Interpretive Educational Scheme (iED)
Clinical Scenario 1/2026 – Solid Organ Transplantation

Dispatched on 26th May 2026

We received 45 responses in total. 20 responses from UK and Ireland (UK&I) based laboratories and 25 responses from laboratories based in the Rest of the World (RoW).

Summary of Results

Samples from a 36-year-old female patient diagnosed with pyelonephritis caused by reflux nephropathy were received in the laboratory in 2021 for kidney transplantation. The patient had an eGFR of 7ml/minute/1.73m^2 and was on continuous ambulatory peritoneal dialysis (CAPD) at that time. She had a history of recurrent urinary tract infections, as well as hypertension. She had one pregnancy and no previous transfusions or transplants.

Table 1: Patient HLA Type and ABO Group

	Patient								
HLA Type	**A***	**B***	**C***	**DRB1***	**DRB4***	**DQB1***	**DQA1***	**DPB1***	**DPA1***
	03:01 33:03	07:02 40:01	03:04 07:02	01:01 04:07	01:03 01:03	03:01 05:01	01:01 03:03	03:01 03:01	01:03 01:03
ABO Group	B								

HLA antibody detection using LABScreen Mixed beads were Class I Positive, Class II Negative. Specification testing was performed using LABScreen Class I single antigen bead (SAB) testing (Table 2).

Table 2: Patient Class I SAB Results (*Beads over 500 MFI are shown)*

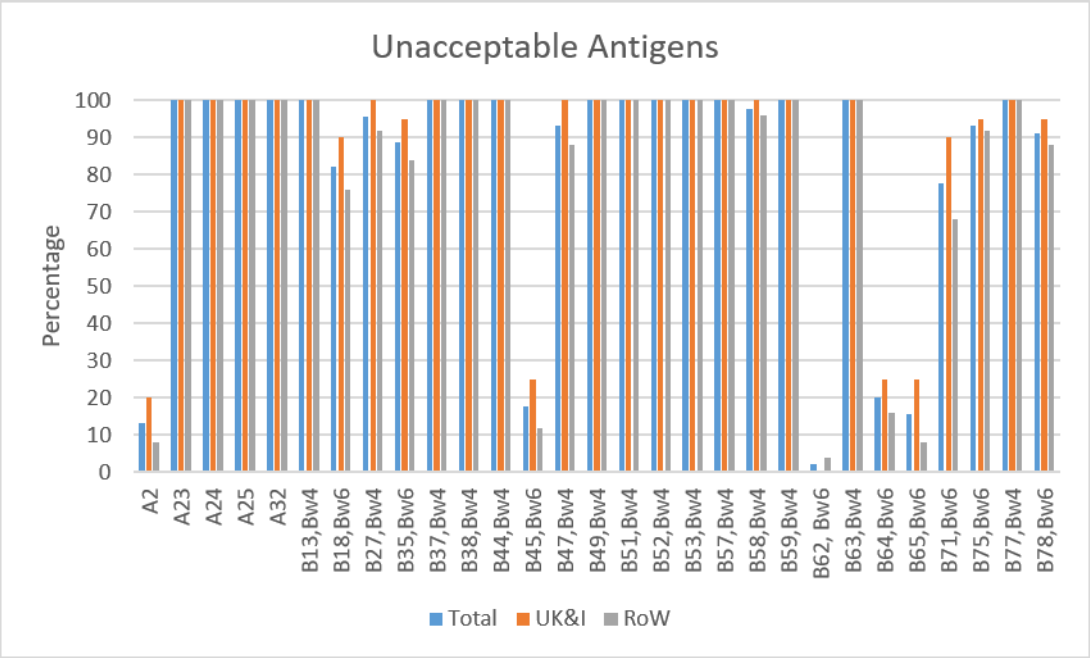
Specificity	Antigen	MFI 10/02/2021	MFI 26/05/2021
B*51:02	B51,Bw4	21,143	20,468
A*32:01	A32	20,893	21,779
B*49:01	B49,Bw4	20,759	20,303
A*25:01	A25	20,374	21,738
B*51:01	B51,Bw4	20,028	21,184
B*15:13	B77,Bw4	19,812	19,256
A*23:01	A23	19,437	18,459
B*52:01	B52,Bw4	19,130	19,557
B*59:01	B59,Bw4	18,992	20,024
B*15:16	B63,Bw4	18,830	19,953
B*57:01	B57,Bw4	18,817	17,612
B*13:02	B13,Bw4	18,551	18,053
B*38:01	B38,Bw4	18,512	17,981
B*53:01	B53,Bw4	18,026	20,244
B*57:03	B57,Bw4	17,905	17,059
B*58:01	B58,Bw4	17,681	17,501

