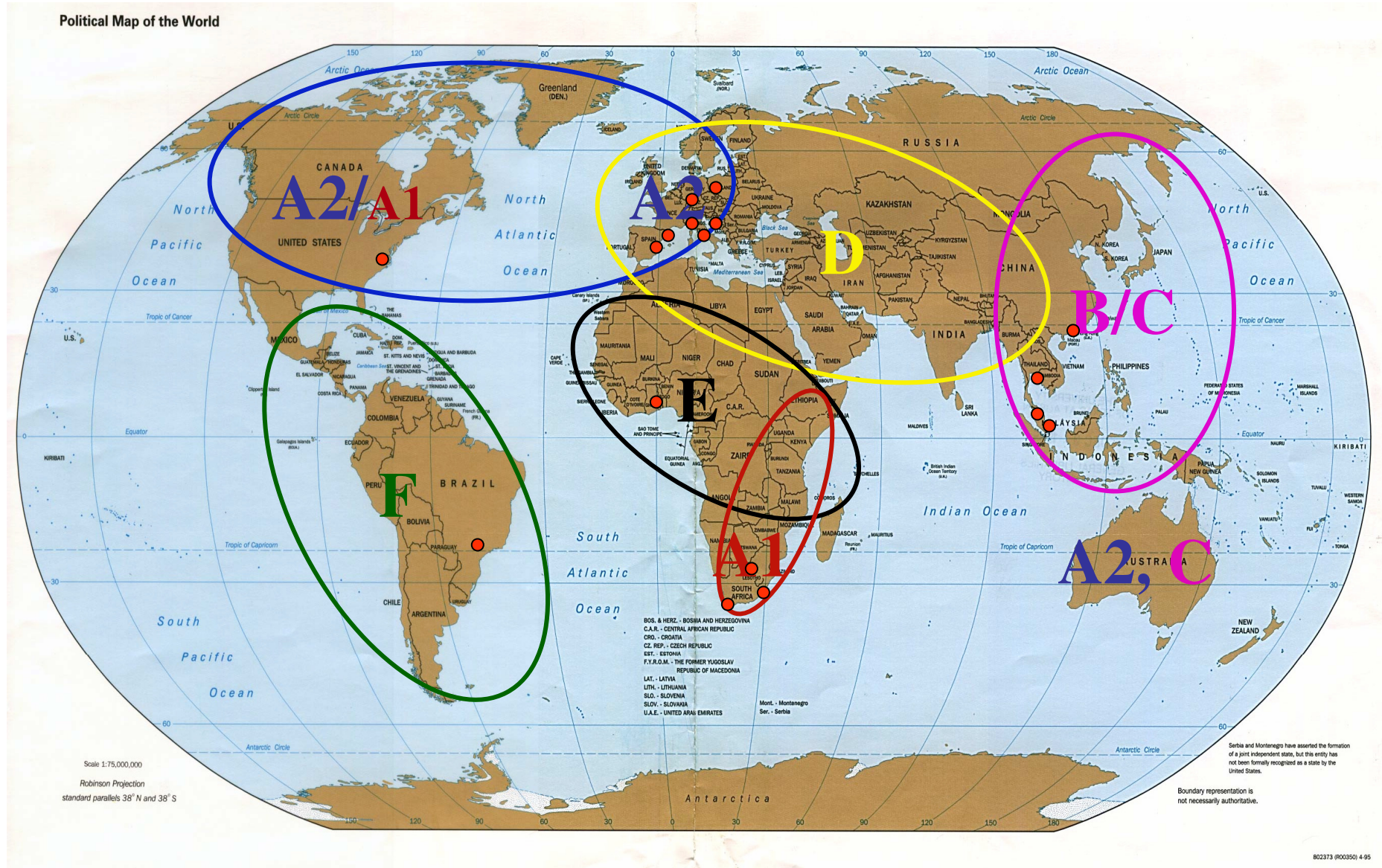


ISBT TTI WP: HBV safety study group

Molecular characterisation of occult HBV infection
of different genotypes in blood donors

