



Rare Donor Program

Country: Brazil (Sírio-Libanês Blood Bank)

Rare Donor Program			
Rare Donor Program Yes			
National Regional or Facility based	In hospital based blood bank		
Number of Rare Donors	114		
Definition of Rare	Someone who is negative for a high prevalence antigen where the frequency of this antigen negative phenotype is less than 1 in 1000. People with a combination of antigen negative phenotypes where that combination has a prevalence of less than 1 in 1000 may also be considered rare.		
Are the donors listed in the International Rare Donor Panel  Yes			
Frozen Inventory	Yes		
Selected donor phenotyping and genotyping  How are Rare Donors found  Corresponding antibody detected in a donor or patient  Family studies			
Number of Rare Donor Units used per year	<10 units per year		
ISBT Rare Donor WP Blood Shipment form used	Yes		
Outcome of incompatible transfusion form used	Yes		
Most difficult types to find	Rh null, D, K <sub>0</sub> , U-, PP <sub>1</sub> Pk-		
Phenotypes confirmed by molecular testing	In some cases, molecular tests are performed.		

Phenotype	Total Active Donors	Group O	O Positive	O Negative	Other ABO/Rh
GE:-2,-3	0	0	0	0	0
Jk(a-b-)	0	0	0	0	0
K <sub>0</sub>	1	1	1	0	0
Kp(b-)	4	4	4	0	0
MkMk	0	0	0	0	0
Rh:-34	0	0	0	0	0
U-	0	0	0	0	0
PP1Pk-	0	0	0	0	0
SC:-1	0	0	0	0	0
En(a-)	0	0	0	0	0
At(a-)	0	0	0	0	0
Di(b-)	11	10	10	0	1
Jr(a-)	0	0	0	0	0
Rh null	0	0	NA	NA	0
Vel(-)	9	8	8	0	1
D	0	0	0	NA	0
Oh	0	NA	NA	NA	NA
Kx-	2	0	0	0	2
k- (cellano)	84	52	45	7	32

# Sírio-Libanês Blood Bank (Brazil) How are your rare donors found?

	Yes / No	Method	Comments
Extended phenotyping donors	Yes	Group O donors are typed for Rh (C, E, c, e) and K. – Biorad (IH 1000)	·
Extended genotyping donors	No	·	·
Family studies	Yes	Recruitment of family of donors and patients	Information to recruit family of donors is provided to the donor for discussion with family members. Family of patients are contacted via the treating clinician with patient consent.
Antibody investigations	Yes	All donors are screened for red cell antibodies using the Biorad (IH 1000).	Antibody identification in patients and donors may require the use of many different techniques, including molecular testing to determine the specificity.
Other	NA	NA	NA





Red Cell Product Specifications

	Donor Selection – Whole Blood	
Donation	Voluntary	
Age or Weight Restrictions	New donors: 16 First donation: 1 >50	L6 to 60 years
Donation Interval	Men: 90 days (3 months); wo	men: 120 days (4 months)
Sexual Activity	Positive for HIV, Hepatitis B/C, or HTLV	Permanent deferral
Precautions	Male to male sex	If up to 3 sexual partners in 1 year, since the last one with sexual intercourse at least 4 months ago: no restriction; if less than 4 months: 1 year deferral.  If more than 3 sexual partners in 1 year: 1 year deferral.
	Sex worker or contact with sex worker	1 year deferral
Travel Exclusions If donor has returned from an	Dengue Chikungunya	4 weeks deferral 4 weeks deferral
area endemic for the listed infectious illnesses	Ebola	8 weeks deferral
	Malaria	Antibody screening if donor has visited an endemic area in previous 30 days until 12 months. After 12 months, no restrictions
	West Nile Virus	4 weeks deferral
Lifestyle	Acupuncture, piercing or tattoo	1 year deferral
	Drug use (Non-prescribed injected)	Permanent deferral
	Incarceration	Deferral for 12 months from date of release
CJD geographic restrictions	If the donor stayed in the United Kingdom and/or the Republic of Ireland for more than 3 months cumulatively after 1980 until December 31, 1996 or stayed in Europe for 5 years or more consecutively or intermittently after 1980 until the present time: permanent deferral	
COVID restrictions	COVID19 vaccine administration	7 days deferral
	COVID infection	30 days deferral from last symptoms
	Household contact	According to the relevant public health guidelines

	Mandatory Infectious Diseases Screening of Blood Products		
	Screening test	Risk of blood transfusion transmission	
HIV	HIV-1/2 Ab (also detects HIV p24 Ag) & RNA by NAT	<1 in 1 million risk of blood transfusion transmission	
HCV	HCV Ab & RNA by NAT	<1 in 1 million risk of blood transfusion transmission	
НСВ	HBsAg & HBV DNA by NAT	<1 in 1 million risk of blood transfusion transmission	
Syphilis	Treponemal Ab	<1 in 1 million risk of blood transfusion transmission	
HTLV (1 & 2)	HTLV-1/2 Ab	<1 in 1 million risk of blood transfusion transmission	
CMV	Not routinely screened Leucodepleted blood products are considered CMV safe	<1 in 1 million risk of blood transfusion transmission	
Zika Virus	NA		
West Nile Virus	NA		
Babesia	NA		
Trypanosoma cruzi (T. cruzi) Chagas Disease	T. Cruzi Ab	<1 in 1 million risk of blood transfusion transmission	