A*24:02	A24	17,198	17,283
A*24:03	A24	16,935	17,620
B*44:03	B44,Bw4	13,072	9,696
B*37:01	B37,Bw4	12,911	13,072
B*27:05	B27,Bw4	9,231	7,322
B*44:02	B44,Bw4	8,758	8,494
B*13:01	B13,Bw4	7,902	8,827
B*78:01	B78,Bw6	6,991	9,268
B*15:02	B75,Bw6	5,029	4,643
B*35:01	B35,Bw6	4,379	6,009
B*47:01	B47,Bw4	4,264	3,064
B*15:11	B75,Bw6	4,141	5,505
B*18:01	B18,Bw6	2,949	2,592
B*15:10	B71,Bw6	2,873	2,741
A*02:06	A2	1,396	736
A*02:01	A2	1,356	799
B*45:01	B45,Bw6	1,307	634
B*14:01	B64,Bw6	1,263	1,081
A*02:03	A2	1,159	686
B*14:02	B65,Bw6	1,010	783
B*15:01	B62, Bw6	617	791

Q1a – Based on the two sample results above, what would you list as unacceptable antigens for deceased donor transplantation?

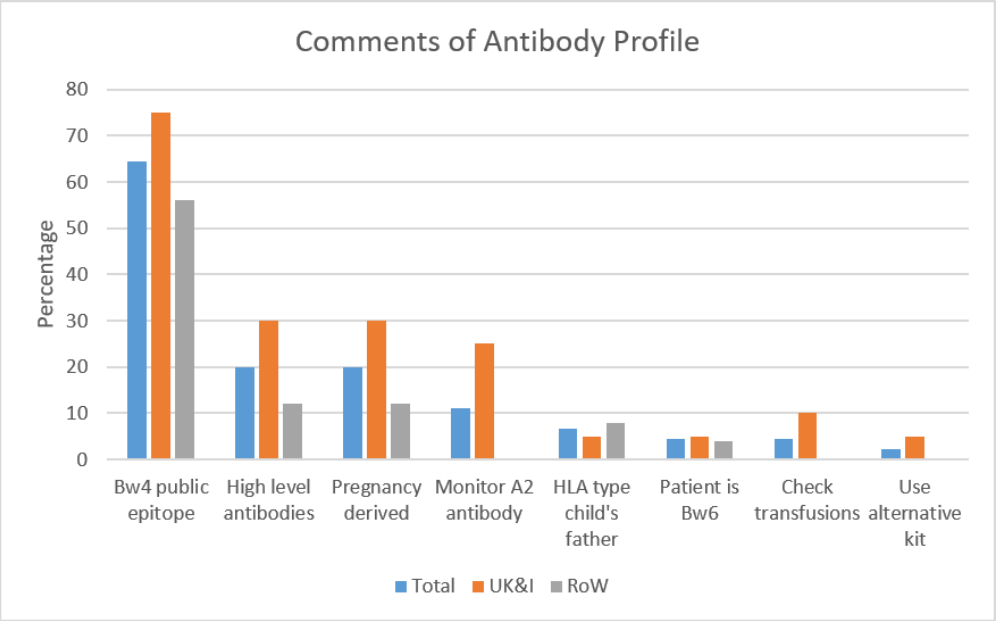
Unacceptable Antigens	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
A2	6	**13**	4	**20**	2	**8**
A23	45	**100**	20	**100**	25	**100**
A24	45	**100**	20	**100**	25	**100**
A25	45	**100**	20	**100**	25	**100**
A32	45	**100**	20	**100**	25	**100**
B13,Bw4	45	**100**	20	**100**	25	**100**
B18,Bw6	37	**82**	18	**90**	19	**76**
B27,Bw4	43	**96**	20	**100**	23	**92**
B35,Bw6	40	**89**	19	**95**	21	**84**
B37,Bw4	45	**100**	20	**100**	25	**100**
B38,Bw4	45	**100**	20	**100**	25	**100**
B44,Bw4	45	**100**	20	**100**	25	**100**
B45,Bw6	8	**18**	5	**25**	3	**12**
B47,Bw4	42	**93**	20	**100**	22	**88**
B49,Bw4	45	**100**	20	**100**	25	**100**
B51,Bw4	45	**100**	20	**100**	25	**100**
B52,Bw4	45	**100**	20	**100**	25	**100**

B53,Bw4	45	**100**	20	**100**	25	**100**
B57,Bw4	45	**100**	20	**100**	25	**100**
B58,Bw4	44	**98**	20	**100**	24	**96**
B59,Bw4	45	**100**	20	**100**	25	**100**
B62, Bw6	1	**2**	0	**0**	1	**4**
B63,Bw4	45	**100**	20	**100**	25	**100**
B64,Bw6	9	**20**	5	**25**	4	**16**
B65,Bw6	7	**16**	5	**25**	2	**8**
B71,Bw6	35	**78**	18	**90**	17	**68**
B75,Bw6	42	**93**	19	**95**	23	**92**
B77,Bw4	45	**100**	20	**100**	25	**100**
B78,Bw6	41	**91**	19	**95**	22	**88**



Q1b – Do you have any comments on the patient's unacceptable antigen profile?

Comments on Antibody Profile	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Antibodies to Bw4 public epitope	29	**64**	15	**75**	14	**56**
High level antibodies	9	**20**	6	**30**	3	**12**
Pregnancy derived antibodies	9	**20**	6	**30**	3	**12**
Monitor A2 antibody	5	**11**	5	**25**	0	**0**
HLA type child's father	3	**7**	1	**5**	2	**8**
Patient is Bw6	2	**4**	1	**5**	1	**4**
Check if patient has had transfusions	2	**4**	2	**10**	0	**0**
Confirm antibody profile with alternative kit	1	**2**	1	**5**	0	**0**



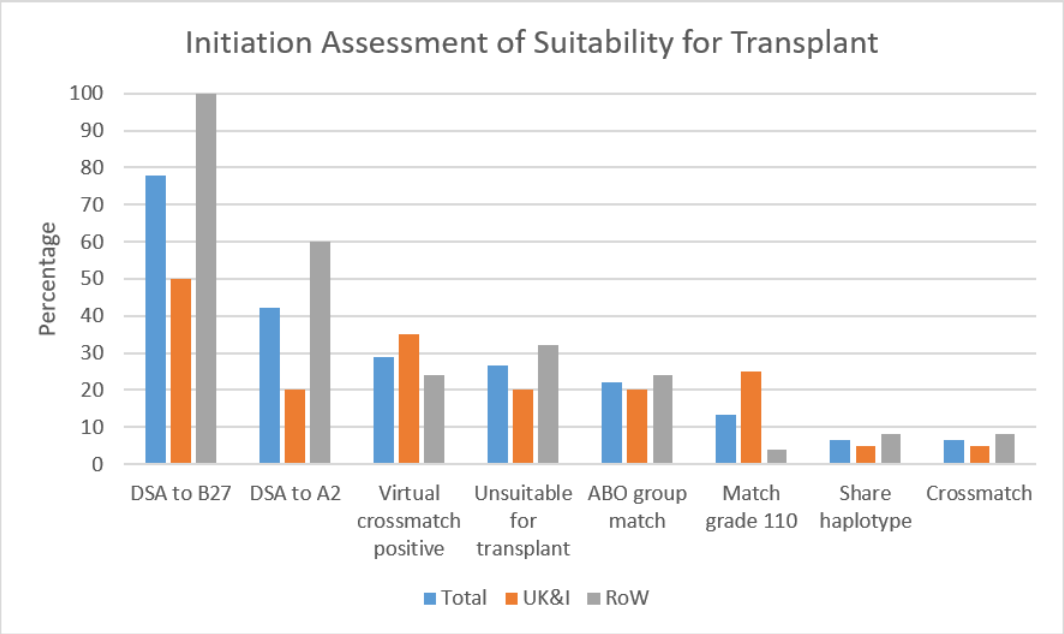
The patient's sister, presented as a potential living directed donor, see Table 3.

