

Enoxaparin: U.S. Food and Drug Administration-Approved Indications, Dosages, and Treatment Durations

The U.S. Food and Drug Administration (FDA)-approved indications, standard dosages, and treatment durations for enoxaparin are provided in Table 1. The recommended prophylaxis and treatment dosage regimens for patients with severe renal impairment are provided in Table 2.



Table 1: Enoxaparin FDA-Approved Indications, Standard Dosages, and Treatment Durations[1]

Indication	Standard Dosages* and Treatment Durations
DVT prophylaxis, abdominal surgery	40 mg subcutaneously once a day for 7 to 10 days.† Initial dose given 2 hours prior to surgery.
DVT prophylaxis, knee replacement surgery	30 mg subcutaneously every 12 hours for 7 to 10 days.‡ Initial dose given 12 to 24 hours after surgery if hemostasis is established.
DVT prophylaxis, hip replacement surgery	30 mg subcutaneously every 12 hours. Initial dose given 12 to 24 hours after surgery if hemostasis is established. or 40 mg subcutaneously once a day for 7 to 10 days;‡ followed by 40 mg subcutaneously once a day for 3 weeks. Initial dose 9 to 15 hours before surgery.
DVT prophylaxis in medical patients	40 mg subcutaneously once a day for 6 to 11 days.‡
Acute DVT with or without PE, inpatient treatment	1 mg per kg subcutaneously every 12 hours (with warfarin). or 1.5 mg per kg subcutaneously once a day (with warfarin), at the same time every day, for at least 5 days and until a therapeutic oral anticoagulant effect has been achieved.§
Acute DVT without PE, outpatient treatment	1 mg per kg subcutaneously every 12 hours (with warfarin) for at least 5 days and until a therapeutic oral anticoagulant effect has been achieved.§
Unstable angina and NSTEMI	1 mg per kg subcutaneously every 12 hours (with 100 mg to 325 mg of oral aspirin once a day) for at least 2 days, and until clinical stabilization (usually 2 to 8 days).
Acute STEMI in patients younger than 75 years old	30 mg intravenous (IV) bolus plus a 1 mg per kg subcutaneous dose (maximum of 100 mg for the first 2 doses only) followed by 1 mg per kg subcutaneously every 12 hours (with 75 mg to 325 mg of aspirin once daily, unless contraindicated). In clinical trials, enoxaparin was administered for 8 days or until hospital discharge, whichever came first. An optimal duration of therapy has not been established but it is likely to be longer than 8 days.

Table 1: Enoxaparin FDA-Approved Indications, Standard Dosages, and Treatment Durations[1] (cont.)

Indication	Standard Dosages* and Treatment Durations
Acute STEMI in patients 75 years old or older	0.75 mg per kg subcutaneously every 12 hours (maximum of 75 mg for the first 2 doses only; with 75 mg to 325 mg of aspirin once daily, unless contraindicated); do not give an initial IV bolus. In clinical trials, enoxaparin was administered for 8 days or until hospital discharge, whichever came first. An optimal duration of therapy has not been established but it is likely to be longer than 8 days.
Acute STEMI managed with PCI	If the last subcutaneous dose was administered less than 8 hours before balloon inflation, additional dosing is not necessary; if the last subcutaneous dose was administered more than 8 hours before balloon inflation, an IV bolus of 0.3 mg per kg should be given.

DVT = deep vein thrombosis

PCI = percutaneous coronary intervention

PE = pulmonary embolism

NSTEMI = non-Q-wave elevation myocardial infarction

STEMI = ST-segment elevation myocardial infarction

* An adjustment should be made to the standard dosage regimen in patients with severe renal failure. Refer to Table 2.

† Enoxaparin was administered for up to 12 days in clinical trials.

‡ Enoxaparin was administered for up to 14 days in clinical trials.

§ Until International Normalization Ratio (INR) is 2 to 3. Enoxaparin was administered for up to 17 days in clinical trials.

|| Enoxaparin was administered for up to 12.5 days in clinical trials.

Table 2: Enoxaparin Dosage Regimens for Patients with Severe Renal Impairment*[2]

Indication	Dosage Regimen
DVT prophylaxis, abdominal surgery	30 mg subcutaneously once a day
DVT prophylaxis, knee replacement surgery	30 mg subcutaneously once a day
DVT prophylaxis, hip replacement surgery	30 mg subcutaneously once a day
DVT prophylaxis in medical patients during acute illness	30 mg subcutaneously once a day
Acute DVT with or without PE, inpatient treatment	1 mg per kg subcutaneously once a day (with warfarin)
Acute DVT without PE, outpatient treatment	1 mg per kg subcutaneously once a day (with warfarin)

Table 2: Enoxaparin Dosage Regimens for Patients with Severe Renal Impairment*[2] (cont.)

Indication	Dosage Regimen
Unstable angina and NSTEMI	1 mg per kg subcutaneously once a day (with aspirin)
Acute STEMI in patients younger than 75 years old	30 mg intravenous (IV) bolus plus a 1 mg per kg subcutaneous dose followed by 1 mg per kg subcutaneously once a day (with aspirin)
Acute STEMI in patients 75 years old or older	1 mg per kg subcutaneously once a day (with aspirin); do not give IV bolus

DVT = deep vein thrombosis NSTEMI = non-Q-wave myocardial infarction PE = pulmonary embolism STEMI = ST-segment elevation myocardial infarction

* Creatinine clearance less than 30 ml per minute.

To see the electronic version of this dosing table and the other products included in the “Enoxaparin” Toolkit, visit the Medicaid Program Integrity Education page at <https://www.cms.gov/Medicare-Medicaid-Coordination/Fraud-Prevention/Medicaid-Integrity-Education/Pharmacy-Education-Materials/pharmacy-ed-materials.html> on the Centers for Medicare & Medicaid Services (CMS) website.

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References

- 1 Lovenox® (enoxaparin) prescribing information. (2013, October 23). Retrieved August 13, 2015, from https://www.accessdata.fda.gov/drugsatfda_docs/label/2013/020164s1021bl.pdf
- 2 Lovenox® (enoxaparin) prescribing information. (2013, October 23). Retrieved August 13, 2015, from https://www.accessdata.fda.gov/drugsatfda_docs/label/2013/020164s1021bl.pdf

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