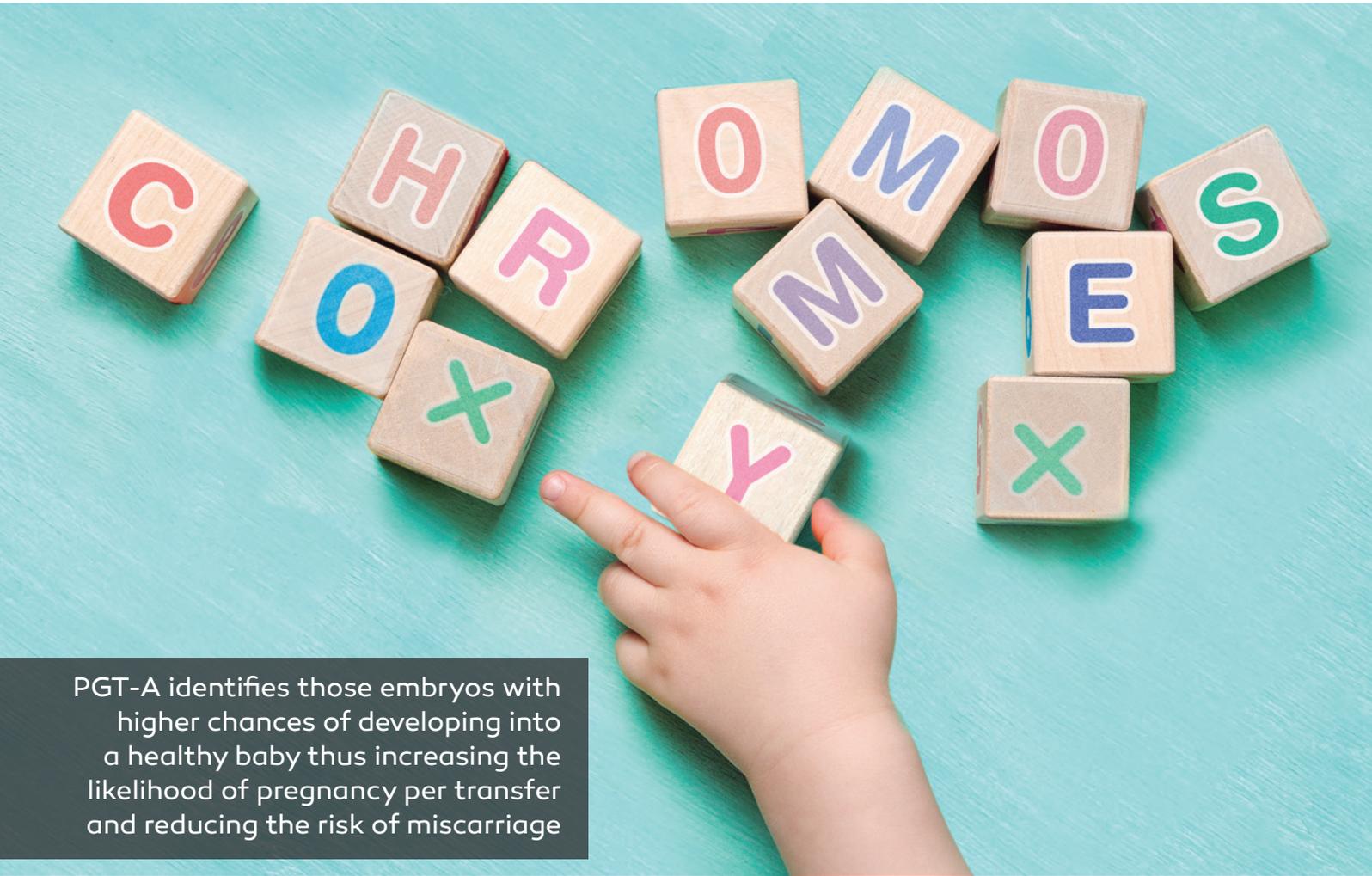


PGT-A

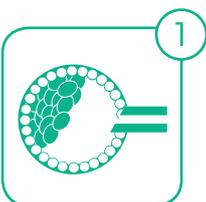
PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY



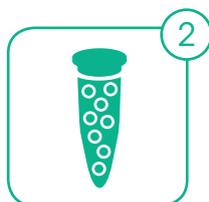
PGT-A identifies those embryos with higher chances of developing into a healthy baby thus increasing the likelihood of pregnancy per transfer and reducing the risk of miscarriage

PGT-A (Preimplantation Genetic Testing for Aneuploidy) also known as PGS (Preimplantation Genetic Screening) is a procedure that allows the determination of the chromosomal status of IVF embryos by screening all 23 pairs of human chromosomes. Only embryos with the correct number of chromosomes will be able to implant and develop into a healthy baby. Our PGT-A test uses the latest next-generation sequencing (NGS) technology to identify those embryos free from chromosome abnormalities, increasing the likelihood of pregnancy per transfer, reducing the risk of miscarriage and allowing confident single embryo transfer.