Origin of OBIs studied and HBV genotypes



Collaborators

Europe

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Prevalence and type of HBsAg-/DNA+ in donations screened individually

Country (%prev)	Donations	OBI frequency	Anti-HBc (%)
Poland	250,191	1:11,900	7
Rome	35,016	1:4,377	4-8
Turin	236,708	1: 13,150	4-8
Madrid	157,207	1:10,500	5
Barcelona	15,545	1:2,590	4
Pakistan (2.2)	966	1:193	17.3
Thailand (5.6)	5,083	1:726	60
Ghana (15)	1,300	1:62	85

Blood Centres contributing to the data presented

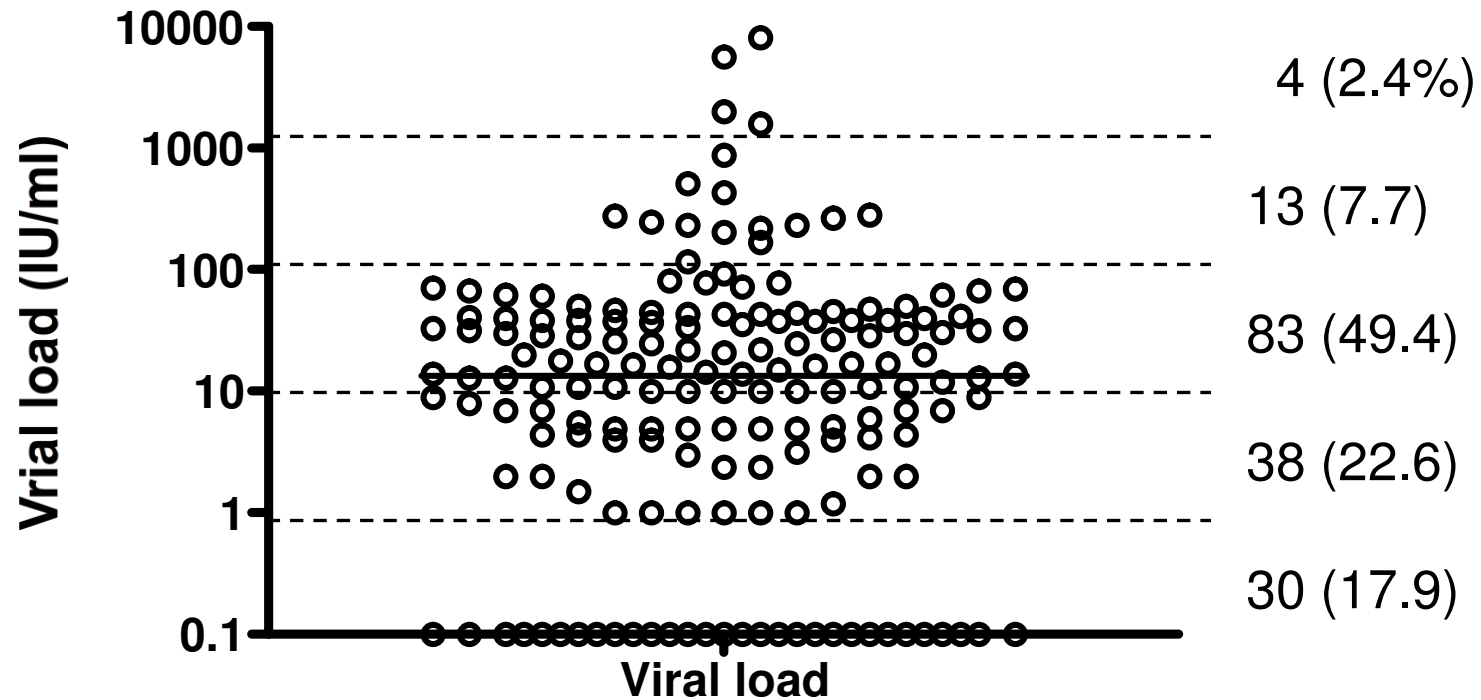
	Number of yield samples			
	Total	WP	OBI	Other*
Poland (21 centres)	28	4	21	3
Spain (Barcelona, Valencia)	35	4	30	1
Italy, (Rome & Torino)	35	0	29	6
Germany (Frankfurt)	11	0	6	5
Hong Kong	2	0	2	0
Singapore	6	0	6	0
Thailand (Bangkok)	2	0	2	0
Malaysia (Kuala Lumpur)	6	0	0	6
Ghana (Kumasi)	23	0	23	0
South Africa (SANBTS, Cape Town)	34	0	34	0
Total	182	8	153	21

