain the eggs, to grow. They are administered by you or your partner and we will teach you how to give them. There are also online videos that you can watch that describe the process step by step. The needle is very small and the injection is given just under the skin. Once the treatment has started, it is necessary to closely monitor the growth of the follicles by means of frequent ultrasounds and blood tests done every 1-3 days.



These visits are preferably done in the mornings between 7-9 AM. Once the follicles have grown to the right size, we will schedule an egg retrieval procedure in our Marlton office.

2. Egg Retrieval

The exact day of the retrieval cannot be known ahead of time, but we can estimate the week that it is likely to occur. A "trigger" shot is given in the evening and 36 hours later we will perform the retrieval. This is typically done between 9am and noon. You will be given anesthesia for the procedure which takes about 30 minutes. We use an ultrasound to guide a needle into each follicle to collect the eggs. Your partner needs to come with you for the egg retrieval to collect a sperm specimen (if applicable) and to drive you home. Recovery usually takes about 1-1 ½ hours.

3. Fertilization

The eggs and sperm will be combined the day of the egg retrieval. For some patients this involves placing 50-100,000 sperm around each egg and for other patients we may need to perform ICSI to assist fertilization.

ICSI (Intra-Cytoplasmic Sperm Injection)

In cases of sub-optimal sperm counts, poor sperm motility, or for PGS, Intra-Cytoplasmic Sperm Injection (ICSI) is used to increase the chance of successful fertilization. The procedure consists of injecting a single sperm directly into the egg. Manipulation of the eggs requires special equipment specifically designed to perform the very small, intricate movements used in this procedure.

4. Embryo Transfer

Successful fertilization is determined the day after the egg retrieval. Not all eggs will fertilize, but most will. Most, but not all of the fertilized eggs will divide over the next several days. After 3 days the embryos usually contain 4-8 cells. In the past, this was the stage at which embryos were transferred back to the uterus. In some cases we still recommend a transfer on "day 3" but most patients will have their embryos transferred on "day 5."

Blastocyst Embryo Transfer

After 5 to 6 days of culture, healthy embryos usually reach the blastocyst stage where they contain more than 100 cells. When an embryo reaches this stage, it has proven itself to be quite viable. In January of 1999, we began extending the

embryo culture in order to transfer embryos at the blastocyst stage. By transferring blastocysts we are striving to increase your pregnancy rate by transferring the best quality embryos. Our intention is also to decrease the multiple gestation rate by limiting the number of embryos we transfer.

Selecting the Number of Embryos to Transfer

Increasing the number of embryos transferred into the uterus can increase the chance for pregnancy in certain circumstances; however, the more embryos returned to the uterus, the higher the risk of a multiple gestation. Our team of doctors, nurses, and embryologists will help you determine the best number



of embryos to transfer in your individual situation. Our goal is to optimize your pregnancy rate while reducing the risk of multiple gestations. The decision is based on national guidelines for embryo transfer from the American Society for Reproductive Medicine (ASRM), the quality of the embryos that are available, and your willingness to risk a multiple gestation. Other important factors are your age, the reason for your

infertility, whether you have been successful before, and the number of previous IVF attempts. Patients under the age of 35 typically have only 1 embryo transferred, if the embryos available are of above average quality.

Assisted Hatching

Assisted Hatching is a procedure that helps the embryo hatch out of a protective shell called the zona pellucida. Hatching is necessary to allow attachment to the lining of the uterus, and some embryos have trouble completing this step. Assisted Hatching is performed just prior to transferring the embryos to the uterus by creating a small opening in the shell around the embryo with the aid of a laser. The risk of damaging the embryo from the Assisted Hatching procedure is exceedingly rare. Assisted Hatching is usually performed on all embryos being transferred to the uterus with the exception of embryos at the blastocyst stage during a fresh cycle.

Pre-implantation Genetic Screening (PGS)

Pre-implantation Genetic Screening (PGS), also called Comprehensive Chromosome Screening (CCS), is a technique that screens embryos for the correct number of chromosomes to lower miscarriage rates and improve the chance of a live birth. In order to "count chromosomes", we need to sample some cells from the outer edge of the embryo, and send those cells to a special laboratory where the DNA is tested and the number of chromosomes is determined. This technique allows an enhanced way of selecting the best embryo to transfer, and results in higher pregnancy rates and lower miscarriage rates.

Who is a candidate for PGS?

Any patient who wants to maximize their IVF success rates, especially:

- 1. Patients whose age is greater than 35 years
- 2. Patients desiring a single embryo transfer to avoid a multiple pregnancy
- 3. Patients desiring gender selection
- 4. Patients with previous IVF failure
- 5. Patients with recurrent pregnancy loss

Pre-implantation Genetic Diagnosis (PGD)

Pre-implantation Genetic Diagnosis (PGD) is a related procedure in which embryos created through in-vitro fertilization (IVF) are tested for a specific genetic disorder carried by the intended parents prior to being placed into the uterus to establish a pregnancy." With the increased emphasis on screening potential parents to see if they are carriers for genetic disease, PGD has become an excellent option for patients who test positive and wish to avoid having a child with a specific genetic disorder.

Embryo Cryopreservation

Many patients find that they have "extra" embryos beyond those needed for transfer into the uterus during the fresh IVF cycle. Embryo Cryopreservation (freezing) gives patients the chance to achieve a pregnancy without having to undergo a complete IVF stimulation cycle. In the long run, embryo cryopreservation improves the likelihood of conception at a decreased cost. Cryopreservation is performed on embryos between the fifth and sixth day of culture, thus it is done before you know if you have become pregnant from the fresh cycle. Thawing and transfer of the embryos is performed in a programmed cycle, which includes administration of Lupron, Estrogen pills and patches, and Progesterone supplements. Cryopreservation does not cause birth defects.

5. Progesterone and Estrogen Support

Progesterone is a hormone that is critical to implantation of the embryo. As its name implies, it promotes gestation. The ovaries naturally make progesterone, but during an IVF cycle it has been shown that additional progesterone after egg retrieval is necessary. Progesterone may be administered as a vaginal tablet or gel or as an injection. The medication is continued until the tenth week of pregnancy. Estrogen is another hormone that helps the uterine lining and we recommend oral pills of estrogen along with the progesterone medications until 10 weeks.

Costs and Success Rates

The cost and success rate of your IVF cycle will vary somewhat based on your specific diagnosis and situation. We will provide you with an estimate of the cost which includes our standard fees, insurance coverage and the cost of medications. We will also counsel you on your chance of success. Many factors contribute to this estimate including your age, whether you have successfully conceived before, the length of time you have been trying, your ovarian reserve and whether you choose to do PGS or not.

We are happy that you are considering an IVF cycle at South Jersey Fertility Center. We take pride in the individual attention we provide to each patient and look forward to helping you build your family. Please call our nurse coordinators to start your IVF process.





OFFICE LOCATIONS

Marlton Office

400 Lippincott Drive, Suite 130 Marlton, NJ 08053

Phone: 856.596.2233 Fax: 856.596.2411

Burlington Office

1900 Mount Holly Road, Building 4, Suite A Burlington, NJ 08016

Phone: 609.386.4701 Fax: 609.386.4750

Sewell Office

570 Egg Harbor Road, Suite B4 Sewell, NJ 08080

Phone: 856,218,8863 Fax: 856,218,4651

Egg Harbor Township Office

2500 English Creek Avenue, Suite 225 Egg Harbor Township, NJ 08234

> Phone: 609.813.2192 Fax: 609.813.2303

Appointments may be requested online for your convenience through our Patient Portal







