

LIST OF AVAILABLE BLOOD COMPONENTS

I. Red Blood Cell Products:

Product	Function	Indication	Volume/HCT/ Anticoagulant	Storage/ Expiration
CPDA-1 Whole Blood	To provide oxygen carrying capacity, blood volume expansion; to prevent or treat hypovolemic shock.	Treatment of patient who has lost >25% total blood volume.	Approx. 500 mls/ 40 %/ CPDA-1.	1-6°C up to 35 days from date drawn. 1-6°C up to 24 hours from the time the unit was entered.
CPDA-1 Red Blood Cells	To provide oxygen carrying capacity.	Treatment of anemia in normovolemic patients who require only an increase in oxygen carrying capacity & red cell mass.	Approx. 250 mls/ 70-80%/ CPDA-1.	1-6°C up to 35 days from date drawn. 1-6°C up to 24 hours from the time the unit was entered.
AS-1, AS-3, or AS-5 Red Blood Cells	To provide oxygen carrying capacity.	Treatment of anemia in normovolemic patients who require only an increase in oxygen carrying capacity & red cell mass.	Approx. 300-350 mls/ 55-65%/ CPD;plasma removed and AS-1 or AS-5 added as a preservative. CP2D; plasma removed and AS-3 added as a preservative.	1-6°C up to 42 days from date drawn. 1-6°C up to 24 hours from the time the unit was entered.
Red Blood Cells, Washed	same as RBC, but with removal of the plasma proteins. Extracellular potassium and metabolic waste such as ammonia and lactate are also minimized.	a) May be used to transfuse a patient with plasma incompatible red cells. b) For patients with hypersensitivity to plasma proteins. c) For patients with IgA deficiency and anti-IgA antibodies.	Approx. 200-250 mls/ 70-80%.	1-6°C up to 24 hours from the time the unit was entered.

Product	Function	Indication	Volume/ HCT/ Anticoagulant	Storage/ Expiration
Red Blood Cells, Deglycerolized	Same as RBC, with several advantages including: prolonged storage, maintenance of rare donor blood, WBC removal and reduced risk of transmitting CMV.	a). Patients with rare atypical antibodies, or hyper-sensitivity to plasma proteins b). Autologous blood to be used at a later date.	Approx. 200-250 mls/ 80 %	1-6°C up to 24 hours from date thawed, or can be refrozen. Store at -65°C or below (frozen in 40% glycerol) up to 10 years from date drawn.
Red Blood Cells for Intra-uterine transfusion	Maintains circulating blood volume and oxygen transport to tissues of the severely anemic fetus while minimizing chances of volume overload. RBC may be collected from the mother to decrease donor exposure to the fetus.	Treatment of severe fetal anemia.	Approx. 180 mls/ approx. 75-80%.	1-6°C up to 24 hours from time of entry for preparation.
Modified Whole Blood	Maintains circulating blood volume and oxygen transport to tissues in neonatal patients, without altering the electrolyte balance.	For exchange transfusions.	Approx. 300 mls/ 55% \pm 5%.	1-6°C up to 24 hours from time the original unit is entered.
Red Blood Cells for Neonates	Maintains circulating blood volume and oxygen transport to the tissues in neonatal patients, without altering the electrolyte balance.	For neonatal patients who require small volume transfusions.	Requested volume dispensed in syringe aliquots/ 55-80%/ CPDA-1 or additive solution.	1-6°C, syringe expires 6 hours after preparation.

