

Plasma Transfusion Guidelines – Adults

Clinical practice guidelines and recommendations are not considered to be standards or absolute requirements. They do not apply to all individual transfusion decisions. Clinical judgment is critical in the decision to transfuse; therefore, plasma transfusion above or below the specified INR threshold may be dictated by the clinical context.

Patient with active bleeding or pre-invasive procedure*	INR \geq 2.0 For emergent warfarin reversal: recommend vitamin K and four-factor prothrombin complex concentrates (PCC) (e.g., KCentra) as first-line treatment.
CNS/spinal trauma, CNS/spinal surgery, ocular trauma/surgery, CNS hemorrhage, or invasive neurologic procedure	INR \geq 1.5
Inherited deficiency of single clotting factors (factors II, V, X, XI, and XIII)	If specific factor is not available in concentrate form. Plasma to be given for active bleeding or in preparation for invasive procedure/surgery.
Thrombotic Thrombocytopenic Purpura (TTP)	During plasma exchange. Can also be used for simple transfusion in these patients while awaiting vascular access for plasma exchange.
Hemorrhage Protocol/ Massive Transfusion Protocol	Give at least 1 Plasma for every 3 RBCs. Refer to institution specific protocols.
Replacement fluid in therapeutic plasmapheresis	May be used if the patient is hypofibrinogenemic or coagulopathic
Contraindications	<ul style="list-style-type: none"> • For bleeding in the absence of clotting factor deficiencies. • For supratherapeutic INR due to warfarin without bleeding or without an imminent invasive procedure • For replacement of immunoglobulin in patients with immunoglobulin deficiency. • For patients with one or more coagulation factor deficiencies who are not bleeding and who are not anticipating an invasive procedure. • As a volume expander. • As a nutritional supplement.

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***INR of 1.5 may be appropriate if there is a high risk of bleeding & insufficient time for Vitamin K/kCentra reversal**

References

1. Guyatt Gordon H et al for the American College of Chest Physicians Antithrombotic Therapy and Prevention of Thrombosis: Executive Summary: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. Chest.2012;141(2)(suppl):7S-47S.
2. Circular of Information for the Use of Human Blood and Blood Components, FDA, current edition