

Single embryo transfer vs multiple



What the choice actually means

In assisted reproduction, the number of embryos transferred during one procedure can range from one embryo to two or, less commonly now, more than two. A single embryo transfer means exactly one embryo is placed in the uterus. A multiple-embryo transfer usually means two embryos, although the term can sometimes include three or more in older practice patterns.

The logic behind transferring multiple embryos is straightforward: if one embryo does not implant, another might. But biology does not reward this strategy in a simple linear way. Implantation is affected by embryo competence, uterine receptivity, timing, and sometimes chance. Adding more embryos does not guarantee success; instead, it often increases the possibility that more than one embryo implants.

That distinction matters because the goal of fertility treatment is not only a positive pregnancy test. The goal is a healthy singleton birth when possible, with the lowest reasonable risk to the pregnant person and the future baby.

Why single embryo transfer is now the preferred standard

Modern evidence has pushed practice toward elective single-embryo transfer when more than one embryo is available. The ESHRE guideline states that single-embryo transfer is the preferred standard because it reduces multiple pregnancy risk without clear evidence of worse cumulative live-birth outcomes in many patients. That is an important distinction: the outcome should be viewed across the whole treatment journey, not only after one transfer.

A landmark randomized trial published in the New England Journal of Medicine found that single-embryo transfer markedly reduced multiple births, while live-birth rates were not substantially lower than with double-embryo transfer in the studied group. That kind of data changed the conversation. Instead of asking only, "How do we maximize the chance from this one transfer?" many clinics now ask, "How do we maximize the chance of one healthy baby over time?"

The reason this matters clinically is that twin pregnancy is not just "two for the price of one." It is associated with higher rates of preterm birth, low birth weight, hypertensive disorders, gestational diabetes, cesarean delivery, and neonatal intensive care admission. Those are meaningful risks, not minor inconveniences.

When more than one embryo may still be discussed

Even though single embryo transfer is often preferred, there are situations where a fertility specialist may discuss transferring two embryos. ASRM guidance emphasizes that decisions should be individualized, and that more than one embryo may sometimes be considered when the expected chance of success per embryo is lower. Examples can include advanced maternal age, limited embryo availability, prior unsuccessful cycles, or other factors that suggest a lower prognosis.

That said, the presence of a lower prognosis does not automatically mean that multiple embryo transfer is the best option. The clinic may consider whether a transfer of two embryos is truly likely to improve the chance of a live birth enough to justify the added risk of twins. In some cases, the answer is no. In others, patient-specific priorities and medical history may shift the balance.

Genetic testing can also change the discussion. ASRM advises limiting transfer to one euploid embryo regardless of age. A euploid embryo has the expected

number of chromosomes, which generally improves the case for transferring just one embryo because the embryo itself already has a stronger chance of implantation.

The real trade-off: more immediate odds versus more risk

People often hear that transferring multiple embryos gives a better chance of pregnancy in one cycle. Sometimes that is true at the level of that single procedure. But the more clinically relevant question is whether the overall likelihood of a live birth improves enough to justify the higher complication rate. In many modern IVF programs, especially when frozen embryos remain available, the answer increasingly favors one embryo at a time.

Multiple gestation changes the risk profile in several ways. For the pregnant person, twin or higher-order pregnancies can increase the chances of preterm labor, preeclampsia, placenta complications, anemia, and delivery-related complications. For the babies, the major concerns are prematurity and its downstream effects on breathing, feeding, growth, and long-term neurodevelopment. These are not rare edge cases; they are well-recognized consequences of multiple gestation.

Single embryo transfer is therefore not only a safety choice. It is also a strategy that can preserve future treatment options. If one embryo is transferred and does not implant, another embryo may still be available later. That approach can spread risk over time rather than concentrating it in one high-risk pregnancy.

How age, prognosis, and embryo quality shape the plan

There is no universal answer that fits every patient. Age, diagnosis, ovarian reserve, embryo development, prior implantation history, and uterine factors all influence how a fertility team weighs the number of embryos to transfer. Prognosis matters because the same embryo number can mean very different things in different clinical contexts.

For example, a younger patient with a favorable prognosis and a euploid blastocyst often has strong reasons to choose single embryo transfer. By contrast, someone with repeated failed cycles, few embryos available, or a more

limited prognosis may have a more complex discussion. Even then, the decision should be framed in terms of absolute benefit, not just intuition.

It also helps to remember that embryo quality is not only about appearance under the microscope. Chromosomal status, developmental stage, laboratory conditions, and the uterine environment all interact. Because of that complexity, two embryos are not always twice as good, and one embryo is not necessarily half as effective.

Shared decision-making and what to ask your clinic

The best embryo-transfer plan usually comes from a conversation, not a rule. Many people feel pressure to choose the option that seems most aggressive, especially after infertility, loss, or long treatment delays. That emotional reality is real and deserves compassion. At the same time, fertility care works best when choices are grounded in evidence and individualized risk assessment.

Useful questions for your clinician may include:

What is the expected live-birth chance with one embryo versus two in my situation?

How much would transferring two embryos increase the chance of twins or higher-order multiples?

Does embryo testing change the recommendation?

Would you still recommend single embryo transfer given my age and prognosis?

What are the implications for future frozen embryos if this transfer does not succeed?

Asking these questions can make the decision less abstract. It also helps you understand whether the recommendation is based on guideline-level evidence, your specific medical history, or both.