II. Plasma Products

Product	Function	Indication	Volume	Storage/ Exp.
Fresh Frozen Plasma	Primarily to replace clotting factors, mainly Factors V and VIII.	For patients with clotting factor deficiencies, massively transfused patients, or patients with TTP. For management of DIC.	Approx. 180-330 mls.	≤ -18°C up to 1 year from date drawn. After thawing: 24 hours at 1-6°C.
Fresh Frozen Plasma, Pediatric	Same as FFP.	To reduce donor exposure in pediatric patient requiring multiple transfusions of FFP.	Three aliquots of approx. 80 mls each, may be issued in syringe aliquots.	≤ -18°C for 1 yr. from collection date; 1-6°C for 24 hr. after thawing; syringe expires 6 hr. after preparation.
Fresh Frozen Plasma, Apheresis	Same as FFP.	To reduce donor exposure in patients requiring multiple transfusions of FFP.	400-500 mls.	≤ -18°C up to 1 yr. from date drawn; After thawing, 24 hr. at 1-6°C.
Plasma (Frozen within 24 hr. of Collection);FP24	Primarily to replace stable clotting factors.	Treatment of stable coag. factor deficiencies ; Plasmapheresis.	Approx. 180-300 mls.	≤ -18°C up to 5 yr. from collection date; After thawing, 24 hrs. at 1-6°C.
Fresh Frozen Plasma, Apheresis (Frozen within 24 hr. of Collection); FPPX	See FP24.	See FP24	400-500 mls	≤ -18°C up to 5 yr. from collection date; After thawing, 24 hrs. at 1-6°C.
Thawed Plasma (FFP or FP24 extended to 5 days)	See FP24.	See FP24.	Approx. 180-300 mls.	≤ -18°C for 1 yr. from collection After thawing, 5 days at 1-6°C.
Thawed Plasma Cryoprecipitate Reduced	See FP24.	Plasma exchange for TTP patients who are refractory to FFP replacement therapy.	Approx. 200-250 mls.	< -18°C for 1 yr. from collection. After thawing, 5 days at 1-6°C.

Product	Function	Indication	Volume	Storage/Exp.
Cryo-precipitated AHF	To provide a relatively high concentration of Factor VIII and Fibrinogen in a small volume of plasma.	Treatment of Factor VIII deficiency (Hemophilia A), von WilleBrand's, hypofibrinogenemia; or treatment of uremic coagulopathy.	7-10 mls; each bag contains a minimum of 80 IU of Factor VIII and ≥ 150 mg of Fibrinogen.	$\leq -18^{\circ}\text{C}$ up to 1 yr. from date drawn. After thawing/ pooling, cryo expires in 4 hr. Store at room temp ($20-24^{\circ}\text{C}$).
Pooled Cryoprecipitate AHF (before freezing)	To provide a relatively high concentration of Factor VIII and Fibrinogen in a small volume of plasma.	Treatment of Factor VIII deficiency (Hemophilia A), von WilleBrand's, hypofibrinogenemia; or treatment of uremic coagulopathy.	Approx. 200 mls (pool of 5 bags).	$\leq -18^{\circ}\text{C}$ up to 1 yr. from date drawn. After thawing/ pooling, cryo expires in 4 hr. Store at room temp ($20-24^{\circ}\text{C}$).
Fibrin Glue (CRYO)	Applied topically with = volume of bovine thrombin, fibrin glue has adhesive +/- hemostatic-sealant qualities.	Orthopedic, otolaryngeal, dental, cardiac, & neurological procedures to control surface oozing; maintains tissues in tight opposition.	7-10 mls	$\leq -18^{\circ}\text{C}$ up to 1 yr. from date drawn; After thawing, expires in 4 hr.; Store at room temp ($20-24^{\circ}\text{C}$).
Platelet Concentrates	To prevent or treat hemorrhage; to achieve homeostasis during surgery.	Thrombocytopenia; platelet function abnormalities; DIC associated with severe, life threatening hemorrhage.	30-50 mls per unit, platelets are pooled for patients requiring multiple units.	$20-24^{\circ}\text{C}$ in platelet chamber with continuous, gentle agitation Expires 5 days post collection/ 4 hr. post pool.
Platelets, Apheresis	Same as platelet concentrates.	Same as platelet concentrates.	Approx. 225 mls(=to 6 PC). May be divided for pediatrics to minimize exposure, for platelet drips, during low inventory, or when the platelet yield is high.	Storage is same as PCs. Expires 5 days after collection, 24 hr. after pooling (2 bag collection system).

