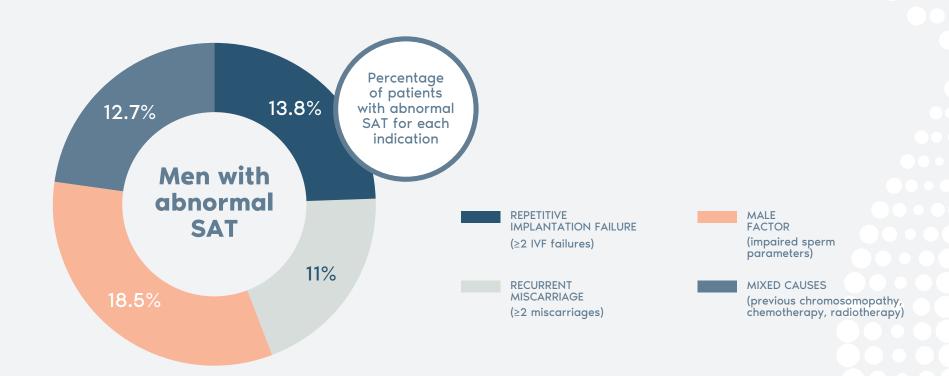


# The SAT test is a diagnostic tool to study male infertility. It allows us to evaluate the presence of an abnormal number of chromosomes in the sperm.

The chromosomes 13, 18, 21, X and Y, are frequently implicated in pregnancy loss and affected children with chromosomal abnormalities.

The SAT test is a useful tool to provide a more personalized genetic counseling to the couple before their in vitro fertilization treatment.



## An increase of sperm chromosomal abnormalities affects reproduction on 3 levels:



#### **EMBRYO LEVEL**

- Spermatozoa with sex chromosome abnormalities result in aneuploid embryos.
- Diploid sperm results in triploid embryos. (Rodrigo et al., 2010)



#### **PREGNANCY LEVEL**

- An elevated SAT decreases pregnancy rates after ICSI.
- And increases miscarriage rate. (Rubio et al., 2001)



### **OFFSPRING LEVEL**

• It increases the risk of abnormal offspring for the chromosomes detected in the sperm (Down, Klinefelter or Turner's syndromes).