

Clinical Policy: Enoxaparin (Lovenox)

Reference Number: CP.PHAR.224

Effective Date: 05.01.16

Last Review Date: 02.20

Line of Business: Commercial, Medicaid

[Coding Implications](#)
[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Enoxaparin (Lovenox[®]) is a low molecular weight heparin (LMWH).

FDA Approved Indication(s)

Lovenox is indicated:

- For prophylaxis of deep vein thrombosis (DVT), which may lead to pulmonary embolism pulmonary embolism (PE):
 - In patients undergoing
 - Abdominal surgery who are at risk for thromboembolic complications;
 - Hip replacement surgery, during and following hospitalization;
 - Knee replacement surgery;
 - In medical patients who are at risk for thromboembolic complications due to severely restricted mobility during acute illness.
- For treatment of acute DVT:
 - Inpatient treatment of acute DVT with or without PE, when administered in conjunction with warfarin sodium.
 - Outpatient treatment of acute DVT without pulmonary embolism when administered in conjunction with warfarin sodium.
- For prophylaxis of ischemic complications of unstable angina and non-Q-wave myocardial infarction, when concurrently administered with aspirin.
- For treatment of acute ST-elevation myocardial infarction (STEMI).

Policy/Criteria

Provider must submit documentation (including such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation[®] that Lovenox is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Thrombosis/Thromboembolism* (must meet all):

1. Any of the following indications (a, b, or c):
 - a. Thrombosis or thromboembolism prevention associated with any of the following conditions:
 - i. Cancer;
 - ii. Unstable angina or myocardial infarction;
 - iii. Atrial fibrillation or prosthetic heart valve;

- iv. Major surgery - orthopedic or non-orthopedic;
- v. Critical illness related to ICU admissions or events;
- vi. Restricted mobility associated with acute illnesses or conditions;
- vii. Implanted devices-vascular (e.g., central venous access device, umbilical venous catheter, devices/fistulas related to hemodialysis, ventricular assist devices);
- b. Thrombosis or thromboembolism treatment;
- c. Short-term prophylaxis for transition to or from oral anticoagulation.

Approval duration:**Medicaid** – 6 months**Commercial** – 6 months or to the member’s renewal date, whichever is longer**Includes off-label use for adults and pediatrics.***B. Anticoagulation in Pregnancy: Ante- and Postpartum (off-label) (must meet all):**

1. Any of the following indications:
 - a. Acute venous thrombosis during current pregnancy;
 - b. Prior venous thrombosis;
 - c. Receiving long-term therapy with a vitamin K antagonist (e.g., warfarin);
 - d. Prosthetic heart valve;
 - e. Inherited thrombophilia;
 - f. Antiphospholipid antibody syndrome;
 - g. Development of severe ovarian hyperstimulation syndrome post assisted reproduction;
 - h. Cesarean section – current pregnancy and request is for the postpartum period;
 - i. Any other indication not listed here that is listed in section I.A.
2. Member is pregnant or < 6 months postpartum.

Approval duration:**Medicaid/HIM** – Antepartum (to estimated delivery date); postpartum (6 months)**Commercial** – Antepartum (to estimated delivery date); postpartum (6 months)**C. Other diagnoses/indications**

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial and CP.PMN.53 for Medicaid.

II. Continued Therapy**A. Thrombosis/Thromboembolism (must meet all):**

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. Continued use is limited to any of the following indications (a, b, or c):
 - a. Venous thrombosis prophylaxis or treatment in the presence of cancer;
 - b. Past history of failed anticoagulation therapy (clot development) on a non-LMWH* (e.g., failed therapy on heparin, fondaparinux, warfarin, apixaban, dabigatran, edoxaban, rivaroxaban);

- c. Any other indication in section I.A where bridging to warfarin is inappropriate or member has a contraindication to warfarin and extended (indefinite duration) anticoagulation therapy is required.

Approval duration:

Medicaid – 6 months

Commercial – 6 months or to the member’s renewal date, whichever is longer

**LMWHs include enoxaparin and dalteparin.*

B. Anticoagulation in Pregnancy: Ante- and Postpartum (off-label) (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. Member is responding positively to therapy;
3. See Section II.A for continued anticoagulation therapy beyond 6 months postpartum.

Approval duration:

Medicaid – Antepartum (to estimated delivery date); postpartum (6 months)

Commercial – Antepartum (to estimated delivery date); postpartum (6 months)

C. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial and CP.PMN.53 for Medicaid or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

DVT: deep vein thrombosis

PE: pulmonary embolism

LMWH: low molecular weight heparin

STEMI: ST-elevation myocardial infarction

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - Active major bleeding
 - History of immune-mediated heparin-induced thrombocytopenia (HIT) within the past 100 days or in the presence of circulating antibodies

- Known hypersensitivity to enoxaparin sodium (e.g., pruritus, urticaria, anaphylactic/anaphylactoid reactions)
- Known hypersensitivity to heparin or pork products
- Known hypersensitivity to benzyl alcohol (which is in only the multidose formulation of Lovenox)
- Boxed warning(s): Spinal/epidural hematomas

