# Enoxaparin

## Names

The generic drug name is enoxaparin. Lovenox® is the brand name. There may be other brand names for this medication.

## How is Enoxaparin Administered?

Enoxaparin comes in a syringe to be injected just under the skin (subcutaneously), usually in the stomach area. You must use a different area of the stomach for each injection. Enoxaparin is not injected into your muscle. Each syringe contains enough medication for one shot. Follow the directions on your prescription label carefully, and ask your doctor or pharmacist to explain anything you do not understand.

To inject enoxaparin, follow these instructions:
- Wash your hands and the area of skin where you will give the shot.
- Look at the syringe to be sure the drug is clear or pale yellow.
- Take the cap off the needle. Do not push any medication out of the syringe before giving the shot unless your nurse/doctor tells you to.
- Lie down and pinch a fold of skin between your fingers and thumb. Push the entire needle into the skin and then press down on the syringe plunger. Hold onto the skin the entire time you give the shot. Do not rub the site after you give the shot.

If you have questions about where to give the shot, ask your health care provider. **Each syringe and needle should be used one time – do NOT reuse a syringe or the needle.**

## Why am I taking this Drug and How Does it Work?

Enoxaparin is used to prevent and treat blood clots. It is a type of anticoagulant medication (low molecular weight heparin) that stops the formation of substances that cause blood clots.

## What Should I Tell My Doctor Before I Begin?

Tell your doctor if you:
- are allergic to enoxaparin, heparin, or any pork products
- have an artificial heart valve or a bleeding disorder (current bleeding)
- have or have ever had kidney disease, an infection in your heart, a stroke, ulcers, or a low platelet count
- if you are pregnant or breastfeeding

**This drug may interact with other medications. Tell your doctor and pharmacist about all prescription or over-the-counter medications, vitamins, herbal or diet supplements you take.**
What Are Some Possible Side Effects?

- Upset stomach
- Fever
- Irritation or burning at the injection site

When Should I Call the Doctor?

Call your doctor immediately if you have:

- unusual bruising or bleeding: bleeding lasts more than 10-15 minutes or that causes dizziness; black or bloody stools; vomit that is bloody or that looks like coffee grounds; blood in your urine or phlegm/mucus, unusually heavy menstrual bleeding, spontaneous bleeding from your gums or nose, or superficial bleeding into the skin that appears as a rash of pinpoint-sized reddish-purple spots (petechiae)
- any sign of infection: Fever of 100.4°F (38°C) or higher, chills, cough, sore throat, pain or burning upon urination; redness or tenderness along a vein, at an IV site, or at any other wound or skin irritation
- numbness, tingling, leg weakness or swollen ankles and/or feet
- loss of control over your bladder or bowels

What Else Should I Know About Enoxaparin?

- Continue to use enoxaparin even if you feel well. Do not stop taking enoxaparin without talking to your doctor.
- If you are having surgery, including dental surgery, tell the doctor or dentist that you are taking enoxaparin.
- Inject the missed dose as soon as you remember it. However, if it is almost time for the next dose, skip the missed dose and continue your regular dosing schedule. Do not inject a double dose.
- Store the syringes at room temperature and away from excess heat and moisture (not in the bathroom). Do not use the syringe if it leaks or if the fluid is dark or contains particles.
- Keep all appointments with your doctor and the laboratory. Your doctor will order certain lab tests to monitor your enoxaparin therapy.
- If you have epidural or spinal anesthesia or a spinal puncture while taking a "blood thinner" such as enoxaparin, you are at risk for collection of blood in the spinal column that could cause you to become paralyzed. Be sure all your doctors know all the medications you are taking, particularly any medication, vitamin, or supplement that affects blood clotting.
- If you have any questions, please ask your doctor or pharmacist.
Subcutaneous Injections

A subcutaneous injection delivers medication into the fatty tissue just below your skin. Since there is little blood flow in fatty tissue, the medication is absorbed more slowly.

How to Give an Enoxaparin Subcutaneous Injection with a Preloaded Syringe

1. Wash your hands thoroughly to prevent infection.

2. Assemble and check your equipment. Make sure the medication is not cloudy and that there is no sediment. If you see either, throw it away and use a new syringe.

3. Pick a location for the injection. The best sites are areas with a layer of fat between the skin and muscle - the shaded areas on the diagram: the front of the thigh, your belly (at least 1-inch away from your navel), or the upper, outer arm.

   Avoid areas where the skin is red, irritated, bruised, burned, hardened, scarred, or has lumps or stretch marks.

   It is important to rotate injection sites so your skin stays healthy and able to absorb medication. Talk to your nurse to learn more about rotating your injection sites.

4. Clean the area: Using an alcohol swab or pad, clean a 2-inch area around the site you have chosen. Begin at the center of the site and move outward in a circular motion. Allow the skin to dry; this will help avoid stinging during the injection. If your doctor tells you to clean the area differently, always follow your doctor’s directions.

5. Hold the syringe in your dominant hand and use the other hand to pinch a 1-inch fold of skin. This helps prevent injecting the solution into a muscle.
6. Hold the syringe like a pen and with a quick, smooth motion, push the needle into the skin at an angle between 45° and 90° (see diagram). Your doctor or nurse will let you know if you need to use a straight 90° degree angle.

Keep the angled (beveled) side of the needle facing up, towards you.

7. Inject the medication by pushing carefully and slowly on the plunger.

8. Wait briefly and then withdraw the needle at the same angle as it was inserted. Hold a cotton ball or alcohol prep pad over the site – do not rub. If there is any bleeding after 5 seconds, cover with a Band-Aid®.

9. Use each syringe only once. Discard the used syringe into a hard container right away – do not try to get the cap back on.

10. After 2 hours, check the injection site for signs of redness, swelling, or tenderness. If any of these are present and do not go away in a few days, notify your clinic.

Roswell Park has a video on how to give a subcutaneous injection. Because you are using prefilled syringes, you can start the video at time marker 1:37.

Video: https://youtu.be/LNXOFKjTPJc