



Leuprolide

(loo proe' lide)

Contents of this page:

- [About your treatment](#)
- [Other uses for this medicine](#)
- [Precautions](#)
- [Side effects](#)
- [Storage conditions](#)
- [In case of emergency/overdose](#)
- [Special instructions](#)
- [Brand names](#)
- [Other names](#)

About your treatment

Your doctor has ordered the drug leuprolide to help treat your illness. Leuprolide comes as a solution (Lupron) that is injected subcutaneously (just under the skin) and is usually given once daily. Leuprolide also comes as a long-acting suspension (Eligard) that is injected subcutaneously and is usually given every 1, 3, 4, or 6 months. This medication also comes as a long-acting suspension that is injected intramuscularly (into a muscle) and is usually given once a month (Lupron Depot, Lupron Depot-PED) or every few months (Lupron Depot-3 month, Lupron Depot-4 month). Leuprolide is also available as an implant (a small, thin metal tube containing medication) (Viadur) that is inserted under the skin and is usually given once a year.

Leuprolide is used to treat:

- symptoms of advanced prostate cancer in men
- endometriosis (condition in which cells normally found in the uterus become implanted in other areas of the body) in women
- uterine fibroids (noncancerous growths in the uterus) in women
- central precocious puberty (a condition causing children to enter puberty too soon, resulting in accelerated bone growth and the development of sexual characteristics) in girls usually younger than 8 years of age and in boys usually younger than 9 years of age

If you receive leuprolide long-acting suspension (Eligard) as a subcutaneous injection, you may notice a small bump when you first receive an injection. This bump should eventually go away.

If you receive leuprolide as an implant under the skin, keep the area where the implant was inserted clean and dry for 24 hours. Do not swim or bathe during this time. Cover the area with a bandage for a few days until the wound heals. Avoid heavy lifting and physical activity for 48 hours after receiving the implant and avoid bumping the area around the implant for a few days.

Leuprolide prescribed for children with precocious puberty will likely be discontinued by your child's doctor before age 11 for girls and age 12 for boys.

Leuprolide is in a class of drugs known as gonadotropin-releasing (GnRH or LH-RH) hormone agonists. It decreases the production of testosterone (male hormone) in men and estrogen (female hormone) in women. Decreasing the production of these hormones is

desirable because they stimulate the growth of the diseased cells involved in prostate cancer and endometriosis, and they stimulate the development of sexual characteristics in children with early puberty.

Your doctor will tell you how long your treatment with leuprolide will last. When used to treat advanced prostate cancer, leuprolide controls the symptoms of prostate cancer but does not cure it. Continue to use leuprolide even if you feel well. Do not stop using leuprolide without talking to your doctor.

If your doctor has told you or your caregiver to give a subcutaneous injection of leuprolide, follow these steps:

- Wash your hands well with soap and water.
- Look at the liquid in the container. If the liquid is cloudy or contains particles, do not use it and call your pharmacist.
- If using a new container of leuprolide, flip off the plastic cover to expose the gray rubber stopper. Wipe the metal ring and rubber stopper on the container with an alcohol wipe, just before each use.
- Remove the outer wrapping from a new syringe. Pull the plunger back until the tip of the plunger is at the right mark for your dose. If you do not know the right mark for your dose, call your doctor or pharmacist.
- Carefully pull the cover off the needle. Do not touch the needle. Place the container on a clean, flat surface and push the needle through the center of the rubber stopper of the container.
- Push the plunger all the way down to inject air into the container.
- Keep the needle in the container while turning the container straight upside down. Check to make sure the tip of the needle is in the liquid.
- Slowly pull back on the syringe plunger until the syringe fills with liquid to the right mark for your dose.
- While keeping the needle in the container and the container upside down, check for air bubbles in the syringe. If you see any, push the plunger in slowly to push the air bubbles out of the syringe. Keep the tip of the needle in the liquid and pull the plunger back again to fill the syringe to the mark for your dose.
- Remove the needle from the container and lay the syringe down on a clean, flat surface without touching the needle or touching it to any surface. Carefully recap the syringe if it will be left for a period of time.
- Choose an injection spot and clean it with a new alcohol wipe. Use a different injection spot each day.
- Hold the syringe in one hand and pull up skin at the injection spot with the other hand.
- While holding the syringe like a pencil, quickly insert the needle all the way into the skin at a 90 degree angle.
- Push the plunger in to inject the complete dose of leuprolide.
- Pull the needle out from the skin at the same angle it was inserted. Dab an alcohol wipe on the skin at the injection spot.
- Throw the syringe and needle away in a puncture-resistant container out of the reach of children. Talk to your doctor or pharmacist about the proper way to throw away syringes and needles.
- Do not try to get every last drop of medication out of the leuprolide container. There is extra medication in the container so that you can withdraw the recommended number of doses without drawing air into the syringe.
- Ask your pharmacist or doctor for a copy of the manufacturer's information for the patient.

Other uses for this medicine

This medication is sometimes prescribed for other uses; ask your doctor or pharmacist for more information.

Precautions

Before taking leuprolide,

- tell your doctor and pharmacist if you are allergic to leuprolide; any of the ingredients in leuprolide injection or implant; other gonadotropin-releasing hormones including gonadorelin hydrochloride (Factrel), goserelin (Zoladex), or nafarelin (Synarel); any other medications; or benzyl alcohol. Ask your doctor or pharmacist if you are not sure if a medication you are allergic to is a gonadotropin-releasing hormone. Ask your pharmacist for a list of ingredients in leuprolide injection and leuprolide implant.