* HBsAg+ with alternative assays or 2d WP or unconfirmed OBI

Samples pending

Hong Kong	14
USA	18
Slovenia	6
Paul Erlich Institute	1
Cape Town	7
Johanesburg/Durban	94
Malaysia	5
Total	<u>145</u>

Distribution of viral load in 168 cases of OBI



Distribution of HBV genotypes based on Pre-S-S sequences

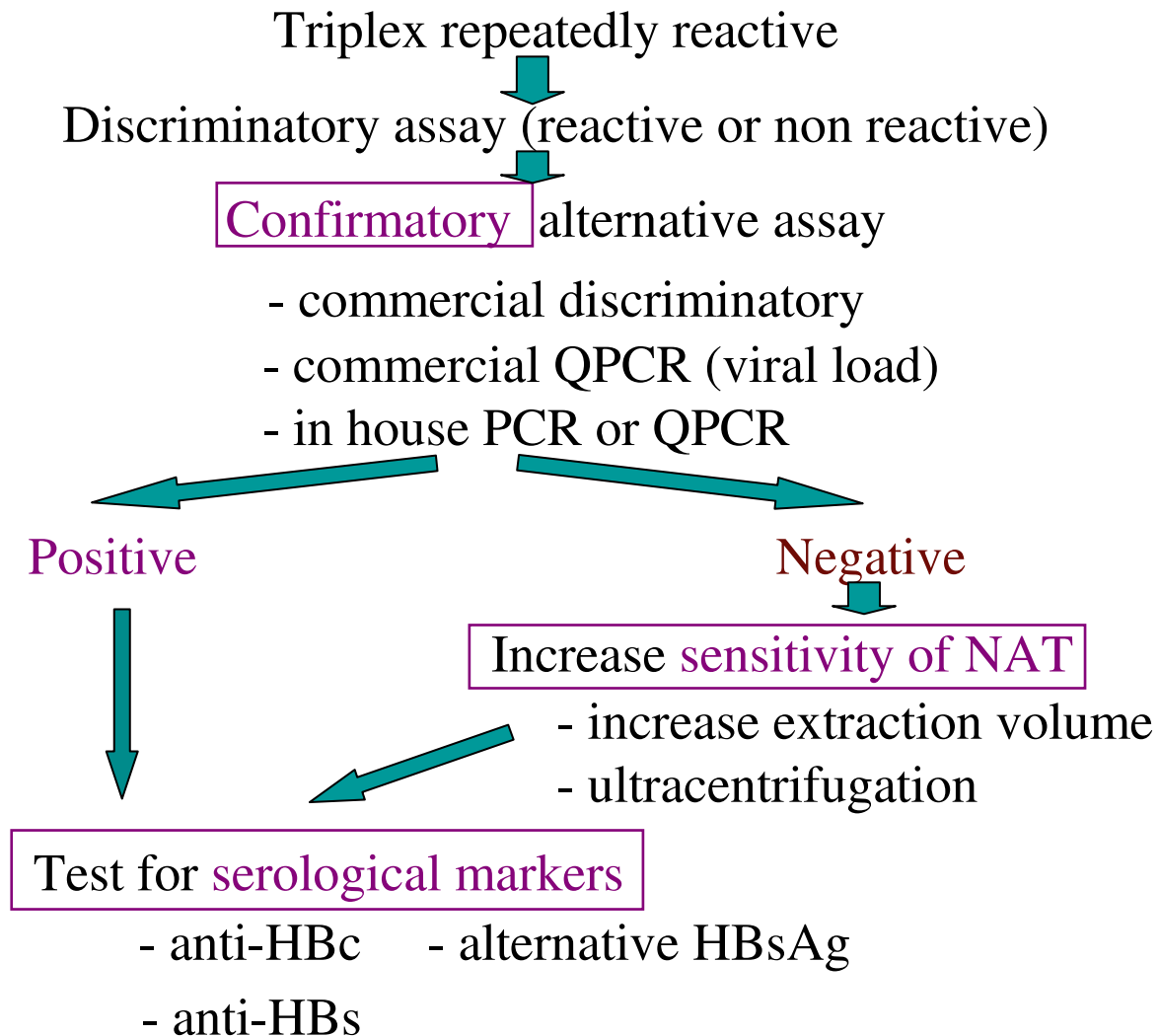
Origin	Genotype						
	A1	A2	B	C	D	E	F
Poland		4			10		
Spain		4			10		1
Italy					13		
Germany		1			1		
Far East			2	3			
Ghana						16	
South Africa	10				3		
Total	10	9	2	3	37	16	1

