University Health System

Low Molecular Weight Heparin and Fondaparinux
Adult Treatment Dosing and Monitoring Guidelines≠

	Indication	Agent			Comments
		Enoxaparin (Lovenox®)	**Dalteparin (Fragmin®)**	**Fondaparinux (Arixtra®)**	
	DVT w/ or w/out PE	1 mg/kg SQ every 12 hours **OR** 1.5 mg/kg SQ ONCE Daily	****1st Month** 200 IU/kg SQ ONCE Daily ****Months 2 - 6** 150 IU/kg SQ ONCE Daily	< 50kg: 5 mg SQ ONCE Daily 50 – 100kg: 7.5 mg SQ ONCE Daily > 100kg: 10 mg SQ ONCE Daily	**Doses based on TBW** Overlap with Warfarin 4-5 days **AND** until 2 INRs are in therapeutic range
	Adjustment for CrCl < 30 mL/ min	1 mg/kg SQ **ONCE DAILY**	< 1 week No dose adjustments > 1 weeks Heparin Assay	**Contraindicated in CrCl < 30 mL/min**	Consider LMW Heparin Assay (Anti-Xa level) or SQ UFH
	UA and N-STEMI	1 mg/kg SQ every 12 hours	120 IU/kg SQ every 12 hours **(max 10,000 IU)**	*2.5 mg SQ Daily	**Doses based on TBW**
	STEMI	Single IV bolus of 30 mg + 1 mg/kg SQ every 12 hours	---	---	

	Laboratory Monitoring		Comments
CBC (H/H, Platelets)	**Baseline** then periodically Watch for signs and symptoms of bleeding Monitor for sign of **HIT (Enoxaparin and Dalteparin**)		Formulary Flash on HIT available on clinical intranet
Serum Creatinine	Baseline then periodically		
LMW Heparin Assay (Anti-Xa level)	**Consider in the following population:** -Renal Insufficiency w/ CrCl < 30 mL/min -Liver Disease -Obese (> 190 kg) or Low weight (< 50 kg) -Pregnancy -Children		
Target Peak Treatment Levels	1mg/kg BID dosing: 0.5-1.1 units/mL 1.5mg/kg once daily dosing: 1.0-2.0 units/mL (Draw level 4 hours after 2nd or 3rd dose)	Not available at UHS	

HIT – Heparin Induced Thrombocytopenia, LMWH - Low Molecular Weight Heparin, N-STEMI - Non-ST segment elevation myocardial infarction, SQ - Subcutaneous, STEMI - ST segment elevation myocardial infarction, TBW- Total Body Weight, UA - Unstable Angina, UFH - Unfractionated Heparin

≠For information on anticoagulants in pediatrics, see guidelines posted to the clinical intranet

*****Non-FDA approved indication

******Only FDA approve for VTE treatment in cancer patients

Anticoagulation Safety Committee
P&T Approved October 2008
Updated January 2012