Red Cells	Leucocyte Depleted	Paediatric Leucocyte Depleted	Washed Leucocyte Depleted
Description	A red cell component obtained by removing most of the plasma after centrifuging whole blood collected into anticoagulant. The red cells may be resuspended in other additives to prolong storage and are filtered to remove most leucocytes.	A leucocyte depleted red cell component divided into two or more packs for the purpose of reducing donor exposure for small paediatric transfusions and to minimise product wastage.	Red cells leucocyte depleted are washed with sterile saline solution using a manual process to remove the majority of unwanted plasma proteins, antibodies and electrolytes. The washed red cells are resuspended in saline solution.
Anticoagulant	Citrate phospahte dextrose (CPD) 66.5 mL +/- 10% per pack of whole blood		
Additive Solution	Saline adenine glucose mannitol (SAG-M) 105 +/- 10% mL	Saline adenine glucose mannitol (SAG-M)	Saline solution
Average volume	260 +/- 15 mL 60 +/- 4 mL 258 +/- 18 mL		258 +/- 18 mL
Storage Duration	42 days	42 days 42 days 24 hours	
Leukofiltration		leucocyte reduced to <1x10^6/unit	
Storage Temperature	2°C to 6°C		
Transport Temperature	2°C to 10°C		
Modifications	Phenotyped, irradiated		
Irradiation Policy	Gamma irradiation: 25-50Gy or X-ray irradiation		

	For Intrauterine Transfusion	Frozen Leucocyte Depleted
Description	A hyper-concentrated red cell component less than five days old with a haematocrit of 0.70–0.85 obtained by removing most of the plasma/additive solution. The red cells may be resuspended in saline solution to achieve the desired haematocrit.	Used for patients with rare red cell phenotypes, or multiple red cell antibodies and for autologous collections when liquid-preserved blood cannot fulfil demands.  Can be supplied internationally as a frozen product and thawed locally
Anticoagulant	Citrate phospahte dextrose (CPD)	Citrate phospahte dextrose (CPD)
Additive Solution	Saline adenine glucose mannitol (SAG-M)	Glycerol is added to red cells as a cryoprotectant
Leukofiltration	leucocyte reduced to <1x10^6/unit	leucocyte reduced to <1x10^6/unit
Average volume	>220 mL	>185 mL
Storage Temperature	2°C to 6°C	-65°C to -80°C Frozen within 7 days of collection 2°C to 6°C once thawed
Transport Temperature	2°C to 10°C	Below -65°C 2°C to 10°C once thawed
Storage Duration	24 hours post irradiation	10 years
Irradiation Policy	Gamma irradiation: 25-50Gy or X-ray irradiation Red cells for IUT must be irradiated. Once irradiated the component must be used within 24 hours.	Gamma irradiation: 25-50Gy or X-ray irradiation
Other	ABO, RhD compatible with both mother and fetus, K negative. Should be antigen-negative for maternal alloantibodies, IAT crossmatch compatible with the maternal plasma and CMV seronegative. If the fetal blood group is unknown use group O, RhD negative red cells.	Prior to transfusion, glycerol must be removed from the thawed component by washing the cells with sodium chloride. After washing, the red cells are resuspended in additive solution or and must be used within 24 hours. There will be some loss of red cells during the freezing and thawing process. When requesting frozen red cells it should be noted that thawing and processing time is several hours.

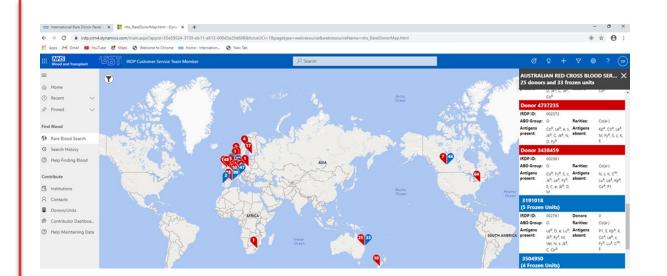




Frozen Inventory

General Information		
Freezing Method	Valeri Method	
Frozen Expiry (years)	10 years Exceptionally rare units may be retained beyond expiry.	
Storage Temperature	≤ -65°C	
Can inventory be issued and sent frozen	Yes	
Thawing Method	Deglicerolisation with 12% and 0.9% saline using COBE 2991 cell washer	
Thawed Expiry (days)	24 hours	
Additive Solution	SAGM	
Irradiation Policy	Not a registered process, but may be issued as a patient tailored product	
IUT and Neonate use	Not a registered process, but may be issued as a patient tailored product	
Supply out of date Policy	Exceptionally rare units may be retained beyond expiry . If required for issue they are released as a non-confirming product	

Product Specifications		
Volume	> 185mL	
Supernatant Haemoglobin	<0.2 g/unit	
Haematocrit	50-75%	
Haemoglobin	≥36	
Osmolarity	≤340	
Residual leucocyte content	< 1.0 x 10 <sup>9</sup> /unit)	
Sterility	No growth	
Other	NA	





Ordering and Shipping

Exporting	
Request form available	Yes
Government Requirements	National Blood Authority Approval to Supply Blood Products to Organisations for Use Overseas facilitated by Lifeblood  Customs invoice supplied by Lifeblood
Regulatory Requirements TGA Export Permit supplied by Lifeblood	
Rare Donor Program Requirements  Preferred courier – World Couriers Completed request form	
Other	NA

	Importing
Government Requirements	NA
Regulatory Requirements	Notification of requirement to import via the TGA Special Access Scheme - Category A
Rare Donor Program Requirements	A copy of all test results for the donation e.g. blood group, phenotype and infectious disease screening Temperature monitored transport (Preferred courier – World Couriers)
Other	NA