# **Gender Selection for Family Balancing**

### **Definition**

The process of gender selection increases the chance of having a female or male child, by separating sperm that bear the X chromosome (female) and those that have the Y chromosome (male), and inseminating with whichever sample is desired.

#### **Indications**

The procedure can be employed for couples who want a child of a specific gender. It is otherwise known as family balancing.

#### • OPTION #1: SPERM SELECTION

This technique for alteration of the "chances" that a pregnancy of a selected gender will occur involves the physical separation of sperm. The human sperm cell, is the gamete responsible for the determination of the sex, of a resulting pregnancy. One half of the sperm normally produced by a healthy male will carry the Y-chromosome producing a male baby, and the other half of the sperm (X-chromosome) will produce a female. By altering the number of sperm of each sex present in a semen sample, the ratio of the sperm for each sex may be altered, with an attendant change in the chance that a given sex will occur in the resulting pregnancy. The advantage of these techniques, which are offered at our Center, relate to lower total cost and the decreased complexity of the procedures. The procedure used for altering the ratio of the sperm for each sex, is the sedimentation method. This method is used similarly for both male and female selection; and takes approximately 2-2½ hours to process. On average, it takes about 3-4 cycles to achieve a pregnancy with this method.



## • OPTION #2: IVF/PGD

The new scientific advances offer guaranteed results. Recent advances in the fields of genetics, genetic diagnosis, embryo biopsy and preimplantation genetic diagnosis (PGD) have opened up a new world of opportunity for couples interested in achieving a healthy pregnancy. As a result of safe new techniques developed to allow physicians and scientists the opportunity to study the genetic wellbeing of an embryo PRIOR to its return to the womb, procedures such as guaranteed sex selection have become a reality. Employing embryo biopsy, couples undertaking in vitro fertilization (IVF) are afforded the opportunity of knowing the gender of each embryo prior to the decision concerning which embryos shall be returned to the womb via embryo transfer and which shall be safely stored for a later date. Clearly, if scientists are aware of the sex of an embryo while it remains still in their care, measures can be taken to assure that only embryos of a selected gender are returned to the womb for the possible establishment of pregnancy. While in vitro fertilization with PGD is only one of the methods for sex predetermination offered by our Center, it is the only procedure where success rates are higher than 99.9% success rate.

Our success rate via gender selection using the sedimentation method is approximately 80% for male selection and 72% for female selection. The success rate for gender selection using the IVF/PGD method is 100% for male or for female selection.

