

## **EMBRYOTEST PLUS™**

Informed Consent for the Preimplantation Genetic Testing (PGT-A).

**Semper Genomics SA de CV** provides you with the following information about **EmbryoTest Plus™ (ETP)**, which is a Preimplantation Genetic Testing (PGT-A). Please carefully read the provided information for the requested service.

Assisted reproductive technology, such as in vitro fertilization, relies on molecular analyses like PGT-A to select embryos with a higher chance of implantation and success rate. To achieve this, **EmbryoTest Plus™** offers a thorough analysis of all the embryo chromosomes.

There are normally 23 pairs of chromosomes in each cell of our body. An aneuploidy means a change (loss or gain) in the number of chromosomes. The presence of an extra chromosome (gain) is called "trisomy", while its absence (loss) is called "monosomy".

Aneuploidies are the result of chromosome segregation errors during embryo development, which may cause inviability or diseases. The most common syndromes related to aneuploidies are Patau Syndrome (trisomy 13), Edwards Syndrome (trisomy 18), Down Syndrome (trisomy 21), Turner Syndrome (monosomy X), Klinefelter Syndrome (XXY karyotype), among others.

The service that **Semper Genomics (SG)** offers starts from the embryo biopsy collection by the assisted reproduction laboratory of the medical center that provides your fertility treatment.

### ADDITIONAL INFORMATION ON EMBRYOTEST PLUS™

- 1. It offers a thorough analysis of the 46 chromosomes of the human embryos to detect possible gains or losses of genetic material (aneuploidies), including the sex chromosomes.
- 2. This test uses the Next-Generation Sequencing (NGS) technique for chromosome screening.
- 3. **EmbryoTest Plus™ (ETP)** allows the selection of those chromosomally normal embryos among all the evolutionary embryos of the patient, which increases the appropriate reproductive and evolutionary possibilities leading to a healthy child. However, this test does not guarantee it.
- 4. It is not a diagnostic test. The result must be interpreted by the doctor involved with this service for the patient's follow-up.
- 5. This test does not detect abnormalities caused by balanced translocation, inversion, ring, UPD, monogenic/polygenic disease, etc. Its use cannot exclude fetal mosaic chromosomal diseases either.
- 6. Potential causes of false positive or false negative results include mosaicism (mixtures of chromosomally normal and abnormal embryo cells) or chromosomal abnormality in either parent.
- 7. Embryonic sex identification can be false if the detected value is within the gray zone.
- 8. **Semper Genomics (SG)** is not responsible for the pregnancy success rate, embryo viability, receptivity in the patient, implantation, or any other risks related to assisted reproductive technology.
- 9. ETP scope is limited to reporting the qualitative findings of chromosomal gains or losses (aneuploidies) of the embryo biopsy analyzed by massively parallel sequencing.



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#### ABOUT THE SEMPER GENOMICS SERVICE

- 1. The client recognizes the herein as **Informed Consent** so that SG as an involved third party can process their samples through ETP under their consent.
- 2. The **EmbryoTest Plus™** service includes:
  - a) Kit delivery (a box with 24 tubes of 0.2 ul with 2.5 ul 1X PBS buffer) for sampling (embryo biopsy).
  - b) Sample collection by the logistics services of SG.
  - c) DNA extraction and amplification regarding biopsies.
  - d) Sample processing by Next-Generation Sequencing (NGS).
  - e) Delivery of technical reports to the doctor in charge of the aneuploidies data found in each sample.
- 3. Samples are collected and relocated by the SG staff to the laboratory located at 108 Santa Margarita, floor 3, offices 9-11, Insurgentes San Borja, Benito Juárez. 0310, with an operation notice before COFEPRIS number 2309145056X00042.
- 4. Please reach your doctor to request the service.
- 5. Sample processing is conditional upon its quality inspection, determined by the SG technical staff under the criteria mentioned below.

#### SAMPLE EXCLUSION CRITERIA

- 1. Disagreement in the identification number and code of the samples with the recorded data in the Sample Collection, Transportation, and Handling Form for EmbryoTest Plus<sup>™</sup>.
- 2. Thawing of samples: it is requested that these remain frozen (-4°F) to keep the genetic material integrity before their collection. Centrifuge them before freezing if possible.
- 3. Sample absence: the microtube does not contain the sample.
- 4. In case of exclusion of one or all the samples, it will be notified to the doctor in charge in the Result Report.

#### SAMPLE LIMITATIONS AND RISKS

- 1. On the other hand, like any other analytical test, **EmbryoTest Plus™** has technical factors and limitations that can affect the results, such as:
  - a) Sample degradation for bad storage or wrong handling thereinto (cold chain challenges).
  - b) The test is limited to a qualitative analysis of the embryonic genome.
  - c) The non-amplification of the genome for some intrinsic inhibitor of the sample.
- 2. Delivery time of the technical report is up to 15 working days from sample reception in the laboratory.
- 3. The technical report has an exclusively qualitative value. The digital file (\*.PDF) will be sent via email to the designated addresses in the Sample Collection, Transportation, and Handling Form for EmbryoTest Plus<sup>™</sup> that is delivered with the sampling kit.
- 4. **Semper Genomics** will terminate the service in accordance with the **results** 72 hours after the file sending if no notification is received from the doctor in charge.

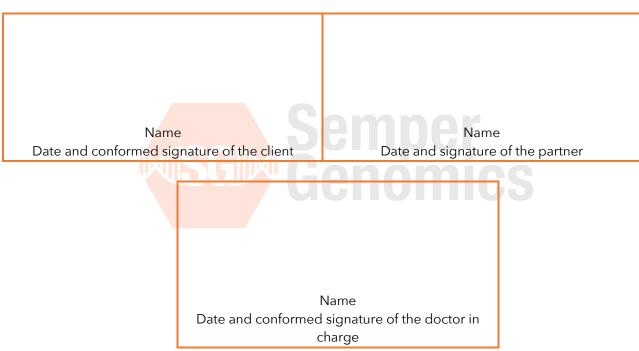


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This kind of test poses a risk of false positive/negative results. Such results commonly occur by biological reasons called "mosaicisms", present in approximately 5% of embryo biopsies. Mosaicism means that the embryo can have cells with a different number of chromosomes (ploidy) both in the normal number (euploidy) and abnormal (aneuploidy). Other important factors that lead to false results are sample contamination, codification problems, rare genetics that interferes with the analysis, technical issues, and human error. Among all these factors, the chance of a false result that is not associated with mosaicism is about 2%.

#### DATA PRIVACY

1. Test results will be protected under strict privacy, and they can be provided by email only to the assigned people in the corresponding forms. Information privacy will be 90 calendar days from the results delivery. They will be eliminated after that date.



#### **CONFORMED SIGNATURES**