IREDELL HEALTH SYSTEM

Enoxaparin (Lovenox®) Dosing Protocol	
Approved by: Laura Rollings, PharmD, BCPS, BCGP	Last Revised/Reviewed Date: 09/2023
P&T Committee	Date: 10/2023

Policy:
Enoxparin will be dosed optimally while minimizing adverse effects. Monitoring will be according to what is outlined in this protocol.

Patients who have or have had heparin-induced thrombocytopenia (HIT) should not receive enoxaparin.

Dosing

- Actual body weight should be used to calculate doses.
- Treatment doses will be rounded to the nearest 10 mg.
- A fixed dose limit (dose capping) is not recommended.
- If weight fluctuates during course of therapy, pharmacists may automatically make adjustment to dose as appropriate.

Monitoring
A baseline CBC and serum creatinine should be obtained prior to initiating therapy, if not done within the previous 24 hours.

- A serum creatinine will be ordered every 3 days. If the creatinine clearance remains stable for one week, then a serum creatinine will be ordered weekly while on enoxaparin.
- A CBC will be ordered every 3 days. If the platelets and hemoglobin remain stable for two weeks, and there are no signs of bleeding, then a CBC will be ordered weekly while on enoxaparin.
- Pharmacists may order labs if needed.

The provider will be contacted:

- if the platelet count is less than 100,000/mm^3 or decreases by more than 30%
- if the hemoglobin drops 3 grams from baseline
- for visible signs or suspicion of bleeding (neurological changes, joint pain, abdominal/flank pain, etc.), or
- if stool is positive for blood
- if the patient has an indwelling epidural or intrathecal catheter.

Enoxaparin should be started no sooner than:

- 4 hours after an epidural catheter is removed;
- 12 hours after epidural catheter is placed or spinal puncture is made;
- 12 hours after Caesarean section.

If more than one of the above situations applies, the longest wait time should be observed before starting enoxaparin.

Indication	CrCl ≥ 30 mL/min	CrCl ≥ 20 and < 30 mL/min
DVT Prophylaxis		
Total knee replacement	30 mg SQ q 12h	30 mg SQ q day
Total hip replacement	40 mg SQ q day **or** 30 mg SQ q 12 hours	30 mg SQ q day
Medical and Surgical Patients	40 mg SQ q day	30 mg SQ q day
Obese Patients - **(BMI ≥ 40 kg/m^2; pregnant women excluded)**	40 mg SQ q12 hours	40 mg SQ q day
Pharmacists may automatically reduce the prophylactic dosage / frequency of enoxaparin, when appropriate, based on indication and renal function (CrCl < 30 mL/min). Pharmacists may automatically increase the prophylactic dosage / frequency of enoxaparin in female patients weighing at least 45 kg or male patients weighing at least 57 kg with a CrCl ≥ 30 mL/min. If the CrCl is < 20 mL/min, the pharmacist will contact the provider to suggest the use of an alternative agent.		
DVT Treatment (w/ or w/o PE)	1 mg/kg SQ q12h **or** 1.5 mg/kg SQ q24h **Note**: the q12h regimen is preferred to the q24h regimen in obesity and cancer. Provider must be contacted prior to making change in frequency for such case.	1 mg/kg SQ q day
Acute Coronary Syndrome (Unstable angina, Non-Q wave MI)	1 mg/kg SQ q12h	1 mg/kg SQ q day
Acute STEMI		
< 75 years of age	30 mg IV bolus plus 1 mg/kg SQ followed by 1 mg/kg q12h SQ (maximum 100 mg for each of the first 2 SQ doses only)	30 mg IV bolus plus 1 mg/kg SQ followed by 1 mg/kg SQ q day
≥ 75 years of age	No initial IV bolus. 0.75 mg/kg q12h SQ (maximum 75 mg for each of the first 2 doses only)	No initial IV bolus. 1 mg/kg SQ q day

INITIAL EFFECTIVE DATE: 12/2008
DATES REVISIONS EFFECTIVE: 09/2009, 02/2016, 10/2018, 12/2018, 09/2020, 08/2021, 10/2023
DATES REVIEWED (no changes):