- tell your doctor and pharmacist what prescription and nonprescription medications, nutritional supplements, and herbal products you are taking or plan to take. Be sure to mention aluminum-containing antacids; cancer chemotherapy corticosteroids such as dexamethasone (Decadron, Dexone), methylprednisolone (Medrol), and prednisone (Deltasone); cyclosporine (Neoral, Restasis, Sandimmune); diuretics ('water pills'); heparin; lanthanum carbonate (Fosrenol); lithium; medications to control seizures; medications for thyroid disease; phenothiazines; sevelamer (Renagel); or tetracycline.
- tell your doctor if you have a history of drinking alcohol or using tobacco products for a long period of time; or if you have or have ever had anorexia nervosa (an eating disorder), cancer of the spine (backbone), Cushing's disease (condition where adrenal gland produces excess cortisol), diabetes, high cholesterol or lipids (fats in the blood), malabsorption disease (difficulty absorbing nutrients from food), osteoporosis (condition where bones are thin and more likely to break), rheumatoid arthritis, abnormal vaginal bleeding which has not been evaluated or diagnosed by a doctor, urinary obstruction in men (blockage that causes difficulty urinating), or heart, kidney, liver, parathyroid, or thyroid disease.
- you should know that leuprolide may interfere with the normal menstrual cycle (period) in women who have not been through menopause. However, if leuprolide causes amenorrhea (stopping of the menstrual cycle) while you are using it, you should not assume that you cannot get pregnant. Leuprolide should not be used by women who are pregnant or who may become pregnant. Use a reliable method of birth control to prevent pregnancy while using leuprolide. Ask your doctor what type of birth control is best for you. If you become pregnant while using leuprolide, call your doctor immediately. Leuprolide may harm the fetus. Leuprolide should not be used in women who are breast-feeding.
- you should know that this medication may decrease sperm production in men. However, you should not assume that you cannot get a woman pregnant while using leuprolide.

Side effects

Leuprolide may cause side effects. Tell your doctor if any of these symptoms are severe or do not go away:

- weakness
- headache
- dizziness
- hot flashes (a sudden wave of mild or intense body heat)
- sweating or night sweats
- tiredness
- nausea
- vomiting
- diarrhea
- constipation
- loss of appetite
- change in weight
- increased need to urinate, especially at night
- breast tenderness or change in breast size in both men and women
- decrease in sexual desire in men and women or ability to perform in men
- decrease in size of testicles
- vaginal discharge, dryness, or itching in women
- absence of menstrual periods in women
- spotting (light vaginal bleeding)
- swelling of the hands, feet, ankles, or lower legs
- depression
- difficulty concentrating
- anxiety or nervousness
- difficulty with memory
- difficulty falling asleep or staying asleep
- flu-like symptoms
- muscle aches

- itching, swelling, burning, stinging, pain, bruising, redness, or development of a sore at injection spot
- firmness or hardness at subcutaneous injection spot
- bleeding, bruising, burning, pain, pressure, itching, swelling, or redness at the place where the implant was inserted
- hair loss
- acne

Some side effects can be serious. If you experience any of the following symptoms, call your doctor immediately:

- hives
- rash
- itching
- difficulty breathing or swallowing
- numbness, tingling, weakness, or pain in the feet or lower legs
- painful or difficult urination
- blood in urine
- bone pain
- testicular or prostate pain
- inability to move arms or legs

There is an increased risk of osteoporosis (condition in which the bones become weak and fragile and can break easily) while using leuprolide. Talk with your doctor about the risks of using leuprolide.

In children receiving leuprolide for early puberty, signs of sexual development may not decrease or may increase during the first few weeks of treatment. In girls receiving leuprolide for early puberty, the onset of menstruation or spotting (light vaginal bleeding) may occur during the first two months of treatment. If bleeding continues beyond the second month, call your doctor.

Leuprolide may cause other side effects. Call your doctor if you have any unusual problems while using this medication.

If you experience a serious side effect, you or your doctor may send a report to the Food and Drug Administration's (FDA) MedWatch Adverse Event Reporting program online [at <http://www.fda.gov/MedWatch/index.html>] or by phone [1-800-332-1088].

Storage conditions

If you are receiving leuprolide injections at home, keep leuprolide in the carton it came in and out of reach of children. Keep syringes and needles out of reach of children. Store leuprolide at room temperature and away from light, excess heat (such as a radiator) and moisture (not in the bathroom). Do not allow leuprolide to freeze. Throw away any medication that is outdated or no longer needed. Talk to your pharmacist about the proper disposal of your medication.

In case of emergency/overdose

In case of overdose, call your local poison control center at 1-800-222-1222. If the victim has collapsed or is not breathing, call local emergency services at 911.

Special instructions

- Keep all appointments with your doctor and the laboratory. Your doctor will order certain lab tests to check your body's response to leuprolide.
- Before having any laboratory tests, tell your doctor and the laboratory personnel that you are using leuprolide.
- If you are receiving your leuprolide injections at home, do not run out of leuprolide. Tell your pharmacist when you will need more leuprolide so that it will be at the pharmacy when you need it.

- If you have a leuprolide implant and your doctor prescribes an X-ray or MRI, the implant will not be affected but will be seen on the films. Before having an X-ray or MRI, tell the medical personnel that you have a leuprolide implant.

Brand names

- Eligard®
- Lupron®
- Lupron Depot®
- Lupron Depot®-3 Month
- Lupron Depot®-4 Month
- Lupron Depot-PED®
- Viadur®

Other names

- Leuprorelin Acetate

Last Reviewed - 09/01/2008