

## **Heparin-Induced Thrombocytopenia**

### ***References:***

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**TABLE 1: Four “T’s” of HIT Clinical Scoring System**

<b>Points</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>Thrombocytopenia</b>	nadir 20-100k <i>or</i> > 50% fall in platelet ct	nadir 10-19k <i>or</i> 30-50% fall in platelet ct	nadir <10k <i>or</i> < 30% fall in platelet ct
<b>Timing of onset of platelet fall</b>	day 5-10 of heparin <i>or</i> ≤ 1 day of heparin with <i>recent</i> * heparin exposure	> day 10 of heparin <i>or</i> timing unclear (but fits with HIT)	≤ day 1 of heparin (no recent heparin exposure)
<b>Thrombosis or other sequelae</b>	proven thrombosis <sup>†</sup> , skin necrosis, or acute systemic reaction after <i>iv</i> heparin bolus	Progressive, recurrent, or silent thrombosis <sup>#</sup> erythematous skin lesions	None

Other causes of platelet fall	None evident	Possible	Definite
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\*within the past 30 days = 2 points, past 30-100 days = 1 point;

¶ Recommend duplex ultrasound for DVT;

# manifested by altered mental status, evidence of intestinal, renal or hepatic dysfunction

**TABLE 2: Direct Thrombin Inhibitors**

	<b>Excretion</b>	<b>Half-Life</b>	<b>Monitoring</b>	<b>Dosing Recommendations</b>
Bivalirudin	Enzymatic 20% Renal	25 min	ECT (400-450s) kaolin ACT >2.5x baseline or >300s	Bolus + Infusion CPB: 1mg/kg + 2.5mg/kg/hr 50mg pump prime OPCAB: 0.75mg/kg + 1.75mg/kg/hr Additional bolus 0.1-0.5 mg/kg
Lepirudin	Renal	80 min	ECT (350-400s) aPTT CPB >2.5x ULN OPCAB 1.5-2.0x ULN	Bolus + Infusion CPB: 0.3-0.4mg/kg + 0.2-0.4mg/kg/hr 0.2mg/kg pump prime OPCAB: 0.3-0.4mg/kg + 0.2mg/kg/hr Additional bolus 0.1-0.3mg/kg
Argatroban	Hepatic	45 min	ACT > 300 sec	Bolus: 0.35mg/kg plus Infusion: 0.025mg/kg/min Insufficient data for CPB

ECT-ecarin clotting time; ULN-upper limit of normal reference range; Dosing for vascular surgery similar to OPCAB.