

Weight-based argatroban protocol for heparin induced thrombocytopenia (aPTT ratio target range 1.5-2.5)

Standard initial infusion rate: 2 micrograms/kg/min (Max 10 mcg/kg/min)

Liver dysfunction/ICU infusion rate: 0.25 micrograms/kg/min (Max 25 mcg/min)

Liver dysfunction-total bilirubin ≥ 1.8 mg/dL or AST or ALT ≥ 150 IU/L-

If total bilirubin > 3.6 mg/dL or AST or ALT > 600 IU/L consider using lepirudin or for patients with severe combined renal/hepatic dysfunction consider bivalirudin

Dose adjustment algorithm

Check baseline aPTT and then first aPTT 2 hours after infusion initiated

<i>aPTT ratio (X control)</i>	<i>Hold infusion</i>	<i>Change infusion</i>	<i>Repeat aPTT</i>
< 1.2	0	+ 20%	4 hrs.
1.2 – 1.4	0	+ 10%	4 hrs.
1.5 – 2.5	0	0	4 hrs. ¹
2.6 – 3.2	0	- 10%	4 hrs.
3.3 – 4.0	45 min	- 20%	5 hrs.
4.1 – 5.0	90 min	- 30%	6 hrs.
>5.0 ²	Hold infusion until aPTT ratio < 3.5 then restart at reduced rate	- 50%	Q2hrs. then 4 hrs. after restart infusion

¹Check aPTT q4 h until aPTT in therapeutic range on 2 consecutive lab values then check aPTT q12 h X 2 then qAM as long as aPTT remains in the normal range and no dose adjustments are made. If the dose is changed, check the aPTT in 4 hours after the infusion change is made.

²Always recheck aPTT ratio values > 6.9 to make sure the value is not an artifact due to argatroban contamination of the specimen

Check Heme 8 at least q day

Risk factors for bleeding include: age > 70 , renal failure

Use argatroban with caution in:

Post-operative patients Patients on thrombolytic or anti-platelet therapy

Patients with liver disease Patients with a baseline INR > 1.5

Patients with a recent stroke or gastrointestinal bleed (< 3 months)

Patients with a baseline aPTT ratio > 1.3 (possibilities include a lupus anticoagulant or hemophilia)

Duration of therapy: Argatroban should be continued until the platelet count normalizes and then continued during warfarin co-therapy (warfarin should not be started until after the platelet count reaches the normal range) for at least 5-7 days until a therapeutic INR is achieved (Remember that argatroban typically doubles the INR during co-therapy with warfarin so an INR of 4 will need to be achieved to ensure an INR of 2 once argatroban is discontinued)