METHODOLOGY



1
Embryo biopsy at blastocyst stage



2
Introduction of biopsied cells into the PGT-A tube



3
Sample shipment at 4C°



4
Analysis of the DNA of the biopsied cells



5
Results in 10 working days

What is chromosome aneuploidy?

Chromosomes are DNA and proteins structures that carry our genetic information. Normal human embryos have 23 pairs of chromosomes. One copy of each chromosome pair is inherited from the mother and the other copy from the father. Abnormalities during early development of the sperm, egg or embryo may lead to an incorrect number of chromosomes in the embryo. These numerical anomalies in chromosome count are called aneuploidies.

Aneuploidy is responsible for the vast majority of first trimester miscarriages and has been shown to be a major cause of infertility and IVF failure¹. Chromosomal abnormalities can occur in women of all ages, however the chances are greater with increasing maternal age². Most chromosomal abnormalities are incompatible with life, leading to abortions and the rest of them are associated with genetic disorders like Down syndrome (resultant from the presence of an extra copy of chromosome 21).

What is PGT-A?

PGT-A (Preimplantation Genetic Testing for Aneuploidy) also known as PGS (Preimplantation Genetic Screening) is a genetic test that allows the determination of the chromosomal status of IVF embryos by screening all 23 pairs of human chromosomes. Only embryos with the correct number of chromosomes will be able to develop into a healthy baby. PGT-A test is able to identify those embryos free from chromosome abnormalities (euploid embryos) that are more likely to implant and result in a healthy live birth.

By selecting healthy embryos with the right number of chromosomes to be transferred to the uterus, PGT-A:

- Improves IVF success, increasing the likelihood of pregnancy per transfer³.
- Reduces the risk of miscarriage⁴.
- Allows for confident single embryo transfer, reducing the risks and complications associated to multiple pregnancies⁵.
- Reduces time to pregnancy by allowing the identification of a normal embryo as soon as possible⁶.
- Avoids the live birth of a baby with genetic disorders⁷.

Who can benefit from PGT-A?

PGT-A is a helpful technique for the vast majority of couples seeking IVF treatment. All pregnancies are at risk of chromosome abnormality. Nearly 50% of the embryos produced in an IVF cycle are aneuploid⁸.

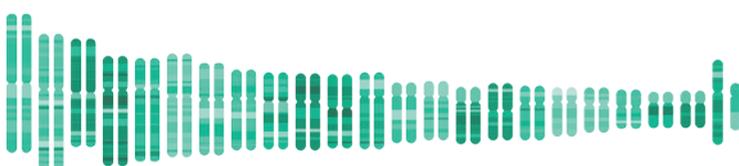
Aneuploidies are a major cause of difficulties achieving pregnancy in couples of all ages. However, as a woman ages, the quality of her eggs decreases and her risk of producing an embryo with chromosome abnormalities increases. This is why a woman's age is critical for pregnancy success.

Embryo screening would improve the chances of achieving a successful pregnancy in all IVF patients. However, it is particularly suitable to help couples with recurrent pregnancy loss, couples with previous IVF failure attempts, women of advanced reproductive age (over 35 y.o.), couples with family history of chromosome problems, couples opting for confident single embryo transfer and good prognosis patients who want to avoid futile future cycles of frozen embryos.

Why using iGLS PGT-A test?

iGLS uses the most advanced Next Generation Sequencing (NGS) technology currently available in the market to perform PGT-A. Our NGS Illumina VeriSeq™ platform analyses thousands of DNA sequences that are unique to each chromosome allowing the accurate identification of extra or missing chromosomes. This technology provides exceptional data reading and scalability and reliable results with better detection of imbalances than other available methods. Our test gives accurate answers to patients, guaranteeing the transfer of a genetically normal embryo and hence minimizing the incidence of miscarriages and birth defects caused by irregularity in the chromosome number.

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