



# Smart PGT-A<sup>PLUS</sup>

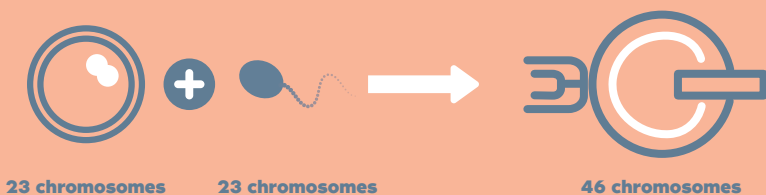
Preimplantation Genetic  
Testing for Aneuploidies

Our new standard  
of care for embryo  
testing

**Igenomix**<sup>®</sup>  
PART OF VITROLIFE GROUP<sup>™</sup>

**PGT-A is a genetic test performed on trophectoderm biopsies from embryos that have been developed through an IVF process.**

**PGT-A quantifies the number of chromosomes in each embryo biopsy to differentiate between chromosomally normal embryos with 46 chromosomes and chromosomally abnormal embryos with missing or extra chromosomes.**



This will help your physician select the best embryo for transfer and improve your chances of achieving an ongoing pregnancy.

Our current technology, **Smart PGT-A**, integrates next-generation sequencing (NGS) with advanced algorithms and machine learning to analyze the genomic data of embryos, delivering highly accurate and reliable results.

However, one limitation is that it cannot detect the ploidy status of the embryos, which refers to the number of complete sets of chromosomes. Consequently, embryos with an apparently normal chromosomal profile may potentially conceal a triploid, or haploid constitution.

In our continuous pursuit of advancing genetic testing for IVF embryos, we have developed and validated an additional targeted SNPs (Single Nucleotide Polymorphism) analysis, expanding the diagnostic capabilities and clinical utility of our current Smart PGT-A. We call this new advanced test **Smart PGT-A Plus**.

Building upon our extensive expertise, our latest offering, Smart PGT-A Plus, is a 4-in-1 test significantly increasing accuracy and confidence in selecting the optimal embryo for transfer without the need for additional parental samples.

## Smart PGT-A Plus

Our most advanced 4-in-1 genetic testing solution



### SMART PGT-A

Our custom and validated technology that combines next-generation sequencing (NGS) with advanced algorithms and machine learning, enabling the genetic analysis of with exceptional accuracy and reliability.



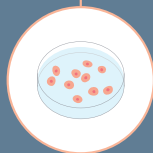
### PLOIDY DETECTION AND GENETIC PRONUCLEAR (PN) CHECK

Avoids transfer of triploid embryos and increases the number of viable embryos available for transfer.



### CONTAMINATION

Detection of external and maternal cell DNA contamination in the biopsy, a potential source of misdiagnosis.

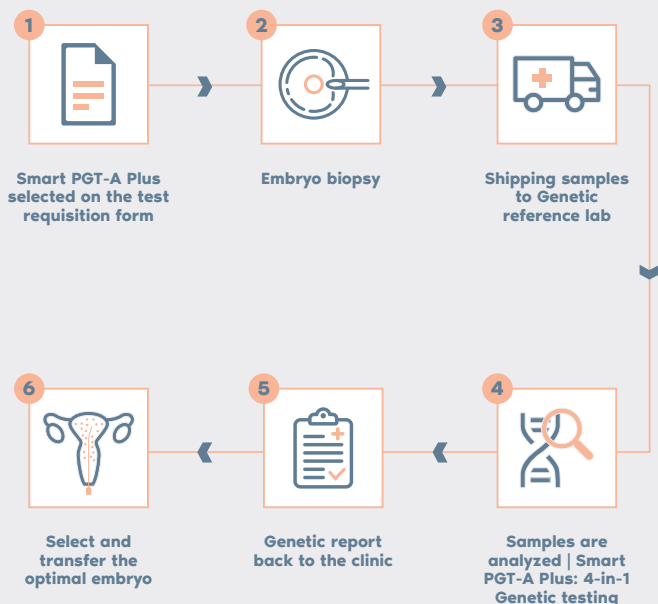


### SIBLING QC

Extra quality control providing assurance that your group of tested embryos are genetically related to each other, identifying any possible sample mix-ups due to human error.

# How does it work?

Simple test process designed with the patient's and clinician's convenience in mind



## Who should consider Smart PGT-A Plus?

While any couple can have an embryo with aneuploidy, the chances can increase with the following factors:

- Female age over 35
- History of recurrent pregnancy loss
- Previous IVF failure
- Prior child or pregnancy with a chromosome abnormality

Smart PGT-A Plus is especially recommended for:

- Patients with severe male factor or high rate of diploidy in sperm
- Previous or recurrent triploid pregnancy
- Previous molar pregnancy
- Patients with high quality embryos derived from abnormally fertilized oocytes
- Recurrent or sporadic miscarriage after conventional PGT-A

# What makes our Smart PGT-A Plus stand out from the rest?



Offers enhanced confidence with robust and accurate results, utilizing two independent technologies for DNA analysis.



Strengthened by the power of big data and artificial intelligence, effectively overcoming the limitations of human subjectivity and greatly reducing the risk of human error.



Maximizes the likelihood of successful pregnancy by carefully identifying optimal embryos for transfer.



Reduces the risk of miscarriage due to previously undetected abnormalities (e.g. triploidy).



Increases the number of viable embryos available for transfer after rescuing embryos derived from abnormally fertilized oocytes.



Enhances accuracy and reduces the risk of misdiagnosis by detecting external and maternal cell DNA contamination.



Provides confirmation that all embryos from the same patient are genetically related to each other without the need for additional parental samples.



Ensures enhanced quality control in the laboratory procedures conducted within your IVF lab, providing greater assurance.



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