Algorithm for Thrombate III® (antithrombin III) during Cardiopulmonary Bypass (CPB) Surgery for Anesthesiologists and Perfusionists

- Thrombate III® will be stored with other coagulation/blood products in the main pharmacy purchasing office refrigerator
- Verbal orders for Thrombate III® will be accepted via anesthesia practitioner or agent (not in Sunrise) and charged in Sunrise by quick charge
- This should be considered a STAT item and immediately delivered to the OR
- Administration is documented in the anesthesia system (PICIS)

Patient undergoing procedure requiring CPB

Draw a Baseline ACT

Administer unfractionated heparin 300 units/kg

Draw ACT 3 minutes after administration
ACT ≥ 400 sec?

Yes

No

Proceed with CPB

Administer unfractionated heparin to a total dose of 500 units/kg
ACT ≥ 400 sec?

Yes

No

Proceed with CPB

Administer 1 vial (~500 IU) of antithrombin III concentrate IV
Dose may be repeated up to 4 times until ACT ≥ 400 sec

Created Dec. 2014 based on Algorithm Approved by P&T Aug. 2013
Adapted directly from the clinical protocol from Case Cardiac Anesthesia Group

References:


