

Leuprolide (Lupron®) – GYN

Overview

- The generic drug name is leuprolide (loo-PROE-lide). Lupron® is a brand name. There may be other names for this medication..
- Leuprolide is used to treat ovarian, breast, and endometrial cancer in women, as well as endometriosis and infertility. In addition, it may be given to suppress menstrual periods and protect the ovaries during chemotherapy. Using leuprolide during some types of chemotherapy treatments may increase the chances your menstrual periods will return when treatment ends.
- During the first 2 weeks after starting leuprolide, your estrogen levels may temporarily increase, which can cause bloating, tender breasts, and weight gain. After 2 weeks, estrogen levels will drop.
- Lupron Depot® is injected into muscle (intramuscular or IM). It is typically given every month or every 3 months, depending on the formulation. Your doctor will discuss your options and when you need to return for a follow up visit.

How Does it Work?

Leuprolide is in a class of medications called gonadotropin-releasing hormone (GnRH) agonists. At first, it stimulates your ovaries, causing them to make more estradiol (estrogen). After about 2 weeks, a decrease in the sex hormones released by the pituitary gland, Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH), signals the ovaries to stop making estrogen, and estrogen levels drop significantly. Estrogen is one of two main sex hormones in women. The spike in estrogen at puberty causes the growth of breasts and pubic hair, and the start of monthly ovulation (release of eggs from the ovary) and periods (menstruation). Estrogen also plays a key role in controlling the menstrual cycle, maintaining pregnancy; and protecting bone health. Estrogen may affect your brain function, mood, bones, heart, and skin. Estrogen is primarily made in the ovaries, and by the placenta during pregnancy.

If you are premenopausal (have not gone through menopause and still get monthly periods) and your estrogen levels are very low, your ovaries will not release an egg (anovulation) and therefore, you will not have your monthly periods. You may also have side effects from low estrogen.

What are the Side Effects of Low Estrogen?

About 2 weeks after starting leuprolide, your estrogen levels drop significantly and you may have side effects similar to the symptoms of menopause - hot flashes, sweating, joint pain, acne, body aches, headache, and decreased interest in sex. If used over a long period of time, your bones may become weaker/more porous (osteopenia). If bones continue to weaken, you may develop osteoporosis, which will put you at greater risk for bone fractures. Your provider may suggest you take vitamin D and calcium supplements and have your bone density tested.

Does Leuprolide Protect Against Pregnancy or Sexually Transmitted Infections (STIs)?

Though this medication may stop your periods, it is NOT a form of birth control. You may still get pregnant, even if your periods are lighter or have stopped. If you are of childbearing age, you will need to use birth control. Leuprolide does not protect against sexually transmitted infections.

When Should I Call My Doctor?

Call your doctor right away if you:

- get a sudden, strong headache
- have heavy vaginal bleeding
- are vomiting (for no known cause)
- faint or pass out
- have eye problems (change in eyesight, inability to move your eyes)
- **could** be pregnant