# Fertility treatments overview: types, how they work, and choosing the right option

## When fertility treatment may be considered

### Lifestyle optimization and timed intercourse

### Fertility medicines and ovulation induction

Oral ovulation induction medications: Agents such as letrozole or clomiphene citrate are used in many ovulatory disorders. They can promote follicular development and trigger more predictable ovulation. Monitoring may include ultrasound and hormone testing, depending on the clinical situation.
Gonadotropin injections: Follicle-stimulating hormone and luteinizing hormone preparations directly stimulate the ovaries. They are used in some ovulation induction protocols, IUI cycles, and IVF cycles. They require careful monitoring because they can increase the risk of multiple follicles and multiple pregnancy.
Ovulation trigger medications: Human chorionic gonadotropin or gonadotropin-releasing hormone agonist triggers may be used to time ovulation or egg maturation before retrieval.
Luteal support: Progesterone may be used after certain treatments to support the uterine lining, especially in IVF protocols.

**Intrauterine insemination: how it works and when it may help**

**IVF and ICSI: the core assisted reproductive technology pathway**

**Surgery, uterine treatment, and reproductive anatomy**

**Donor eggs, donor sperm, donor embryos, and gestational carriers**

Donor sperm: May be used for severe male-factor infertility, single parents by choice, LGBTQ+ family building, or genetic-risk avoidance.
Donor eggs: May be considered with markedly diminished ovarian reserve, premature ovarian insufficiency, age-related oocyte quality concerns, repeated IVF failure related to egg factors, or avoidance of certain genetic conditions.
Donor embryos: May be an option when both egg and sperm donation are acceptable or when embryo donation aligns with personal values.
Gestational carrier: May be considered when pregnancy is medically unsafe, the uterus is absent or unable to carry a pregnancy, or after certain repeated implantation or pregnancy complications. The carrier has no genetic link to the embryo unless a separate egg donation arrangement is involved.

**Choosing the right option: a structured decision framework**

Diagnosis: Tubal blockage, anovulation, severe sperm abnormalities, endometriosis, uterine cavity problems, and unexplained infertility often point toward different first-line strategies.
Age and ovarian reserve: Time may be a major factor, especially in the late 30s and 40s or when ovarian reserve is low. Faster escalation to IVF may be discussed in these settings.
Likelihood per cycle versus cumulative likelihood: IUI may have a lower per-cycle chance than IVF but may be reasonable over several cycles in selected patients. IVF may offer more information about egg number, fertilization, embryo development, and cryopreservation potential.
Risk tolerance: Multiple pregnancy, ovarian hyperstimulation syndrome, procedure risks, medication side effects, and emotional stress differ by treatment.
Financial and access considerations: Insurance coverage, medication costs, travel distance, monitoring visits, time off work, and laboratory fees can

strongly influence choice.
Values and boundaries: People differ in how they feel about embryo creation, genetic testing, donor gametes, freezing embryos, selective reduction, or stopping treatment.

**Emotional health, treatment fatigue, and support**