



Summary of Thresholds for Blood Component Transfusion

Tables summarize conditions and laboratory thresholds when considering transfusion.

RED BLOOD CELLS

Condition	Hb Threshold
Hospitalized Patient	
Active bleeding (acute blood loss $\geq 30\%$)	Target Hb: keep $> 7\text{g/dL}$
Critically ill in ICU (including sepsis)	$\leq 7\text{g/dL}$
Upper gastrointestinal bleeding (no shock)	$\leq 7\text{ g/dL}$
Post-op surgery (including CV and ortho)	$\leq 8\text{g/dL}$
Hemodynamically stable pt w/cardiac disease	$\leq 8\text{g/dL}$
Acute MI, unstable angina	9-10g/dL
Traumatic brain injury, subarachnoid bleed	$\approx 9\text{g/dL}$
Symptomatic anemia in normovolemic patient (tachycardia, chest pain, hypotension)	$< 10\text{g/dL}$
Outpatient hematology/oncology patients	Keep Hb $> 7\text{g/dL}$

PLATELETS

Condition	Platelet Threshold
Active bleeding	$< 50,000/\mu\text{L}$
Prophylaxis in hematology/oncology patients	$< 10,000/\mu\text{L}$ (stable); $< 20,000/\mu\text{L}$ (with risk factors)
Surgery/Invasive procedure:	
CNS, eye or other uncompressible site	$< 100,000/\mu\text{L}$
Other surgical procedures	$< 50,000/\mu\text{L}$
Known or presumed platelet function defect with bleeding or prior to procedure	Any platelet count

PLASMA

Condition	INR or PTT Threshold
Active bleeding	INR > 1.7 or PTT > 1.5 times upper limit of normal
Prophylaxis prior to surgery/invasive procedure	INR > 1.7 or PTT > 1.5 times upper limit of normal
Urgent reversal of Warfarin (bleeding or prior to procedure)*	INR > 1.7
Treatment of TTP	Any INR
Replacement fluid for TPE when bleeding risks	Any INR

*when insufficient time for reversal by Vitamin K; for life-threatening bleeding when PCC unavailable

CRYOPRECIPITATE

Condition	Fibrinogen Threshold
Hypofibrinogenemia <i>with</i> bleeding or undergoing invasive procedure	$< 125\text{ mg/dL}$
Post-partum massive bleeding	$< 200\text{mg/dL}$
Dysfibrinogenemia <i>with</i> bleeding	Any fibrinogen level