

LMWH THERAPEUTIC DOSING
For DVT/PE/Atrial Fibrillation
VJH / RIH / EKH / KB / PRH / SLH / QVH

Weight (kg)

 Bulleted orders are initiated by default, unless crossed out and initialed by the physician/prescriber. Boxed orders () require physician/prescriber check mark () to be initiated.

For VTE Prophylaxis: Refer to the IH VTE Prophylaxis PPO #829495

1. **ALLERGIES:** See Allergy/ADR record
2. **PRIOR TO INITIATING THERAPY:**
 - Obtain current weight of patient in kg
 - Discontinue previous heparin, low-molecular weight heparin (LMWH) or oral anticoagulant therapy (see reverse of page 1 for details)
 - Avoid intramuscular injections
3. **LABORATORY**
 - Baseline CBC, serum creatinine, INR, PTT
 - CBC 24 hours after the start of therapy
 - CBC, serum creatinine on Day 3 and Day 5 of therapy, and then twice weekly thereafter
4. **SPECIAL CONSIDERATIONS: RISK OF THROMBOCYTOPENIA**
 - Consult physician if platelet count falls by 50% or more, and / or the patient develops new thrombosis or skin rash between days 4 to 14 of LMWH administration (heparin induced thrombocytopenia should be considered and a clinical assessment made)
5. **MEDICATIONS** *(select one option below, then proceed to page 2 for dosing)*

 enoxaparin

- no formulary restrictions
- for malignancy associated VTE, use dalteparin
- exclude any possible contraindications prior to starting therapy (see reverse of page 1)

****OR****
 dalteparin

- restricted for use in malignancy associated VTE, clotting in hemodialysis OR renal extracorporeal systems
- exclude any possible contraindications prior to starting therapy (see reverse of page 1)

Date (dd/mm/yyyy) / /	Time	Prescriber's Signature	Printed Name or College ID#
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LMWH THERAPEUTIC DOSING

For Treatment of DVT/PE/Atrial Fibrillation

Vernon Jubilee Hospital / Royal Inland Hospital / East Kootenay / Kootenay Boundary / Shuswap Lake General Hospital / Queen Victoria Hospital

Contraindications^{1,2,3}

- Hypersensitivity to dalteparin, enoxaparin or benzyl alcohol (contained in multidose vial only)
- Active bleeding of clinical significance requiring intervention (e.g. cerebral hemorrhage)
- High risk of serious bleeding or bleeding into a critical site (e.g. intracranial, intraspinal, pericardial, intraocular, retroperitoneal, intra-articular)
- Intra-abdominal solid organ injuries managed non-operatively
- Platelet count less than $50 \times 10^9/L$ (consider Hematology consult)
- Known major bleeding disorder or acquired coagulopathy (consider Hematology consult)
- History of heparin-induced thrombocytopenia (consider Hematology consult)
- Patient already receiving therapeutic anticoagulation (includes Factor Xa Inhibitors such as rivaroxaban or apixaban or Thrombin Inhibitors such as dabigatran)
- Patient on epidural (requires approval from anesthesiologist)
- Septic endocarditis
- Severe uncontrolled hypertension (generally diastolic blood pressure above 120 mmHg)

Management in Obesity

- There is little data to guide options
- Consider patient-specific thromboembolic recurrence risk, major bleeding risk, renal function and planned duration of therapy
- Options include:
 - Dose cap (enoxaparin 150 mg subcut Q12H or dalteparin 30,000 units subcut Q24H)
 - No dose cap:
 - 1) enoxaparin 1 mg/kg subcut Q12H or
 - 2) dalteparin 200 units/kg subcut Q24H or
 - 3) dalteparin divided dose Q12H if at high risk of bleeding
 - Weight-based heparin IV infusion protocol

Conversion to and from LMWH therapeutic dosing^{1,2}

Anticoagulant	Conversion TO LMWH from other Anticoagulant		Conversion FROM LMWH to other Anticoagulant	
	START LMWH	STOP Anticoagulant	START Anticoagulant	STOP LMWH
apixaban	At the time the next scheduled dose of apixaban would have been due	At the time the discontinuation order is written	Within 0 to 2 hours prior to when the next scheduled dose of LMWH would have been due	At the time the discontinuation order is written
dabigatran	<i>If CrCl greater than or equal to 30 mL/min:</i> 12 hours after the last dose of dabigatran <i>If CrCl less than 30 mL/min:</i> 24 hours after the last dose of dabigatran	At the time the discontinuation order is written	Within 0 to 2 hours prior to when the next scheduled dose of LMWH would have been due	At the time the discontinuation order is written
rivaroxaban	At the time the next scheduled dose of rivaroxaban would have been due	At the time the discontinuation order is written	Within 0 to 2 hours prior to when the next scheduled dose of LMWH would have been due	At the time the discontinuation order is written
warfarin	<i>If INR target is 2 to 3:</i> on the day the INR is less than 2 <i>If INR target is 2.5 to 3.5:</i> on the day the INR is less than 2.5	At the time the discontinuation order is written	At the time the discontinuation order is written	On the second consecutive day that the INR is within therapeutic range target range
heparin (continuous infusion)	Within 0 to 1 hour of discontinuing the heparin infusion	At the time the discontinuation order is written	Within 1 to 2 hours prior to when the next scheduled dose of LMWH would have been due	At the time the discontinuation order is written

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5. MEDICATIONS *(continued)*

enoxaparin dosed by weight (check appropriate weight range AND renal function)

Select	Body Weight (kg)	<input type="checkbox"/> eGFR greater than or equal to 30 mL/min	<input type="checkbox"/> eGFR 10 to 29 mL/min
<input type="checkbox"/>	35 to 45	60 mg subcut Q24H	40 mg subcut Q24H
<input type="checkbox"/>	46 to 59	80 mg subcut Q24H	60 mg subcut Q24H
<input type="checkbox"/>	60 to 72	100 mg subcut Q24H	60 mg subcut Q24H
<input type="checkbox"/>	73 to 88	120 mg subcut Q24H	80 mg subcut Q24H
<input type="checkbox"/>	89 to 100	150 mg subcut Q24H	100 mg subcut Q24H
<input type="checkbox"/>	101 to 114	100 mg subcut Q12H	100 mg subcut Q24H
<input type="checkbox"/>	115 to 139	120 mg subcut Q12H	120 mg subcut Q24H
<input type="checkbox"/>	140 to 160	150 mg subcut Q12H	150 mg subcut Q24H
<input type="checkbox"/>	161 and above	see reverse of page 1 for dosing recommendations	

* Select pre-filled syringe size that matches the dose required

enoxaparin obesity dosing (see reverse of page 1 for details): _____

****OR****

dalteparin dosed by weight (check appropriate weight range):

Select	Body Weight (kg)	Dosage	Frequency	Prefilled Syringe Size(s)
<input type="checkbox"/>	Less than 46	7,500 units	subcut Q24H	7,500 units/0.3 mL
<input type="checkbox"/>	46 to 56	10,000 units	subcut Q24H	10,000 units/0.4 mL
<input type="checkbox"/>	57 to 68	12,500 units	subcut Q24H	12,500 units/0.5 mL
<input type="checkbox"/>	69 to 82	15,000 units	subcut Q24H	15,000 units/0.6 mL
<input type="checkbox"/>	83 to 95	18,000 units	subcut Q24H	18,000 units/0.72 mL
<input type="checkbox"/>	96 to 106*	20,000 units	subcut Q24H	2 x 10,000 units/0.4 mL
<input type="checkbox"/>	107 to 118*	22,500 units	subcut Q24H	10,000 units/0.4 mL PLUS 12,500 units/0.5 mL
<input type="checkbox"/>	119 to 130*	25,000 units	subcut Q24H	2 x 12,500 units/0.5 mL
<input type="checkbox"/>	131 to 143*	27,500 units	subcut Q24H	12,500 units/0.5 mL PLUS 15,000 units/0.6 mL
<input type="checkbox"/>	144 to 150*	30,000 units	subcut Q24H	2 x 15,000 units/0.6 mL
<input type="checkbox"/>	151 and above	see reverse of page 1 for dosing recommendations		

* For patients at high risk of bleeding, especially when on high doses (e.g. 20,000 units per day or more), consider splitting the total daily dose into Q12H dosing (half of total daily dose given Q12H)

- For eGFR less than 30 mL/min, use heparin per *Heparin Dosing Nomogram*

dalteparin obesity dosing (see reverse of page 1 for details): _____

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/ /			