Table 3: Sibling Donor HLA Type and ABO Group

KK (Prospective Live Donor)									
HLA Type	**A***	**B***	**C***	**DRB1***	**DRB4***	**DQB1***	**DQA1***	**DPB1***	**DPA1***
	02:01 03:01	27:05 40:01	01:02 07:02	01:01 04:03	01:03 01:03	03:01 05:01	01:01 04:01	03:01 04:01	01:03 01:03
Blood Group	B								

Q2 – What would your initial assessment of suitability indicate for this potential transplant?

Assessment on Suitability	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
DSA to B27	35	**78**	10	**50**	25	**100**
DSA to A2	19	**42**	4	**20**	15	**60**
Virtual crossmatch positive	13	**29**	7	**35**	6	**24**
Unsuitable for direct transplant	12	**27**	4	**20**	8	**32**
ABO group match	10	**22**	4	**20**	6	**24**
Match grade 110	6	**13**	5	**25**	1	**4**
Share haplotype	3	**7**	1	**5**	2	**8**
Crossmatch to assess risk	3	**7**	1	**5**	2	**8**



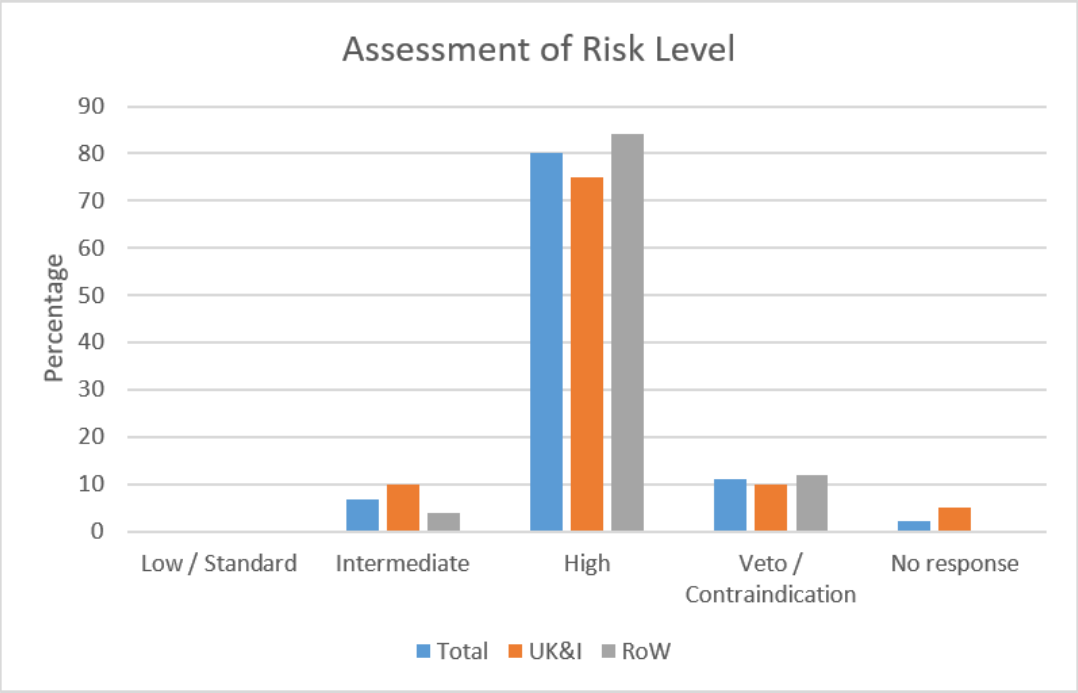
The patient and her sister were crossmatched to assess immunological risk, see Table 4.

