



**Appropriate Initial Interventions**

- IV/IO access: 2 large bore IVs ± CVC
- Crystalloid: as per attending physician
- **Order MHP labs, Type and Screen (as needed), ABG**
- Continuous Monitoring
- Use blood warmer for transfusions if available
- Prevent/reverse acidosis
- Correct hypocalcemia:
  - **Adults: Ca gluconate 3 g IV slowly or Ca Chloride 1 g IV slowly\*\***
  - **Pediatrics: Ca gluconate 30 mg/kg/dose IV slowly**  
\*\*Calcium chloride is a vesicant. Infuse through central line if available.
- Tertiary Trauma Survey

**Other Considerations**

- Heparin reversal: **Protamine 1 mg IV / 100 Units of heparin**
- Warfarin reversal:
  - **Vitamin K 10 mg IV**
  - **Prothrombin Complex** (dose as per INR based protocol)
- Direct Factor X inhibitor bypass: **25-50 IU/kg PCC** (to a max of 3000 units)
- Dabigatran reversal – **Idarucizumab 5 g** over 20 minutes
- Consider antifibrinolytics:
  - **Adults: Tranexamic Acid 1 g IV bolus** (if not already administered) **followed by 1g over 8 hours**
  - **Pediatrics: Tranexamic Acid 10-15mg/kg bolus** (if not already administered) **followed by 1mg-5mg/kg/h infusion**

**General Guidelines for Blood Product Replacement in Adults**

<b>RBCs</b>	Aim for Hgb of at least 80 g/L in actively bleeding patient Dose: MD discretion (Peds: 20 mL/kg reasonable start)
<b>Fibrinogen</b>	If Fibrinogen: ≤1.5 g/L (Trauma, GI or surgical bleeding) ≤ 2.0 g/L (Obstetrical or CV surgical) Typical Dose: Fibrinogen concentrate: 4 grams
IF available at site:	
<b>Plasma</b>	If INR>1.8 Dose: 10-20 mL/kg
<b>Platelets</b>	If Plt <50 x 10 <sup>9</sup> /L or <100 x 10 <sup>9</sup> /L if CNS injury Dose: 1 platelet pool

**Applicability:** Facilities that do not have massive hemorrhage protocol.

