

VTE Prophylaxis Order Set Build Specifications



VTE prophylaxis should be considered for patients considered high or moderate risk of VTE according to risk assessment tools. Patients considered low risk of VTE should not receive pharmacologic or mechanical VTE prophylaxis.

Disclaimers:

Heparin, enoxaparin and dalteparin recommendations do not apply to patients with acute or prior heparin-induced thrombocytopenia. Fondaparinux use should be considered in this population if clinically appropriate (clinically stable, no upcoming procedures, with creatinine clearance > 30 mL/min).

These recommendations do not apply to low body weight patients < 55 kg. Utilization of standard dose low molecular weight heparin and unfractionated heparin regimens in this population has been associated with increased bleeding events and/or supratherapeutic anti-Xa levels. Consider dose reduction in this population.

In Hospital Prophylaxis:

Creatinine clearance > 30 mL/min:

Normal weight:

- Enoxaparin 40 mg subcutaneously once daily (preferred)^a
- Dalteparin 5,000 units subcutaneously once daily (preferred)^a
- Unfractionated heparin 5,000 units subcutaneously q8h
- Rivaroxaban 10 mg orally once daily^c

Obesity (BMI > 40 kg/m² and weight > 100 kg):

- Enoxaparin 40 mg subcutaneously q12h (preferred)^{a,b}
- Dalteparin 7,500 units subcutaneously once daily (preferred)^a
- Unfractionated heparin 7,500 units subcutaneously q8h
- Rivaroxaban 10 mg orally once daily^c

Creatinine clearance 15-29 mL/min:

Normal weight:

- Unfractionated heparin 5,000 units subcutaneously q8h (preferred)
- Enoxaparin 30 mg subcutaneously once daily^a
- Dalteparin 5,000 units subcutaneously once daily^a
- Rivaroxaban 10 mg orally once daily^c

Obesity (BMI > 40 kg/m² and weight > 100 kg):

- Unfractionated heparin 7,500 units subcutaneously q8h
- Rivaroxaban 10 mg orally once daily^c

Creatinine clearance < 15 mL/min or renal replacement therapy:

Normal weight:

- Unfractionated heparin 5,000 units subcutaneously q8h

Obesity (BMI > 40 kg/m²)

- Unfractionated heparin 7,500 units subcutaneously q8h

Low body weight (weight < 50 kg):

- Unfractionated heparin 5,000 units subcutaneously q12h

^a Both enoxaparin and dalteparin will not be available on the formulary at most institutions. The formulary preferred low molecular weight heparin product should be included and non-formulary agents omitted during order set build.

^b Some experts recommend enoxaparin 0.5 mg/kg q12h for obese patients. Establish institutional standards when developing order sets.

^c Rivaroxaban is an option for extended prophylaxis in patients deemed to be at high risk for VTE and at low risk for bleeding. The total course of rivaroxaban (inpatient + outpatient) should be 31-39 days.