**Argatroban** **PROTOCOL FOR ISOLATED HIT, HIT & HITTS IN PATIENTS WITH NORMAL HEPATIC FUNCTION (NON CATH LAB)**

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|---|---|
| Indication | Anticoagulant for prophylaxis or treatment of thrombosis in patients with Isolated HIT, HIT, HITTS (Heparin induced Thrombocytopenia/thrombosis syndrome) |
| Contraindications | Overt major bleeding; argatroban should be avoided if LFT are greater than or equal to 3 times the upper limit of normal |
| Diagnose of HIT | HIT antibody test Is used to diagonse HIT-2 |
| Baseline Labs | aPTT, PT/INR, Serum Creatinine, CMP, HCT, and platelets |
| Monitoring | Platelets daily while on argatroban |
| Monitoring | Guaiac all stools, gastroccult all emesis, visually check for hematuria or other bleeding. CALL PHYSICIAN FOR BLEEDING |
| Notify Physician immediately for any of the following: unexplained drop in blood pressure, development of hematoma, drop in hematocrit, significant bleed, flank pain, bright red urine or bruising | |
| Discontinue | All Heparin, Lovenox (enoxaparin), dalteparin (Fragmin) |
| Discontinue | Discontinue warfarin until platelts are back to baseline or > 100,000 (preferably when count is 150,000) |
| Discontinue | IM injections while on Argatroban, obtain physician order for alternative route |
| Antidote | No antagonist is avialable to reverse the action of argatroban |
| Transition to Warfarin | Start when platelet count > 100,000 (preferably when count is 150,000). No starting doses > 5 mg. Overlap with argatroban for at least 5 days. |
| INR Monitoring | INR daily. If INR > 4 on combination therapy stop argatroban, repeat INR in 4-6 hours, if INR is less than therapeutic restart argatroban at previous rate. Repeat the procedure daily. Discontinue argatroban when two consecutive daily INRs are therapeutic on warfarin alone after therapy has overlapped for at least 5 days. |
| aPTT Monitoring | Draw aPTT 2 hours and 6 hours after initiation of therapy and every 4 hours after any change in infusion rate until two consecutive PTT are therapeutic then draw PTT every 24 Hours<br>If aPTT is greater than 100 seconds, stop argatroban, drawn aPTT every 2 hours unit aPTT within therapeutic range, restart argatroban at new rate<br>All aPTTs should be run stat |
| aPTT Goal | aPTT 40-83 seconds (round actual aPTT to closest whole number) |
| | **Dosage adjustments based on aPTT see Argatroban Rates Changes Based on aPTT Chart** |
| Mixing instructions | Dilute each 2.5ml vial with 250ml of 0.9% Sodium Chloride Injection, 5% Dextrose Injection or Lactated Ringer's Injection to obtain a final concentration of 1mg/ml. The constituted solution must be mixed by repeated inversion of the diluent bag for 1 minute. Upon preparation, the solution may show slight, but brief haziness due to the formation of microprecipitates that rapidly dissolve upon mixing. |
| Drug Amount | **250 mg** |
| Volume | **250 ml** |
| Final Concentration | **1000 mcg/ml** |
| | More concentrated solutions are not recommended as precipitation may occur. |
| Starting Dose | 2 mcg/kg/min<br>Renal Dysfunction (creatinine clearanace less than 60 ml/min): Consider starting at 1 mcg/kg/min<br>Liver Dysfunction: 0.5 mcg/kg/min (Hepatic Disease score greater than 6)<br>Hepatic Disease Score and creatinine clearance calculators are available on the pharmacy web site under calculators<br>If Liver Function Test are greater than 3 times upper limit of normal do not use argatroban |
| Dosage Range | 0.5-10 mcg/kg/min |
| Maximum Dose | 10 mcg/kg/min |

