



Appendix C: Parenteral Medications for the Treatment and Prevention of Venous Thromboembolism

For DOAC medication table, see [BC Guidelines: Direct Oral Anticoagulants](#) and [BC Guidelines: Warfarin](#) for dosing and therapeutic considerations.

Name/Dosage forms	Adult Dosage ^A	Cost per month ^B	PharmaCare Coverage ^C	Therapeutic Considerations ^D
Low molecular weight heparin (LMWH)				
Dalteparin <i>FRAGMIN</i> Prefilled syringes: 2500, 3500, 5000, 7500, 10,000, 12,500, 15,000, 16,500, 18,000 units Ampoule: 10,000 units/mL Multi-dose vial: 25,000 units/mL	200 units/kg subcut daily ^{1,2} OR 100 units/kg subcut BID ^{1,2}	\$1120	Limited Coverage	<ul style="list-style-type: none"> Contraindicated/avoid use^{1,2}: <ul style="list-style-type: none"> CrCl < 30 mL/min History of heparin-induced thrombocytopenia (HIT) Septic endocarditis, severe uncontrolled hypertension Bleeding/major clotting disorders, diabetic or hemorrhagic retinopathy Spinal/epidural anesthesia with treatment dosing Multi-dose vial contains benzyl alcohol - avoid use in pregnancy² Cannot be used interchangeably unit for unit with unfractionated heparin or other LMWHs² Consider BID dosing if > 100 kg¹ or increased risk of bleeding² May increase risk of hyperkalemia in DM, CKD, use with K+ sparing medications² Drug interactions: caution with anticoagulants, platelet inhibitors, NSAIDs, thrombolytic agents²
Enoxaparin <i>LOVENOX</i> , biosimilars Prefilled syringes: 30, 40, 60, 80, 100, 120, 150 mg Multi-dose vial: 100 mg/mL	1.5 mg/kg subcut daily ¹ OR 1 mg/kg subcut BID ¹	\$540 (daily) \$755 (BID)	Limited Coverage	<ul style="list-style-type: none"> Contraindicated/avoid use: same as dalteparin 1.5 mg/kg is equivalent to 150 units/kg³ 1 mg/kg BID is recommended for complicated thromboembolic disorders, e.g., cancer, increased risk of recurrent VTE or symptomatic PE³
Nadroparin <i>FRAXIPARINE</i> Prefilled syringes: 1900, 2850, 3800, 5700, 9500, 11,400, 15,200, 19,000 units	171 units/kg subcut daily ^{1,4} OR 86 units/kg subcut BID ^{1,4}	\$355 (daily) \$590 (BID)	Limited Coverage	<ul style="list-style-type: none"> Contraindicated/avoid use: same as dalteparin 11,400, 15,200 and 19,000 unit prefilled syringes are graduated, which allows for administration of adjusted dosages

Name/Dosage forms	Adult Dosage ^A	Cost per month ^B	PharmaCare Coverage ^C	Therapeutic Considerations ^D
Tinzaparin <i>INNOHEP</i> Prefilled syringes: 2500, 3500, 4500, 8000, 10,000, 12,000, 14,000, 16,000, 18,000 units Multi-dose vials: 10,000, 20,000 units/mL	175 units/kg subcut daily ¹	\$1190	Limited Coverage	<ul style="list-style-type: none"> Contraindicated/avoid use: same as dalteparin, except: <ul style="list-style-type: none"> May use if CrCl \geq 20 mL/min, limited data for CrCl $<$ 20 mL/min¹ Multi-dose vials contain benzyl alcohol - avoid use in pregnancy⁵ All syringes and vials are latex-free⁵ 8000 to 18,000 unit prefilled syringes are graduated, which allows for administration of adjusted dosages
Unfractionated heparin				
Heparin generics Vial: 10,000 units/mL	333 units/kg subcut, then 250 units/kg subcut q12h ¹ OR 5000 units iv (or 80 units/kg) then infusion 18 to 20 units/kg/hr to achieve target PTT ¹	\$525 (subcut)	Regular Benefit	<ul style="list-style-type: none"> Contraindicated/avoid use⁶: <ul style="list-style-type: none"> Severe thrombocytopenia, history of HIT If PTT monitoring cannot be performed (iv route), e.g., elevated baseline PTT Narrow therapeutic range, inter-individual variation in anticoagulant effect, need for laboratory monitoring, increased risk of HIT¹ Reserve heparin for the following¹: <ul style="list-style-type: none"> CrCl $<$ 30 mL/min in whom LMWH should be avoided Increased risk of bleeding where rapid reversal may be needed Considered for thrombolytic therapy No PTT monitoring required for subcutaneous regimen¹
Factor Xa inhibitor				
Fondaparinux <i>ARIXTRA</i> , generics Prefilled syringes: 2.5, 5, 7.5, 10 mg	5 mg subcut daily (weight $<$ 50 kg) ⁷ 7.5 mg subcut daily (weight 50 to 100 kg) ⁷ 10 mg subcut daily (weight $>$ 100 kg) ⁷	\$590	Non-benefit	<ul style="list-style-type: none"> Contraindicated/avoid use⁷: <ul style="list-style-type: none"> CrCl $<$ 30 mL/min Thrombocytopenia associated with a positive anti-platelet antibody in presence of fondaparinux Reserve for patients with history of HIT Rare reports of HIT in fondaparinux-treated patients have been reported⁷ Concomitant VKA should be initiated as soon as possible, within 72 h, if platelet count is $>$150 x 10⁹/L. Continue treatment for at least 5 days until INR 2 to 3.⁷ Latex-free stopper and needle shield⁷
Direct thrombin inhibitor				
Argatroban generics Vial: 100 mg/mL Must be diluted prior to infusion	Starting dose: 1 to 2 mcg/kg per min ⁸ by continuous iv infusion. Adjust to achieve target PTT.	NA	Non-benefit	<ul style="list-style-type: none"> Contraindicated/avoid use⁹: <ul style="list-style-type: none"> Hereditary fructose intolerance Reserve for patients with history of HIT⁹

Abbreviations: PTT partial thromboplastin time; CrCl creatinine clearance; CKD chronic kidney disease; DM diabetes mellitus; subcut subcutaneous; K+ potassium; NA pricing information Not Available; VKA vitamin K antagonist.