Table V: Therapeutic options for initial treatment of VTE

Medication	Dose regimens
Unfractionated heparin	**80 unit/kg IV bolus followed by 18 unit/kg/hour IV infusion adjusted to aPTT based therapeutic range**
Low Molecular Weight Heparin	
Dalteparin	**100 units/kg sc every 12 hours**
	200 units/kg sc daily
Enoxaparin	**1 mg/kg sc every 12 hours (q24 hours if creatinine clearance less than 30 ml/min)**
	1.5 mg/kg sc daily
Tinzaparin	**175 units/kg sc daily**
Pentasaccharide	
Fondaparinux	**5 mg (< 50 kg)** **7.5 mg (50-100 kg)** **10 mg (> 100 kg)**
Direct Thrombin Inhibitors	
Dabigatran*	**150 mg po BID (creatinine clearance > 30 ml/min- use with cautionin patients with borderline renal function, unstable renal function, age > 75 years and weight < 60 mg)**
Lepirudin	**For serum creatinine < 1.0 mg/dL: initial infusion of 0.1 mg/kg/hr IV (adjust to aPTT ratio 1.5-2.0) (** **Consider bolus 0.2 mg/kg if life-threatening thrombosis** **For serum creainine 1.0-1.6: initial infusion of 0.05 mg/kg/hr IV** **For serum creatinine 1.7-4.5 mg/dL:recommend alternative DTI if none available; initial infusion 0.01 mg/kg/hr** **For serum creatinine > 4.5: avoid lepirudin**
Argatroban	**For normal hepatic function, non-ICU patient: initial infusion 1-2**

	µg/kg/min IV (adjust to aPTT ratio 1.5-3.0) **For serum bilirubin > 1.5 mg/dL or ICU patients or patients with cardiac failure, post-cardiac surgery: initial infusion 0.25-0.5 µg/kg/min IV** **For serum bilirudin > 3.6 mg/dL: consider alternative DTI**
Bivalirudin	**For creatinine clearance ≥60 ml/min: initial infusion 0.15 mg/kg/hr IV (adjust to aPTT ratio 1.5-2.5)** **For Creatinine clearance 45-59 ml/min: initial infusion 0.1 mg/kg/hr IV** **For creatinine clearance 30-44 ml/min: initial infusion 0.075 mg/kg/hr** **For creatinine clearance < 30 ml/min: initial infusion 0.05 mg/kg/hr IV** **For Hemodialysis or CVVHD: initial infusion 0.03 mg/kg/hr** **For Combined hepatic-renal failure: 0.03 mg/kg/hr**
Oral Direct Factor Xa inhibitors	
Rivaroxaban*	**15 mg po BID for first 3 weeks then 20 mg daily (creatinine clearance >50 ml/min** **15 mg daily (Creatinine Clearance 15-50 ml/min) –would use this with extreme caution , avoid in patients with unstable renal function, weight < 60 kg or age > 75 years**

Legend: kg=kilogram, sc=subcutaneous, IV=intravenous

- * Off-label use- not FDA approved

References: Dabigatran prescribing information. Boehringer Ingelheim Pharmaceuticals, Inc.Ridgefield, CT 06877 USAWarkentin TE et al. Treatment and prevention of heparin induced thrombocytopenia: Amercian College of Chest Physicians Evidence Based Clinical Practice Guidelines (8th Edition) Chest 2008; ;133;340-380. Kiser TH, Fish DN. Pharmacotherapy 2006;26(4):452–460.