

## **HOW TO INTERPRET THE DATA FROM AN ASSISTED REPRODUCTION CENTRE**

**Published pregnancy rates should be interpreted as a general overview of a clinic's results**

**The direct comparison of pregnancy rates between different clinics may be misleading.** Most clinics perform around the national average.

Differences found between centres depend on many factors, such as the type of patients treated, their age, their diagnosis, the duration of their infertility, and the type of treatment offered.

- Some patients with poor prognosis undertake IVF even when they have been informed of the low probability of success. This circumstance will reduce the clinic's pregnancy rate. Others, however, prefer to proceed directly to egg donation, which will increase the success rate among women with poor ovarian response, or who are older.
- Some women with favourable prognosis prefer IVF to intrauterine insemination. This will increase the clinic's IVF pregnancy rate.
- Clinics that treat a higher percentage of patients who have previously had multiple, unsuccessful IVF cycles, will have lower success rates. The same is true of clinics with a large proportion of patients presenting greater complexity or lower probability of success in achieving pregnancy (for example, due to poor ovarian reserve, endometriosis, fibroids, etc.).

### **Cycles initiated**

Number of treatment cycles in which the patient receives medication (for ovarian stimulation or uterine preparation) or ultrasound monitoring, with the intention of achieving a pregnancy.

### **Oocyte (or egg) retrievals**

Number of IVF or egg donation cycles in which oocyte retrieval is performed. A retrieval is the procedure by which eggs are collected from the ovary. The most important reasons for cancelling a retrieval are excessively low or high responses.

### **Embryo transfers**

The number of transfers carried out in IVF, egg donation or frozen embryo cycles. A transfer is the placement of embryos in the uterus. The most important reasons for cancelling a transfer are the risk of hyperstimulation, the failure to obtain oocytes from the egg retrieval or the failure to achieve viable embryos.

## **Results by age groups**

Female fertility declines with age, and this affects the pregnancy rates obtained by assisted reproduction techniques. The table shows the number of cycles initiated, the number of pregnancies achieved, and the range of pregnancy success rates for different age groups.

### **Pregnancy rate per cycle (range)**

The pregnancy rate per cycle ranges between certain values, within which lies the true pregnancy rate achieved. This range is stated because the pregnancy rate is an inexact measure, which varies from year to year, depending on the clinical characteristics of the patients treated during the year in question, among other factors.

The greater the number of cycles performed by a clinic, the more accurate the range of values regarding pregnancy rates. For example, at a clinic where 1000 cycles are performed and 200 pregnancies are achieved, the pregnancy rate per cycle (20%) will range from 18-23% (i.e., the range is narrow). At another clinic, where only 10 cycles are performed and 2 pregnancies are achieved (with an identical pregnancy rate per cycle, of 20%), the corresponding range will be 3-56% (i.e., much wider and less precise). When the ranges reported by two clinics overlap, we may conclude that there are no differences between these two clinics regarding their pregnancy rates.

### **Percentage of embryos transferred**

The proportion of embryo transfers performed with one, two or three embryos. On very few occasions is any benefit derived from transferring three embryos rather than two. The elective transfer of one embryo is possible in patients with good prognosis and excellent embryo quality; this helps avoid multiple pregnancies.

### **Type of pregnancies achieved**

A clinical pregnancy exists when ultrasound reveals the presence of a gestational sac in the uterus. Positive urine or blood pregnancy results, but without ultrasound confirmation, are excluded.

The rate of singleton pregnancies is the main parameter of good clinical practice, as a singleton pregnancy is the safest outcome of fertility treatments. Clinics should seek to minimise the proportion of twin and triplet pregnancies.