

With the wide variety of fertility drugs available, it can be confusing when you first begin your journey to parenthood. Your best friend swears by Puregon as the best fertility drug, but online forums tout the benefits of Clomid, and someone just the other day told you how well Metformin worked for her. Still others talk about the cocktail of fertility drugs they took for their in vitro fertilization treatments. With all these options, how do you know which fertility drug is best for you? Luckily, your fertility doctor is a specialist who can determine which fertility drugs you should be taking for your best chance at success. When your fertility doctor prescribes a protocol for you that differs from other mothers-to-be, it may seem confusing, but your IVF protocol will be tailored to your individual needs. With some more information, you can make sense of your IVF protocol and understand what the different fertility drugs do to help you conceive.

The Typical IVF Protocol

The IVF protocol for the typical woman usually includes three different types of drugs with three different uses: a GnRH agonist or antagonist, an FSH drug, and an HCG drug. These three types of fertility drugs work together to help increase the number and quality of eggs available for IVF.

GnRH Agonists and Antagonists

GnRH agonists are gonadotropin-releasing hormone agonists, including drugs such as Lupron, Synarel, and Zoladex. GnRH antagonists include drugs such as Cetrotide, Ganirelix, and Orgalutran. Although these are two different classes of drugs, they perform a similar function in a woman's body. Both GnRH agonists and antagonists help to suppress ovulation. Although this may seem counter-intuitive, fertility doctors have a good reason for wanting to temporarily suppress ovulation during IVF treatments. These drugs help to suppress the surge in luteinizing hormone (LH) which would trigger ovulation, helping to properly time the LH surge. During fertility treatments, an LH surge may happen too soon, releasing eggs from the follicles which are immature and unsuitable for fertilization in the clinic. This would be a waste of effort, meaning that you would have to go through ovulation stimulation therapy all over again. A premature LH release may also mean that ovulation occurs before your scheduled IVF appointment, so your IVF technician is not ready to collect the eggs. To avoid immature eggs and bad timing, your fertility doctor may prescribe a GnRH agonist or GnRH antagonist. Once your fertility doctor has determined your follicles are mature and ready to release an egg, they will have you stop taking your GnRH agonist or antagonist, allowing the LH surge to proceed, triggering ovulation.

FSH Drugs

FSH Drugs contain follicle-stimulating hormone similar to what is normally present in a woman's body. This class of drugs includes products such as Gonal-f, Follistim, Bravelle, Repronex, and Menopur. The FSH drugs are important for stimulating the development of multiple eggs that can be removed and fertilized. FSH, like its natural version in a woman's body, is a hormone that triggers follicles to develop. These follicles will then produce eggs which will later be released by an LH surge. The FSH drugs can either help women who do not ovulate regularly to produce eggs or it can help women to produce multiple eggs. The more eggs produced, the more eggs that will be available for IVF treatments. This means the IVF technicians can select from the best eggs to fertilize, and potentially implant multiple fertilized eggs to increase the chances that one of them will lead to a successful pregnancy or even twins.

HCG Drugs

HCG drugs contain human chorionic gonadotropin similar to what is normally present in a woman's body. This class of drugs includes Pregnyl and Ovidrel. HCG, like its natural version in a woman's body, is important for causing the eggs to mature. Although FSH can trigger more follicles to develop, these follicles contain immature eggs that are unsuitable for fertilization in IVF treatments. Your fertility doctor may prescribe HCG drugs to help these eggs mature, creating fully-developed eggs that are ideal for fertilization.

Progesterone and Other Drugs

Fertility doctors may add another drug to the typical IVF protocol, Progesterone, which can help support a successful pregnancy. This class of hormone drugs can include products like Crinone, Endometrin, and generic Progesterone. If a woman has low levels of the hormone progesterone, she may be more prone to miscarriage or failure of the fertilized egg to implant in the uterine wall. This is because the hormone progesterone plays an important role in preparing the lining of the uterus for pregnancy and maintaining that lining during pregnancy. By supplementing a woman's progesterone levels, a fertility doctor hopes to help her maintain her pregnancy. Similarly, some fertility doctors may prescribe drugs like Aspirin or Heparin which can help prevent blood clots and inflammation, reducing the chance of miscarriage by ensuring a steady supply of oxygen and a

healthy environment in the womb.

The Atypical IVF Protocol

Although some women have infertility from lack of ovulation for unexplained reasons, some women have infertility for specific reasons, like a hormone imbalance. This can include hyperprolactinemia or polycystic ovary syndrome (PCOS). In these cases, doctors may prescribe a specific drug to treat these underlying causes of infertility.

Dopamine Agonist

Dopamine agonists include drugs like Dostinex or Bromocriptine for hyperprolactinemia. In hyperprolactinemia, the body produces high levels of the hormone prolactin. These high prolactin levels in the blood can cause irregular menstrual periods, among other symptoms, interfering with fertility. By treating the hyperprolactinemia with dopamine agonists, the fertility doctor can help the patient experience more regular menstrual cycles, improving her fertility.

Insulin-Lowering Drugs

Insulin-lowering drugs include drugs like Metformin, Glucophage, or Pioglitazone. When a woman has PCOS, high insulin levels in the blood can trigger male hormones to increase, interfering with ovulation. By treating the high insulin levels with insulin-lowering drugs, the fertility doctor can help their patient lower her levels of male hormones and to ovulate regularly, increasing her chance of pregnancy.

What does it all mean?

When it comes to IVF treatments, and fertility treatments in general, the bottom line is that everyone is different. What worked for your best friend or your Facebook buddies may not be what is best for you. Speak to a fertility specialist who can help determine why you are having trouble conceiving and the best way to help you. By targeting infertility with individual treatments, your fertility doctor can give hopeful mothers like you the best chance at a successful pregnancy.

More information about in vitro fertilization

- [IVF Treatment Centers](#)
- [Infertility and In Vitro Fertilization](#)
- [In Vitro Fertilization \(IVF\) Overview](#)
- [Ovarian Stimulation IVF Protocols](#)