

MLT SCREENING PLASMA TRANSFUSION ORDERS

ORDER RECEIVED

SCREEN ORDER IF:
Non-Bleeding Adult
&

Transfusion location is Inpatient Unit or Operating Room

Review most recent INR.
Review patient clinical scenario.

DO NOT SCREEN ORDER IF:

Acute Bleeding or Massive Hemorrhage Protocol
&

Transfusion location is
Emergency Department or Outpatient Clinic including
Cancer Care, Medical Day Unit, Dialysis

INR greater than 2.5.

- High-risk invasive procedure planned and patient with liver disease.

INR greater than or equal to 1.8.

- High-risk invasive procedure planned.

INR greater than or equal to 1.8.

- Major bleeding.

INR greater than or equal to 1.8.
OR
Unknown, cannot wait for result.

- Microvascular bleeding.

INR greater than 1.5.

- Urgent warfarin reversal and
- Serious bleeding
- Urgent surgical procedure required within 6 hours.
- Only give plasma if PCC is not available or is contraindicated e.g., history of heparin-induced thrombocytopenia.
- Co-administer Vitamin K 10 mg IV.

Any INR.

- Congenital coagulation factor deficiency where a factor concentrate is not available and:
- Serious bleeding.
- Urgent surgical procedure required.
- To order, consult Hematology.

DO NOT transfuse plasma (any INR)

Low-risk invasive procedure planned (e.g., arterial line, IV line, PICC line, bone marrow procedure, paracentesis, thoracentesis); including patient with liver disease.

If order aligns with indication recommendations, transfusion dose is 10-15 mL/kg.

For number of units, refer to Table 1: Example Weight-based Plasma Dosing.

NOTE:

Plasma is neither indicated nor effective for reversal of heparin, low molecular weight heparin or direct oral anticoagulants (DOACs).

For all other orders & for orders with incorrect dose:

- Inform prescriber order is outside hospital recommendations, reconsider order.
- If order is not reconciled, follow up with the Transfusion Medicine Physician.

Table 1: Example Weight-based Plasma Dosing* <i>Prescriber expertise is required to determine dose required [10 (lower) to 15 (higher) mL/kg], balancing each individual patient's clinical scenario (e.g., severity of bleeding, TACO risk).</i>				
Weight (kg)	Dose 10 mL/kg¹ (mL)	Dose 15 mL/kg² (mL)	S/DP; Pathogen Reduced Plasma³ (# of units)	FP⁴ (# of units)
< 40 kg	Use actual weight (kg) to calculate dose at 10-15 mL/kg, round # of units based on S/DP & Pathogen Reduced Plasma 200 mL/unit or FP 289 mL/unit.			
40-44.9	450	600	2-3	2
45-49.9	500	675	3	2
50-54.9	550	750	3-4	2-3
55-59.9	600	825	3-4	2-3
60-64.9	650	900	4	2-3
65-69.9	700	975	4-5	3
70-74.9	750	1050	4-5	3
75-79.9	800	1125	4-5	3-4
80-84.9	850	1200	5-6	3-4
85-89.9	900	1275	5-6	3-4
90-94.9	950	1350	5-7	4
95-99.9	1000	1425	5-7	4
100 and greater ⁵	1000	1500	5-7	4-5

* Modified from NAC recommendations table; added Pathogen Reduced Plasma (Apheresis Frozen Plasma Psoralen Treated) information per CBS Circular of Information.

1. Dose calculated using upper weight for each weight increment, rounded up to nearest 5 mL.
2. Dose calculated using lower weight for each weight increment, rounded up to nearest 5 mL
3. Number of S/DP and Pathogen Reduced Plasma units rounded to nearest dose volume (mL), using volume 200 mL/unit (i.e., 3 units = 600 mL, 4 units = 800 mL, 5 units = 1000 mL, 6 units = 1200 mL, 7 units = 1400 mL).
4. Number of FP units rounded to nearest dose volume (mL), using mean unit volume 289 mL (i.e., 2 units = 578 mL, 3 units = 867 mL, 4 units = 1156 mL, 5 units = 1445).
5. For weight 100 kg and greater, dose is capped using 95-99.9 kg weight increment dose.