Distribution of HBV genotypes among Polish blood donors

Type of infection	Genotype N (%)	
	A2	D
HBsAg+/DNA+	114 (79.2)	30 (20.8)
HBsAg-/DNA+	6 (37.5)	10 (62.5)

P = 0.001

HBV NAT confirmation



Questionnaire for collecting lookback information on OBI infectivity

ISBT TT I working party: HB V safety study group

Questionnaire to assess the infectivity of occult Hepatitis B virus infection (OBI)

DONOR Serial number

Age in years Male Female

Repeat donor Number of previous donations

Details on Index donation (donation in which HBV DNA has been first detected)

HBV DNA Screening test used: Chiron Roche Other

Number of reactive repeat screens of repeat discriminatory

Confirmation test used (discriminatory assays are not considered confirmatory):

Positive Negative

Viral load when known (IU/ml)

HBV genotype when known

HBV serological markers

HBsAg Positive Negative S/CO assayed

Anti-HBc Positive Negative Not done

Anti-HBe Positive Negative Not done

Anti-HBs Positive IU/L Negative Not done

ALT level 1 (IU/L)

Details of previous donations

Date	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Products	RC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	FFP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole blood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RECIPIENT

Code identification

Age in years Male Female

Date of transfusion

Product transfused RCC PC FFP Whole blood

Estimated volume of plasma transfused in ml

Underlying disease

Drugs taken by the patient possibly influencing the immune status:

Chemotherapy (indicate drug and dosage)

Immunosuppressive treatment (indicate drug and dosage)

Monoclonal antibody (indicate brand and dosage)

Clinical signs post-transfusion suggesting HBV infection

Jaundice Fatigue Vomiting ALT level (IU/L)

Markers of HBV pre-transfusion Indicate number of days pre-transfusion

HBsAg	Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>	Not done	<input type="checkbox"/>
HBV DNA	Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>	Not done	<input type="checkbox"/>
Anti-HBc	Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>	Not done	<input type="checkbox"/>
Anti-HBs	Positive	<input type="checkbox"/>	IU/L	<input type="text"/>	Negative	<input type="checkbox"/>
					Not done	<input type="checkbox"/>

Markers of HBV post-transfusion Indicate the number of days post-transfusion

HBsAg	Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>	Not done	<input type="checkbox"/>
HBV DNA	Positive	<input type="checkbox"/>	Viral load	<input type="text"/>	Genotype	<input type="text"/>
					Negative	<input type="checkbox"/>
					Not done	<input type="checkbox"/>
Anti-HBc	Positive	<input type="checkbox"/>	Negative	<input type="checkbox"/>	Not done	<input type="checkbox"/>
Anti-HBs	Positive	<input type="checkbox"/>	IU/L	<input type="text"/>	Negative	<input type="checkbox"/>
					Not done	<input type="checkbox"/>

Conclusion: HBV transmission by transfusion is:

Demonstrated Very likely Probable Unlikely Proven negative

If 'demonstrated', provide HBV sequences of donor and recipient.

Name and function of person filling this questionnaire