



RCWB

Whole Blood



Storage: 4(±2) °C

Shelf life: 21-35 days

Units should not be exposed to temperatures exceeding 10°C for more than 30 minutes. Red cells stored or transported under suboptimal temperatures undergo haemolysis and may not be suitable for transfusion.

Contains un-separated red blood cells from blood donors, suspended in anticoagulant solution (CPD/CPDA-1). Whole blood does not contain viable platelets or coagulation factors.

Final average haematocrit is 38% in total volume of 350 – 400 mls.

Indications

- ⊕ Critical deficit of oxygen carrying capacity in a bleeding patient
- ⊕ Red cell exchange

Contraindications

Use with caution in patients with cardiac failure or with risk of fluid overload, as the large volume of the product poses risk of transfusion-associated cardiac overload (TACO).

Dosage

Number of units transfused is dependant on degree of red cell loss as result of acute bleeding.

Suggested volume for neonatal red cell exchange is 160 ml/kg. Refer to info-sheet RCWB-ET for additional required information.



Modifications

- ⊕ Leucodepleted
- ⊕ Irradiated

Refer to relevant info-sheets for information regarding above secondary modifications

Pre-transfusion testing requirements

All patients planned for red cells transfusions must have a correct ABO and RhD type on record. Transfused red cells must be ABO compatible to the patient at all times. RhD-patients should always be transfused RhD-blood unless in emergency situations or in post-menopausal females and elderly males.

A valid antibody screen to identify the presence of atypical antibodies capable of causing haemolytic transfusion reaction or reducing survival of the transfused red cells should be performed and if antibodies are identified, antigen negative red cells will need to be issued.

Minimum sample required

Adult:	3 ml in one EDTA tube
Child (> 12 months):	3 ml in one EDTA tube
Infant (4-12 months):	1 ml each in two EDTA microtainer tubes
Infant (0-4 months):	1 ml in one EDTA microtainer tube + 3 ml of biological mother's sample in one EDTA tube



Administration

- ⊕ Use standard blood transfusion set (170-260 µm) and change every 8 hours
- ⊕ Rate of WB transfusions should be adjusted according to clinical condition and rate of blood loss
- ⊕ Transfusion must not exceed 4 hours

Nursing observations

	Pre-transfusion vital signs (V/S)?	Stay at patient bedside?			Vital signs during transfusion		Post-transfusion monitoring
		First 5 mins	First 10 mins	First 15 mins	After 15 mins	Remainder of transfusion	
Adults (in-patients)	Yes	Yes	No, but must be immediately available		Yes	Every 15 mins for 1 st hour, then hourly	V/S on completion then monitor as needed
Adults (out-patients)	Yes	Yes	No, but must be immediately available		Yes	Every 15 mins for 1 st hour, then hourly	V/S at completion then monitor for at least 60 min post*
Paediatrics & Neonates	Yes	Yes			Yes	1 st hr – every 15 mins 2 nd and 3 rd hr – every 30 mins then hourly until completion	V/S at completion then monitor for at least 60 min post

Adverse reactions

All units are tested negative by serology and nucleic acid technology for HBV, HCV and HIV I/II. Nonetheless, there is a remote risk of transfusion-transmitted infections if the donated unit happens to be within a window period of testing. There is also a small risk of infection by bacteria or from non-tested viruses (e.g. CMV) or emerging infections.

Non-infectious risks include febrile non-haemolytic transfusion reactions (FNHTR), haemolytic transfusion reactions (HTR), either immediate or delayed, allergic reactions, transfusion related acute lung injury (TRALI), transfusion associated cardiac overload (TACO) and transfusion associated graft versus host disease (TA-GVHD).

Please refer to relevant info-sheets for further information on recognition and management of these adverse events.