

# Diamond Institute for Infertility and Menopause

2015

*Dear Patients, Physicians, Staff Members and Friends of Diamond Institute*

**“Hand in Hand with Patients.” The Assistance You Require With The Care You Desire.**

## Locations:

89 Millburn Avenue  
Millburn, NJ 07041  
Phone: 973-761-5600  
Fax: 973-761-5100

30 Hatfield Lane, Suite 207  
Goshen, NY 10924

3317 RT 94  
Hamburg, NJ 07419

10 Point Finger Road  
Paget, DVD4, Bermuda

In 1966 Dr. Diamond, a pioneer in the infertility field had a mission to open a center dedicated to infertility care. This year is our 47th Anniversary. As we evolve with advanced infertility care we are expanding our services to include all new technologies which are needed to provide our patients with the best care.

**The only known successful methods that can determine the gender of the baby to be born is testing the embryo genetically prior to embryo transfer during IVF cycle.**

As we evolve with advanced infertility care we are expanding our services to include all new technologies which are needed to provide our patients with the best care.

The technique which is named PGS or PGD has been in use by us for the last ten years.

**PGS** (pre-implantation genetic screening) – this technique is used for genetic screening for potential chromosomal abnormalities (too many or too little chromosomes) known as **aneuploidy**.

**PGD** (pre-implantation genetic diagnosis) – In this technique, the parents’ genetic material is tested for an existing genetic disease or known carrier of the disease which can affect their offspring. **PGS lets us know the sex of the embryo, either a boy or a girl. Some of our patients use this information to help with family balancing and planning.**

Keeping in mind that about 50% of blas-

tocysts (day 5 embryos) have aneuploidy, it makes sense to test embryos prior to transfer. Obviously, the older the patient, the higher the chance for aneuploidy, which makes PGS even more logical. Nevertheless, even younger women, may have blastocysts that are abnormal.

Many human embryos have chromosomal abnormalities regardless of the mode of conception. At ages <35, 35-37, 38-40, 41-42 the rate of chromosomal abnormal blastocysts are 30%, 40%, 60%, 80% respectively. Understanding these results, many patients ask for PGS regardless of their age.

Most abnormal embryos will fail to implant or will end with miscarriage. Transferring normal post-PGS blastocysts significantly increases conception reduces miscarriages, and gives a higher chance of having a baby. PGS can also help patients with repeated pregnancy loss, where most of the time it’s a result of a chromosomally abnormal embryo. Selection of a chromosomally normal embryo will reduce the chance of miscarriage.

Within the last ten years, techniques of embryo biopsy and genetic testing have been refined hand-in-hand with significant cost reduction. In the past, embryos were biopsied on day 3 when the embryos had about 8 cells. However, we have learned that biopsy of blastocysts on day 5 gives more accurate results and improves conception. As a result, more of our patients are now wishing to add PGS to their IVF treatment.



The same technique is being used for embryos that have already been frozen. The frozen embryos are thawed, biopsied and refrozen until we have the results. In our experience this has no negative effect on embryo survival and we are noting improved conception by using PGS on both frozen embryos as well as fresh embryos.

Overall we know that day five embryo biopsy (fresh or frozen) increases success of IVF and does not cause harm to the embryo or to the future baby.

One other aspect of this technique is related to multiple pregnancy. The information we gain about the embryo by performing PGS helps to reduce the number of embryos that we decide to be transferred while maintaining better conception, less miscarriages and helps to maintain the hope of happy results with infertility care. We are excited to be able to provide these services to our patients in hopes to increase their chances of having a baby.

## IVF, Egg Donation & Frozen Embryo Transfer Cycles Clinical Pregnancy Rate (2008 - 2013)

