

HOW MANY EMBRYOS SHOULD I HAVE TRANSFERRED?



**CANBERRA
FERTILITY CENTRE**

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This may be one of the most difficult decisions that you and your partner will need to make during your IVF procedure. The Canberra Fertility Centre will only replace up to two embryos (except in exceptional circumstances, which your doctor will discuss with you at the time of transfer). During your IVF appointment your doctor will make a recommendation for the number of embryos to be replaced, and discuss with you the risk factors associated with multiple pregnancy (twins and triplets). On your IVF consent form you then need to nominate the number of embryos that you wish to have replaced, within the number recommended by your doctor. Below is some information that we hope will help you and your partner in this decision making process.

IMPORTANT TO CONSIDER:

- The incidence of a twin pregnancy when two or more embryos have been replaced is about 20% of pregnancies in Australian IVF clinics;
- Even with the best antenatal care the chance of twins dying before, during and after delivery is about ten times that of a singleton pregnancy due mainly to the increased incidence of premature delivery;
- The incidence of cerebral palsy is seven times higher in twins than in a singleton pregnancy, and there is an increased chance of long term disability;
- There can be considerable social and psychological difficulties in raising twins, largely related to having two children of identical age;
- The miscarriage rate in an IVF program after detection of a foetal heartbeat is about 12% in singleton pregnancies but the chance of miscarrying both foetuses in a twin pregnancy is only 3%;
- The pregnancy rate for transference of one embryo is less than for transference of two embryos in the same cycle.
- For a fresh transfer the chance of pregnancy from transferring one good quality embryo on either of Day 2, 3 or 5 is about the same;
- In a Frozen Embryo Transfer (FET) cycle where there are 4 or more embryos frozen, our statistics show that a Day 5 transfer is more likely to result in pregnancy; and
- There appears to be about a seven-fold increased risk of identical twins from transferring one blastocyst (Day 5 embryo) compared to transferring a 4 or 8 cell embryo (Day 2 or Day 3).



In some circumstances your doctor may discuss the transfer of more embryos than you had initially elected on your consent form. In these exceptional circumstances your doctor will discuss the reasons with you at the time of transfer.

At the 2004 Fertility Society Meeting, scientists from Melbourne IVF gave a presentation on the pregnancy rates that can be achieved by the transfer of either one or two embryos. Please note that the pregnancy rates quoted are for younger women with two good quality embryos available to replace. This is a best case scenario and other groups of women will achieve lower pregnancy rates.

Scenario 1. Patient has two best quality 4 cell embryos which she elects to transfer. Her pregnancy rate is 41.1% and she has a 37.7% chance of a twin pregnancy.

Scenario 2. Patient has the same two best quality 4 cell embryos of which she elects to transfer just one embryo and cryopreserved the other one. Her pregnancy rate is now 28.4%, however this increases to 36.1% after the frozen embryo is subsequently thawed and transferred, and her overall risk of a twin pregnancy is <1%.

These scenarios highlight the dilemma that by replacing more than one embryo there is an increase in the pregnancy rate for that cycle but a marked increase in the chance of multiple pregnancy.

TAKING INTO ACCOUNT ALL OF THE ABOVE STATEMENTS WE RECOMMEND THE FOLLOWING:

If you are under the age of 35 you should consider having a single embryo transfer for your first cycle. If the embryo quality is compromised then your doctor may discuss the option of transferring two embryos. In this circumstance it is then your decision to have one or two embryos transferred.

If you are 35 or over you should clarify the number of embryos recommended for transfer with your doctor, including the option of single embryo transfer.

We encourage you to further discuss your situation with your doctor or staff at the Canberra Fertility Centre.