

HEPARIN TITRATION PROTOCOL

Give initial bolus directly into the LIMB BEING USED TO ACCESS BLOOD, immediately prior to starting the blood pump (this ensures that first blood to hit the filter is heparinized). Administer subsequent boluses directly into either of the red pre blood pump sampling ports. Measure systemic PTT daily and post-filter PTT Q6H (blue sampling port).

The patient is systemically anticoagulated when heparin is infusing via the CRRT circuit. This is NOT a form of regional anticoagulation (filter only), regardless of the systemic PTT. If the patient requires an invasive procedure, stop the PBP heparin infusion 2 hours before (or immediately if urgent procedure or bleeding), and return to PrismaSOL solution on the PBP at 2L/hour until heparin can be resumed.

Post-Filter PTT	Pre-Filter Heparin Bolus	Preblood Pump (PBP) Heparin Dose Standard Concentration: 5,000 units heparin/1 L NaCl = 5 units per mL 1,000 units per hour = 200 mL hour. A dose change by 200 units per hour = 40 mL/hr
Greater than 150 sec	None	<ul style="list-style-type: none"> Stop infusion for one hour and decrease infusion by 200 units per hour (40 mL/hr) Repeat PTT in 6 hours; notify provider if greater than 150
Greater than 100 sec	None	<ul style="list-style-type: none"> Stop infusion for one hour and decrease infusion by 200 units per hour = 40 mL/hr Repeat PTT in 6 hrs
80 to 100 sec	None	Decrease infusion by 200 units/hour (40 mL/hr)
60 to 79 sec	None (usual target)	NO CHANGE
50 to 59 sec	None	Increase infusion by 200 units/hr (40 mL/hr)
40 to 49 sec	1000 units	Increase infusion by 200 units/hr (40 mL/hr)*
30 to 39 sec	2000 units	Increase infusion by 400 units/hr (80 mL/hr)*
Less than 30 sec	5000 units	<ul style="list-style-type: none"> Increase infusion by 400 units/hr (80 mL/hr)* If repeat PTT <30, notify provider

Perform independent double check for all heparin administration/rate adjustments (PBP).

The PBP does not provide the same degree of volume precision as a syringe pump. If smaller dose adjustment are required to stay in target, you may change the concentration to 2,500 units heparin per 1L of NaCl (2.5 units per mL). At this concentration, a rate of 200 mL per hour would = 500 units per hour. A dose change of 100 units per hour would = 40 mL/hr would.

*If post filter PTT is less than 50 seconds, adjust drip per protocol and recheck in 2 hours to ensure PTT has increased. If PTT remains subtherapeutic 2 hours post bolus, treat as per above protocol. Do not decrease heparin infusion for PTT greater than 80 seconds if sample was collected earlier than 6 hours post adjustment (unless stopped for bleeding or procedure).