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Adults		
DVT prophylaxis in abdominal surgery	40 mg SC once daily	Dose as specified; duration may vary.
DVT prophylaxis in knee replacement surgery	30 mg SC every 12 hours	
DVT prophylaxis in hip replacement surgery	30 mg SC every 12 hours or 40 mg SC once daily	
DVT prophylaxis in medical patients	40 mg SC once daily	
Inpatient treatment or acute DVT with or without PE	1 mg/kg SC every 12 hours or 1.5 mg/kg SC once daily	
Outpatient treatment of acute DVT without PI	1 mg/kg SC every 12 hours	
Unstable angina and non-Q wave MI	1 mg/kg SC every 12 hours (with aspirin)	
Acute STEMI in patient < 75 years of age	30 mg single IV bolus plus a 1 mg/kg SC dose followed by 1 mg/kg SC every 12 hours (with aspirin)	
Acute STEMI in patient ≥ 75 years of age	0.75 mg/kg SC every 12 hours (no bolus) (with aspirin)	

VI. Product Availability

- Prefilled syringes: 30 mg/0.3 mL, 40 mg/0.4 mL
- Graduated prefilled syringes: 60 mg/0.6 mL, 80 mg/0.8 mL, 100 mg/1 mL, 120 mg/0.8 mL, 150 mg/1 mL
- Multiple-dose vial: 300 mg/3 mL

VII. References

1. Lovenox Prescribing Information. Bridgewater, NJ: Sanofi-Aventis U.S., LLC; December 2018. Available at https://www.accessdata.fda.gov/drugsatfda_docs/label/2018/020164s116lbl.pdf . Accessed October 1, 2019.
2. Executive summary: Antithrombotic therapy and prevention of thrombosis: CHEST guidelines and expert panel reports. Available at <http://www.chestnet.org/Guidelines-and-Resources/CHEST-Guideline-Topic-Areas/Pulmonary-Vascular>. Accessed October 1, 2019. *The CHEST guideline series presents recommendations for the prevention, diagnosis, and*

treatment of thrombosis, addressing a comprehensive list of clinical conditions, including medical, surgery, orthopedic surgery, atrial fibrillation, stroke, cardiovascular disease, pregnancy, and neonates and children.

3. Thromboembolism in pregnancy. Practice Bulletin No. 196. American College of Obstetrics and Gynecologists. *Obstet Gynecol.* July 2018; 132: e1-17.
4. Enoxaparin. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at nccn.org. Accessed November 7, 2018.
5. Cancer-associated venous thromboembolic disease (Version 1.2019). In: National Comprehensive Cancer Network Clinical Practice Guidelines. Available at nccn.org.
6. Kearon C, Akl EA, Omelas J, et al. Antithrombotic Therapy for VTE Disease: CHEST Guideline and Expert Panel Report. *Chest* 2016;149:315-352.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J1650	Injection, enoxaparin sodium, 10 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy combines Lovenox information from the CP.PHAR.04.LMWH policy and the CP.PHAR.45 Anticoagulant Therapy Pregnancy policy. Added indication for “Thromboembolic complications due to acute thromboembolic stroke with impaired mobility.” Removed STEMI as an outpatient indication. Added bridge to or contraindication to warfarin for DVT without PE. Added “platelet count of < 100,000/mm ³ ” as a discontinuation reason per PI. Added requirement for additional VTE risk factor for Cesarean section indication, as well as bridge to warfarin if anticoagulation therapy is required > 6 weeks. Added an indication for receiving long-term therapy with a vitamin K antagonist per the Chest guidelines. Added continuation criteria for VTE in the presence of cancer. Specialist reviewed.	04.16	05.16
Section I.A. Criteria are edited to follow CHEST 2012 and 2016 in addition to labeled indications. Major additions include 1) prophylaxis: hip fracture, major orthopedic, general, cardiac, thoracic surgery, craniotomy; traumatic injury; critical illness;	04.17	05.17

Reviews, Revisions, and Approvals	Date	P&T Approval Date
<p>restricted mobility due to intracerebral hemorrhage, STEMI; a-fib, prosthetic heart valve; 2) treatment: PE; SVT; CVST; splanchnic thrombosis without cancer; nonbacterial thrombotic endocarditis. Warfarin bridging criteria are moved to renewal criteria. Safety information is removed. Section I.B. Removed required risk factors.</p> <p>Section II. Criteria are edited to follow CHEST 2016 guidelines. Major additions include 1) recurrent venous thrombosis on a non-low molecular weight heparin, 2) any other indication in section I.A., where bridging to warfarin is inappropriate or member has a contraindication to warfarin and extended (indefinite) anticoagulation therapy is required.</p>		
<p>1Q18 annual review:</p> <ul style="list-style-type: none"> - Combined policies for Medicaid and commercial lines of business - Section I.A., Venous Thrombosis, is changed to “Thrombosis and Thromboembolism” so as not to restrict to venous thrombi. <p>Section I.A criteria are edited to encompass CHEST guidelines for neonates and children (seen primarily under implantable devices), and the criteria is collapsed to maximize consistency across the Lovenox, Fragmin and Arixtra policies.</p> <ul style="list-style-type: none"> - Per specialist recommendation an additional indication is added for short-term prophylaxis to or from oral anticoagulation. <p>Continuation criteria added for pregnancy.</p> <ul style="list-style-type: none"> - References reviewed and updated. 	12.01.17	02.18
<p>1Q 2019 annual review; no significant changes; references reviewed and updated.</p>	11.13.18	02.19
<p>1Q 2020 annual review: no significant changes; references reviewed and updated.</p>	11.01.19	02.20

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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