



pet blood bank^{uk}

A charity supported by Vets Now

BLOOD COMPONENT TABLE

DISEASE PROCESS	WHOLE BLOOD	PACKED RED BLOOD CELLS	FRESH FROZEN PLASMA	FROZEN PLASMA OR CRYOSUPERNATANT	CRYOPRECIPITATE	COLLOID	RBC SUBSTITUTE
Regenerative anaemia		•					•
Nonregenerative anaemia		•					
Bicytopenia	•	•					
Pancytopenia	*						
Anaemia with hypoproteinemia	•	*		•		•	•
a Anaemia with hypovolemia	•	*				*	•
Anaemia with coagulopathy	•	*	*				
Von Willebrand's			•		*		
Pretreatment before invasive procedure (vWD, Hemophillia A)			•		*		
Hypoproteinemia				•		•	
Low immunoglobulin				•			
Hemophillia A Factor VIII			•		*		
Hemophillia B Factor IX			•	•			
DIC	*	•	•				
Pancreatitis			•				
Liver disease with coagulopathy			•				
Liver disease with anaemia	*		•				
#Thrombocytopenia							
#Thrombopathia							
Neonatal isoerythrolysis	•	*					

- indicates most suitable blood products that can be utilised in treating the disease process
- * designates the superior product choice when more than one suitable product can be utilised
- # NOTE if platelets are required FRESH whole blood must be collected and administered within 4 hours of collection for platelets to be viable.

Platelet rich plasma is not obtainable in the UK at this time.

Data was provided by Dr Anne Hale of Midwest Animal Blood Services, Michigan, USA

Products are supplied by Pet Blood Bank Services Limited the trading subsidiary of Pet Blood Bank UK. The purchaser of this product has no contract with Pet Blood Bank UK or Vets Now Limited and they accept no duty of care.



pet blood bank^{uk}

A charity supported by Vets Now

COMPONENT: storage instructions and shelf life

Whole Blood (fresh), collected in CPD or CPDA-1 must be transfused within 4 hours to have viable platelets/coagulation factors. If over 4 hours can store for up to 21 days on CPD or 35 days on CPDA at 2-6 degrees C 1 unit average volume = 450ml. Average PCV 45% unless measured	PRBC's in nutrient solution. 2-6 degrees C. 42 days in SAG-M 1 unit average volume = 250ml Average PCV 62% unless measured	Fresh Frozen Plasma <1year <-18 degrees C Becomes FP after 1 year and will store for further 4 years 1 unit average volume = 200ml	Frozen Plasma <5 years <-18 degrees C 1 unit average volume = 200ml	Cryo precipitate 1 year from date of production <-18 degrees C 1 unit average volume = 60ml	Cryo supernatant 1 year from the date of production <-18 degrees C 1 unit average volume = 140mls
Indications for use	Action	Not indicated for	Hazards	Rate of infusion	
Symptomatic anaemia (blood loss) platelet deficiency/coagulation deficit (in absence of suitable component)	Restores O ₂ carrying capacity and blood volume, if used promptly post collection supplies all coagulation factors and platelets	Conditions responsive to specific component	Infectious disease. Septic, toxic and allergic reactions. If inadequate cross matching transfusion reactions. Circulatory overload	As fast as patient can tolerate and equal to blood loss up to calculated dose -see equation below	
Symptomatic anaemia	Restores O ₂ carrying capacity	Pharmaceutically treatable anaemias or coagulation deficits	Infectious disease, septic, toxic and febrile reactions. Circulatory overload	To calculated dose < 4hrs	
Mild and severe coagulopathies, hypogammaglobulinaemia (ie passive immunity) albumin and pretreatment of vWF patients before invasive procedures	Source of labile and nonlabile clotting factors (ie all components of the coagulation cascade) immunity and albumin Lipids and electrolytes	Volume replacement Does not contain viable platelets	Infectious disease, allergic reactions and circulatory overload	<4hr (10ml/kg every 12 hrs to effect) severe coagulopathies may require 20ml/kg Through an in line blood filter (170-260 microns)	
Deficit in nonlabile clotting factors (II,V,VI,IX,X), immunoglobulin transfer, hypoproteinaemia	Source of nonlabile clotting factors (II,V,VI,IX) immunity and albumin, lipids and electrolytes	Volume replacement Does not contain viable platelets	Infectious disease allergy and circulatory overload	<4hrs (10ml/kg every 12 hrs to effect) Through an in line blood filter (170-260 microns)	
Pre treatment for vWFd or haemophilia A before invasive procedures or Tx of active bleeding in these dogs. Topical	Source of factor VIII, fibrinogen, factor XIII, vWF and VIII:c	Coagulopathies involving nonlabile clotting factors (II,V,VI,IX,X) As a source of protein or immunoglobulin	Allergic reactions	1-2ml/kg. Additional amounts may be required for actively bleeding haemophiliacs; may be repeated every 12 hrs haemostasis in surgery	
Vit K dependant coagulopathy, immunoglobulin transfer, hypoproteinaemia	Source of nonlabile clotting factors (II,V,VI,IX,X) albumin and immunoglobulin (v similar to FP)	As frozen plasma	As frozen plasma	As per fresh and frozen plasma	

Volume of donor blood to be transfused = recipient weight(kg) x 70 (dogs) or 60 (cats) x recipient desired PCV/current PCV/PCV of anticoagulated donor blood.

(Rule of thumb 2ml transfused whole blood per kg (recipient bodyweight) raises pcv by 1% or 2ml packed red cells/kg (recipient bodyweight) raises recipient PCV by 2%).

Volume of donor plasma to be transfused (ml) = recipient weight (kg) x 4.5x (desired-current recipient plasma albumin level [g/l]). Albumin level in donor plasma averages 25g/l.