





Rare Donor Program

- ¹ C. Weinstock, ² F.F. Wagner, ³ R. Deitenbeck, ¹ E. Scharberg
- ¹ German Red Cross Blood Service Baden-Württemberg Hessen
- ² German Red Cross Blood Service NSTOB
- ³ German Red Cross Blood Service West: North Rhine-Westphalia, Rhineland-Palatinate, Saarland

	Rare Donor Program
Rare Donor Program	Yes
National Regional or Facility based	facility based
Number of Rare Donors	approx. 2000
Definition of Rare	Negative for clinical relevant antigen >99.5%, rare RH phenotype (CCD.EE, ccddEE, CCddee, D) Negative for a high prevalence antigen (less than 1 in 1.000) or combination of two or more antibodies and a frequency of less than 1 in 1.000 of compatible donations
Are the donors listed in the International Rare Donor Panel	part of the donors
Frozen Inventory	yes
How are Rare Donors found	phenotyping and genotyping of suitable random donors (0 Rh ccddee, 0 Rh CCD.ee, and 0 Rh ccD.EE), systematic screen, antibody formation, relatives of patients
Number of Rare Donor Units used per year	30
ISBT Rare Donor WP Blood Shipment form used	Some of the services use the form
Outcome of incompatible transfusion form used	Offered by blood services but so far not used by customers
Most difficult types to find	Rhnull, D, U neg, Lan neg
Phenotypes confirmed by molecular testing	More than 50 %

Phenotype	Total Active Donors	Group O	O Positive	O Negative	Other ABO/Rh
GE:-2,-3	0				
Jk(a-b-)	0				
Ko	0				
Kp(b-)	21	14	7	7	7
MkMk	0				
Rh:-34	0				
U-	3	0	0	0	3
PP1Pk-	0				
SC:-1	0				
En(a-)	0				
At(a-)	0				
Di(b-)	0				
Jr(a-)	2				
Rh null	2	0	0	0	2
Vel(-)	64	44	32	12	20
D	3	2	2	0	1
Oh	5	5	5	0	

3

Germany How are your rare donors found?

	Yes / No	Method	Comments	
Extended phenotyping donors	Yes			
Extended genotyping donors	Yes	SSP-PCR, MALDI-TOF, NGS		
Family studies	Yes	Genotyping		
Antibody investigations	Yes	Column agglutination		
Other				





Red Cell Product Specifications

	Donor Selection	
Donation	Voluntary/exc	change
Age or Weight Restrictions	> 18 yrs; >	50 kg
Donation Interval	> 56 day	ys
Sexual Activity Precautions	Positive for HIV, Hepatitis B/C, or HTLV	permanent deferral
	Male to male sex	4 month deferral
	Sex worker or contact with sex worker	4 month deferral
Travel Exclusions	Dengue	6 month deferral
If donor has returned from an area endemic for the listed	Ebola	6 month deferral
infectious illnesses	Malaria	6 month deferral
	West Nile Virus	none
Lifestyle	Acupuncture, piercing or tattoo	4 month deferral
	Drug use (Non-prescribed injected)	permanent deferral
	Incarceration	4 month deferral
CJD restrictions	patients and all relativ	ves are deferred
Covid restrictions	COVID19 vaccine administration	1 day deferral
	COVID infection	4 week deferral
	Household contact	

	Screening test	Risk of blood transfusion transmission
HIV	HIV-1/2 Ab & RNA by NAT	< 1 in 4 mio
нсу	HCV Ab & RNA by NAT	< 1 in 10 mio
HBV	HBsAg + anti-HBc (most services also DNA by NAT)	< 1 in 1 mio
Syphilis	Treponemal Ab	no data available
HTLV (1 & 2)	No	no data available
CMV	Donor antibodies or NAT, on request	no data available
Zika Virus	No	no data available
West Nile Virus	June to December by NAT	no data available
Babesia	No	no data available
Trypanosoma cruzi (T. cruzi) Chagas Disease	No No	no data available no data available

Red Cell Blood Product	
Description	
Anticoagulant	CPD
Additive Solution	PAGGS-M
Leukofiltration	yes
Average volume	NA (Hb > 40 g/unit)
Storage Temperature	4 +/- 2 °C
Transport Temperature	2 °C < T < 10 °C
Storage Duration	49 days
Irradiation Policy	Irradiation on request (>25 Gy)
Other	NA

Red Cell Blood Product	
Description	
Anticoagulant	
Additive Solution	
Leukofiltration	
Average volume	
Storage Temperature	
Transport Temperature	
Storage Duration	
Irradiation Policy	
Other	

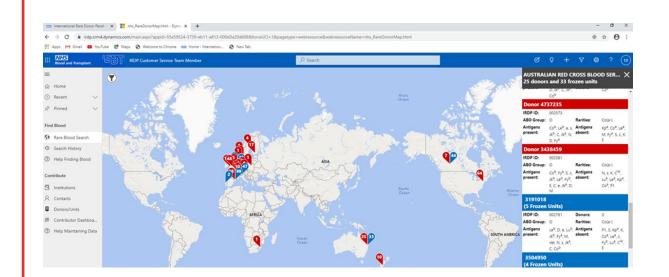




Frozen Inventory

General Information		
Freezing Method	High glycerol; low glycerol	
Frozen Expiry (years)	10	
Storage Temperature	< -80 °C; liquid nitrogen	
Can inventory be issued and sent frozen	no	
Thawing Method	12 % NaCl, Haemonetics; 3 % NaCl, manual preparation	
Thawed Expiry (days)	1	
Additive Solution	PAGGS-M	
Irradiation Policy	on request	
IUT and Neonate use	yes	
Supply out of date Policy	no regulation	

Product Specifications		
Volume	NA	
Supernatant Haemoglobin	NA	
Haematocrit	0.5 – 0.75	
Haemoglobin	> 36 g unit	
Osmolarity	Osmolality: as of the wash solution plus 10 % (mOSm/kg ${ m H_2O}$)	
Residual leucocyte content	< 1 x 10 ⁶	
Sterility	no growth, all wash solutions to be tested	
Other	NA	





Ordering and Shipping

Exporting	
Request form available	no
Government Requirements	blood product approved by the authority of the country of donation/production
Regulatory Requirements	
Rare Donor Program Requirements	none
Other	NA

	Importing
Government Requirements	
Regulatory Requirements	
Rare Donor Program Requirements	
Other	