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Patient information

Pre-Implantation Genetic Testing for Aneuploidy (PGT-A)

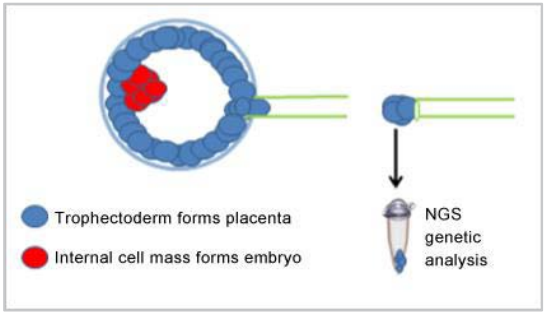
Principles

PGT-A is a genetic test used during in vitro fertilization, and is carried out 5 – 6 days after fertilization of the oocyte before being implanted into the uterus. The aim of the test is to rule out chromosomal abnormalities in order to be able to select suitable embryos for transfer to the womb. This can shorten the time it takes until a pregnancy occurs.

Procedure

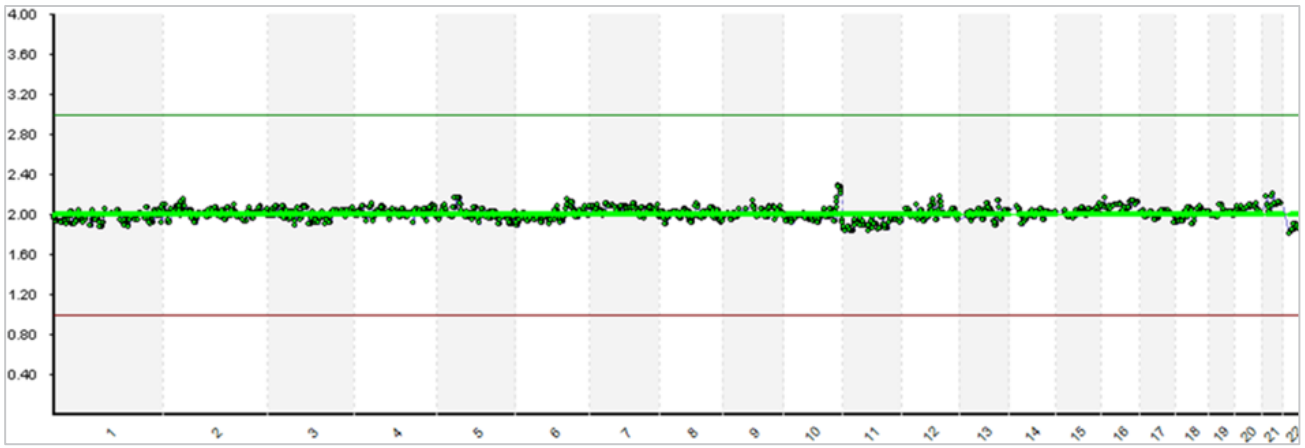
Initially, the fertilized oocyte develops into a blastocyst. The blastocyst is made up of the tissue that forms the placenta (trophoblast) and an inner cell mass, from which the embryo develops (Figure 1). On the 5th or 6th day after fertilization, between 3 and a maximum of 8 cells are biopsied from the trophoblast. No cells are removed from the embryo. The blastocysts are then frozen separately. The 3 – 8 cells taken from the placenta tissue undergo molecular genetic analysis.

Figure 1: trophectoderm biopsy on the 5th day of cells that form the placenta



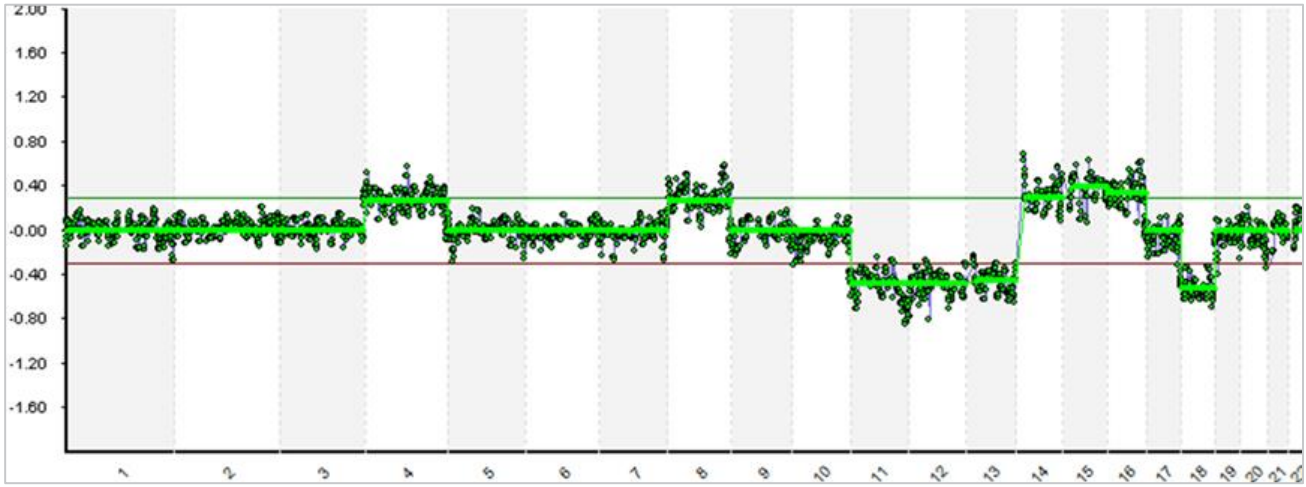
Blastocysts with a normal number of chromosomes (Figure 2) can be defrosted in a cryo cycle for embryo transfer.

Figure 2: normal number of chromosomes



Blastocysts with an abnormal number of chromosomes (Figure 3) are destroyed, with the parents' consent.

Figure 3: example of abnormal chromosome number



Method limitations

- It is not always possible to obtain a reliable result from a biopsy
- The biopsy, freezing, storage and thawing of the cells is performed using tried and tested scientific methods. Viollier AG cannot, however, provide any warranty that the cells will be viable and suitable for establishing a pregnancy after thawing.
- Balanced chromosomal translocations, inversions, uni-parental disomies, triploidies, minor mosaicism (< 20%) and genetic defects cannot be detected using this method
- A transfer during the collection cycle (fresh transfer) is not possible
- PGT-A does not replace normal prenatal care.

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Declaration of consent

Pre-Implantation Genetic Testing for Aneuploidy (PGT-A) on blastocysts

→ Please read this form and patient information carefully.
→ Please ask if there is anything you do not understand or would like to know.

Consultant
Name, First name _____

Patient (f)
Last name, first name, date of birth _____

Patient (m)
Last name, first name, date of birth _____

1. The undersigned consultant has informed me orally and in writing of the goals and procedure of this method, the expected effects, possible advantages and disadvantages, and possible risks. ☐ Yes ☐ No

2. I have read and understood the patient information. My questions relating to this method have been answered to my satisfaction. I can keep the written patient information and will receive a copy of my written consent form. ☐ Yes ☐ No

3. I have had enough time to make my decision. ☐ Yes ☐ No

4. I know that my personal data will only be given to outside institutions in anonymized form. ☐ Yes ☐ No

5. Blastocysts that are diagnosed as abnormal may be destroyed without further consultation ☐ Yes ☐ No

Date, place	Signature patient (f)	Signature patient (m)

Date, place	Signature consultant