

Legacy Transfusion Guidelines and Audit Criteria for Infants Less Than Four Months of Age

All transfusions are subject to quality assurance review. Guidelines have been established by the Transfusion Committee and approved by the Medical Staff and do not constitute indications or triggers for transfusion. Specific clinical situations may dictate practices that differ from review criteria. The guidelines are based on current literature and are reviewed and modified as new data becomes available.

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Red Blood Cells	 Hemoglobin less than 13 g/dL or hematocrit 40% in an infant: a. Requiring assisted ventilation and supplemental oxygen b. With severe pulmonary disease, cyanotic heart disease, or heart failure c. ECMO Hemoglobin/Hematocrit less than 10 g/dL or 30% a. Significant apnea b. Poor weight gain Hemoglobin/Hematocrit less than 8 g/dL or 24% in stable newborn with clinical manifestations of anemia Acute blood loss greater than 10% of total blood volume Phlebotomy losses greater than 5-10% of blood volume
Platelets	Infants ≤37 weeks gestation: 1. Less than 50,000/μL in stable infant 2. Less than 100,000/μL in sick infant: a. ECMO b. Active bleeding c. Invasive procedure Infants ≥37 weeks: 1. Less than 100,000/μL with active bleeding 2. Less than 50,000/μL with need for invasive procedure 3. Less than 20,000/μL in non-bleeding patient with failure of platelet production and risk factors such as coagulopathy, sepsis, fever etc. 4. Less than 20,000 in non-bleeding patient with failure of platelet production 5. Bleeding with qualitative platelet defect regardless of platelet count
Frozen Plasma	Diffuse microvascular bleeding following cardiac bypass, regardless of platelet count PT INR greater than 1.5, aPTT greater than 60 seconds, or factor assay less than 25% and active bleeding, or anticipated major surgery/invasive procedure within 24 hours Diffuse microvascular bleeding and PT/PTT not available Plasma exchange in TTP/HUS or cryo-poor FP Emergency reversal of bleeding associated with Coumadin Protein C, protein S, or ATIII deficiency if purified concentrate not available Initial stabilization on ECMO circuit
Cryoprecipitate	 Hypofibrinogenemia (fibrinogen less than 100 mg/dL) and: a. Active bleeding b. Anticipated surgery or major invasive procedure Factor XIII deficiency Uremia with bleeding unresponsive to non-transfusion therapy Fibrin glue Active bleeding and Hemophilia A or vWD when purified factor concentrates not available (e.g. Humate P for vWD)
Granulocytes	 Absolute neutrophil count less than 500 Sepsis unresponsive to traditional antibiotic therapy