

Blood Transfusion Guidelines 2015

There may be situations when the numeric criteria for a transfusion are not met and a transfusion is medically needed. In these cases, the reason for the transfusion should be clearly documented in the chart.

PACKED RED BLOOD CELLS	Contraindications		Do not use to treat anemia that can be corrected with a non-transfusion therapy such as iron or recombinant erythropoietin.
			Do not use as a source of blood volume, oncotic pressure, coagulation factors or platelets.
	Hgb		< 7g.dL or Hct<21%
			< 8g/dL or Hct<24% with acute coronary syndrome
			< 8g/dL -chronic transfusions or myelosuppressive therapy / Symptomatic anemia
			≤ 9 - Perioperative anemia with impending major blood loss (based on patient risk)
			Sepsis within first 6 hrs: Target 7-8g/dL
			8-10g/dL for unstable ischemic heart disease/CAD/critical patients
	Anemia due to renal failure/hemodialysis refractory to erythropoietin therapy		
	Sickle cell disease - when general anesthesia anticipated, when S & S of anemia are present or for exchange transfusion		
Active Bleeding	Rapid Blood Loss > 30% of blood volume or 750 cc		Hypovolemia due to surgery, trauma or hemorrhage
	Systolic BP< 100		
	20% fall in BP		
	Pulse > 100 with systolic BP < 90		

PLATELETS	Contraindications		Do not use with autoimmune thrombocytopena or thrombotic thrombocytopenic purpura except for life-threatening hemorrhage.
			Do not use when plt dysfunction is extrinsic to the plt (uremia, certain types of von Willebrand's disease & hyperglobulinemia)
	Pit count	Non-surgical	< 10,000
			< 20,000 - coagulation abnormalities or extensive petechiae or ecchymoses
			< 20,000 - Pre-op in absence of other coagulopathy
		Surgical	<50,000 - Active bleeding
			< 20,000 - Lumbar puncture or fiberoptic bronchoscopy (w/o biopsy) & GI endoscopy w/o biopsy
	< 80,000 - Pt having epidural spinal anesthesia		
	< 100,000 - Neuro or ophthalmologic surgery		
			Diffuse microvascular bleeding after CABG & < 100,000 or massive transfusion
		< 50,000 - Invasive procedure (CVP placement, paracentesis, thoracentesis, respiratory/GI biopsies, sinus aspiration & dental extraction)	
		< 50,000 - Surgical & obstetrical patients with microvascular bleeding	

FRESH FROZEN PLASMA	Contraindications		Do not use when coagulopathy can be corrected with Vit K.
			Do not use as a source of blood volume.
	INR	INR>2 and invasive procedure	Recent/in progress and/or planned
	Levels	INR>1.7 and neurosurgical procedure	Recent/in progress and/or planned
		INR>1.5 with significant hemorrhage	
	Bleeding on Warfarin therapy / Emergency reversal - planned procedure		
	Urgent invasive procedure on Warfarin therapy		
	Thrombotic thrombocytopenic purpura		
	Coagulation factor deficiency when no concentrate is available		
	Rare specific plasma protein deficiencies, such as C1 inhibitor		
After massive blood transfusion (> 10 units)	Continued bleed		
	Replacement of total blood volume (10 units) within 24 hrs		

CRYOPRECIPITATE	Hypofibrinogenemia or dysfibrinogenemia associated with fibrinogen levels < 120 or reduced functional levels of fibrinogen.	
	Hemophilia A or Von Willebrand's disease only if appropriate Factor VIII concentrates are not available	
	As a fibrin sealant	
	Uremic bleeding	
	Bleeding in massively transfused patients (10 units within 24 hrs) when the fibrinogen level is < 100	
	Factor XIII deficiency (for bleeding & pre-operative prophylaxis)	