Product	Function	Indication	Volume	Storage/Exp.
Platelets, Apheresis, HLA	Same as Platelet Concentrates.	Patients with antibodies to platelet or HLA antigens; patients whose bleeding is not controlled by random donor platelets.	Approx. 250-350 mls.	Same as Apheresis Platelets.

III. Special products

Product	Function	Indication	Volume	Storage/Exp.
Granulocytes, Apheresis	To provide white blood cells to a septic leukopenic patient.	Septic leukopenic patients with poor or no response to antibiotics; documented granulocyte dysfunction.	200-600 mls.	20-24°C in a platelet chamber, <u>without</u> agitation. Expire 24 hr. after collection.
Leukocyte Reduced by Filtration	Same as primary product, but with removal of WBCs.	Routinely given to all patients at UNCH; given to reduce non-hemolytic, febrile transfusion reactions; given to delay HLA alloimmunization in patients receiving chronic transfusions; given for outpatient transfusions; given to provide CMV safe product (pregnant women).	Same as primary product.	RBC: 1-6°C, expires in 24 hr. if the unit was entered. Retains original expiration if sterile connected. Platelets: 20-24°C in a platelet chamber, expire 4 hr. after entry for preparation.
Split Products	Same as primary product.	Pediatric transfusion; prevention of circulatory overload; patients requiring multiple transfusions, to reduce donor exposure.	Volume is decreased by requested amount, i.e. split RBC= one-half RBC.	Same as for the appropriate product, unless unit is entered (24 hr. for RBC/plasma, 4 hr. for platelet), or platelet is transferred into a transfer bag (12 hr).

Product	Function	Indication	Volume	Storage/Exp.
Autologous Products	Same as for the appropriate products.	Predeposit and storage of donor-patient blood pre-surgery, intended for transfusion to the person during hospital stay.	Same as for appropriate products.	Same as for appropriate products. RBC may be frozen when surgery requires more units than can be safely donated during wet unit shelf life.
Directed Products	Same as for the appropriate product.	Collected for a minimal exposure program for patients requiring multiple transfusions or patients whose product requirements can only be met by a specified donor.	Same as for appropriate product.	Same as for appropriate products. RBC may be frozen and deglycerolized for transfusion.
Rh Immune Globulin (RhIG)	To provide short term circulating anti-D and prevent natural production of anti-D; to prevent hemolytic disease of the newborn.	Rh negative females who qualify (RhIG Request III;8.1); Rh negative females <50 years old receiving Rh positive blood or platelets.	3 mls (standard 300 ug dose).	Store at 1-6°C. Expiration varies, depending on manufacturer and lot #.
Intravenous Rh Immune Globulin	To increase platelets in ITP patients.	Rh positive patient with ITP; may be used for preventing Rh sensitization, but this is not the product of choice.	Approx. 2.5 ml of *300 ug equivalent to 1500 IU of anti-D or *120 ug equivalent to 600 IU of anti-D	Store at 1-6°C. Store at 1-6°C for 4 hr. after reconstitution Expiration varies, depending on lot #.
Cryopreserved Skin/Tissue	To provide temporary coverage, speed reepithelialization, act as a metabolic and physical barrier.	Human skin allograft is the dressing of choice for patients with deep burn wounds when sufficient amounts of skin for autografting are unavailable.	Ordered by the square foot (e.g. 1 square foot is equal to six 3"x8" packets or nine 2"x8" packets)	Store at ≤-70°C up to 5 years from date of processing. Store thawed or fresh <u>open</u> containers at 1-10°C up to 24 hours and <u>unopened</u> containers at 1-10°C for 7 days.

Product	Function	Indication	Volume	Storage/Exp.
Fresh Skin/Tissue	To provide temporary coverage, speed reepithelialization, act as a metabolic and physical barrier.	Human skin allograft is the dressing of choice for patients with deep burn wounds when sufficient amounts of skin for autografting are unavailable.	Ordered by the square centimeter.	Store at 1 – 10C. Expires 3 days from the date of processing/harvesting.