| Patient Weight (kg) | Patient Weight (lbs) | INITIAL DOSE (mcg/kg/min) 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 88 | 0.2 | 0.5 | 0.7 | 1 | 1.2 | 2.4 | 4.8 | 7 | 10 | 12 | 14 | 17 | 19 | 22 | 24 |
| 45 | 99 | 0.3 | 0.5 | 0.8 | 1.1 | 1.4 | 2.7 | 5 | 8 | 11 | 14 | 16 | 19 | 22 | 24 | 27 |
| 50 | 110 | 0.3 | 0.6 | 0.9 | 1.2 | 1.5 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 55 | 121 | 0.3 | 0.7 | 1 | 1.3 | 1.7 | 3.3 | 7 | 10 | 13 | 17 | 20 | 23 | 26 | 30 | 33 |
| 60 | 132 | 0.4 | 0.7 | 1.1 | 1.4 | 1.8 | 3.6 | 7 | 11 | 14 | 18 | 22 | 25 | 29 | 32 | 36 |
| 65 | 143 | 0.4 | 0.8 | 1.2 | 1.6 | 2 | 3.9 | 8 | 12 | 16 | 20 | 23 | 27 | 31 | 35 | 39 |
| 70 | 154 | 0.4 | 0.8 | 1.3 | 1.7 | 2.1 | 4.2 | 8 | 13 | 17 | 21 | 25 | 29 | 34 | 38 | 42 |
| 75 | 165 | 0.5 | 0.9 | 1.4 | 1.8 | 2.3 | 4.5 | 9 | 14 | 18 | 23 | 27 | 32 | 36 | 41 | 45 |
| 80 | 176 | 0.5 | 1 | 1.4 | 1.9 | 2.4 | 4.8 | 10 | 14 | 19 | 24 | 29 | 34 | 38 | 43 | 48 |
| 85 | 187 | 0.5 | 1 | 1.5 | 2 | 2.6 | 5 | 10 | 15 | 20 | 26 | 31 | 36 | 41 | 46 | 51 |
| 90 | 198 | 0.5 | 1.1 | 1.6 | 2.2 | 2.7 | 5 | 11 | 16 | 22 | 27 | 32 | 38 | 43 | 49 | 54 |
| 95 | 209 | 0.6 | 1.1 | 1.7 | 2.3 | 2.9 | 6 | 11 | 17 | 23 | 29 | 34 | 40 | 46 | 51 | 57 |
| 100 | 220 | 0.6 | 1.2 | 1.8 | 2.4 | 3 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 105 | 231 | 0.6 | 1.3 | 1.9 | 2.5 | 3.2 | 6 | 13 | 19 | 25 | 32 | 38 | 44 | 50 | 57 | 63 |
| 110 | 242 | 0.7 | 1.3 | 2 | 2.6 | 3.3 | 7 | 13 | 20 | 26 | 33 | 40 | 46 | 53 | 59 | 66 |
| 115 | 253 | 0.7 | 1.4 | 2.1 | 2.8 | 3.5 | 7 | 14 | 21 | 28 | 35 | 41 | 48 | 55 | 62 | 69 |
| 120 | 264 | 0.7 | 1.4 | 2.2 | 2.9 | 3.6 | 7 | 14 | 22 | 29 | 36 | 43 | 50 | 58 | 65 | 72 |
| 125 | 275 | 0.8 | 1.5 | 2.3 | 3 | 3.8 | 8 | 15 | 23 | 30 | 38 | 45 | 53 | 60 | 68 | 75 |
| 130 | 286 | 0.8 | 1.6 | 2.3 | 3.1 | 3.9 | 8 | 16 | 23 | 31 | 39 | 47 | 55 | 62 | 70 | 78 |
| 135 | 297 | 0.8 | 1.6 | 2.4 | 3.2 | 4.1 | 8 | 16 | 24 | 32 | 41 | 49 | 57 | 65 | 73 | 81 |
| 140 | 308 | 0.8 | 1.7 | 2.5 | 3.4 | 4.2 | 8 | 17 | 25 | 34 | 42 | 50 | 59 | 67 | 76 | 84 |
| 145 | 319 | 0.9 | 1.7 | 2.6 | 3.5 | 4.4 | 9 | 17 | 26 | 35 | 44 | 52 | 61 | 70 | 78 | 87 |
| 150 | 330 | 0.9 | 1.8 | 2.7 | 3.6 | 4.5 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 155 | 341 | 0.9 | 1.9 | 2.8 | 3.7 | 4.7 | 9 | 19 | 28 | 37 | 47 | 56 | 65 | 74 | 84 | 93 |
| 160 | 352 | 1 | 1.9 | 2.9 | 3.8 | 4.8 | 10 | 19 | 29 | 38 | 48 | 58 | 67 | 77 | 86 | 96 |
| 165 | 363 | 1 | 2 | 3 | 4 | 5 | 10 | 20 | 30 | 40 | 50 | 59 | 69 | 79 | 89 | 99 |
| 170 | 374 | 1 | 2 | 3.1 | 4.1 | 5 | 10 | 20 | 31 | 41 | 51 | 61 | 71 | 82 | 92 | 102 |
| | | **RATE (ml/hr)** | | | | | | | | | | | | | | |

| **Infusion Rate Change Based on aPTT**<br>**Please see Rate Change Chart for rate in ml/hr** | | | | |
|---|---|---|---|---|
| **aPTT (Seconds)** | | | | |
| **33 or less** | **34-39** | **40-83** | **84-96** | **97 or higher** |
| 50% Increase | 25% Increase | No Change | 25% Decrease | 50% Decrease |
| **Rate Change** | | | | |
| **If aPTT is greater than 100 seconds, stop argatroban, drawn aPTT every 2 hours until aPTT is within therapeutic range, then restart argatroban at new rate** | | | | |
| **Round the aPTT to the closest whole number** | | | | |

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