Table 4: Flow cytometry crossmatch (FCXM) results

Allogeneic FCXM					Autologous FCXM			
Serum Date	**T Cell**	**LCS***	**B Cell**	**LCS***	**T Cell**	**LCS***	**B Cell**	**LCS***
10/02/2021	Positive	66	Positive	99	Negative	1	Negative	23
26/05/2021	Positive	84	Positive	105	Negative	0	Negative	15
12/09/2021	Positive	87	Positive	109	Negative	4	Negative	37
**Linear Channel Shift (LCS) ≥ 40 is positive.*								

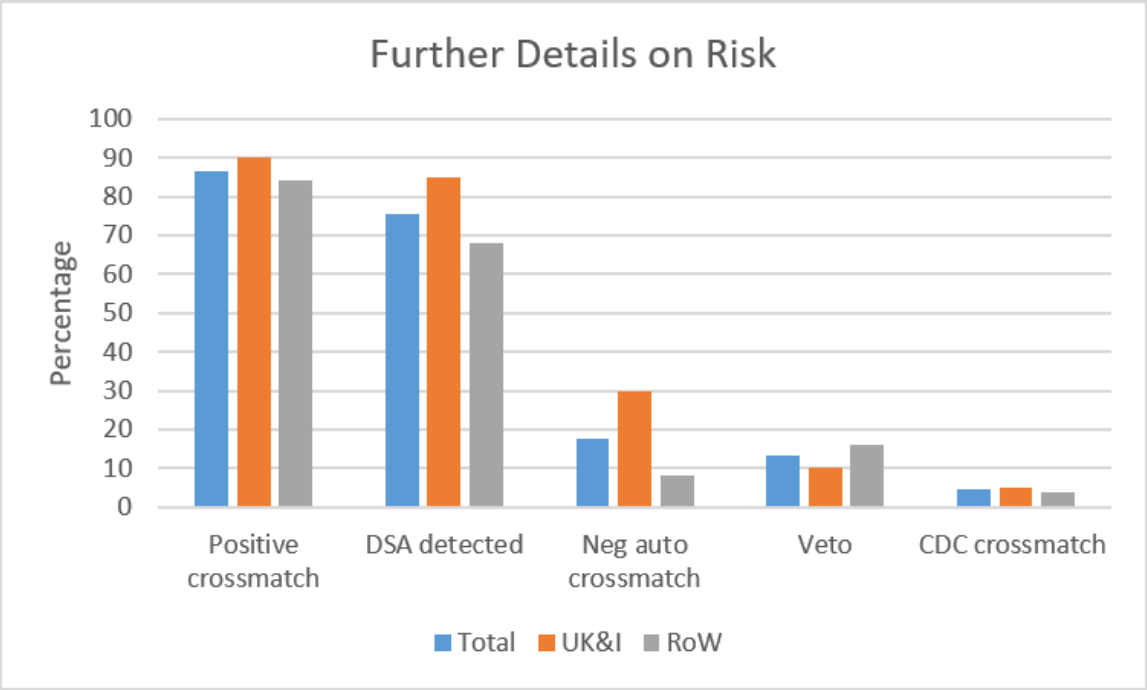
Q3a – What risk level would you assign this transplantation?

Risk Level	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Low/Standard	0	**0**	0	**0**	0	**0**
Intermediate	3	**7**	2	**10**	1	**4**
High	36	**80**	15	**75**	21	**84**
Veto/Contraindication	5	**11**	2	**10**	3	**12**
No response	1	**2**	1	**5**	0	**0**



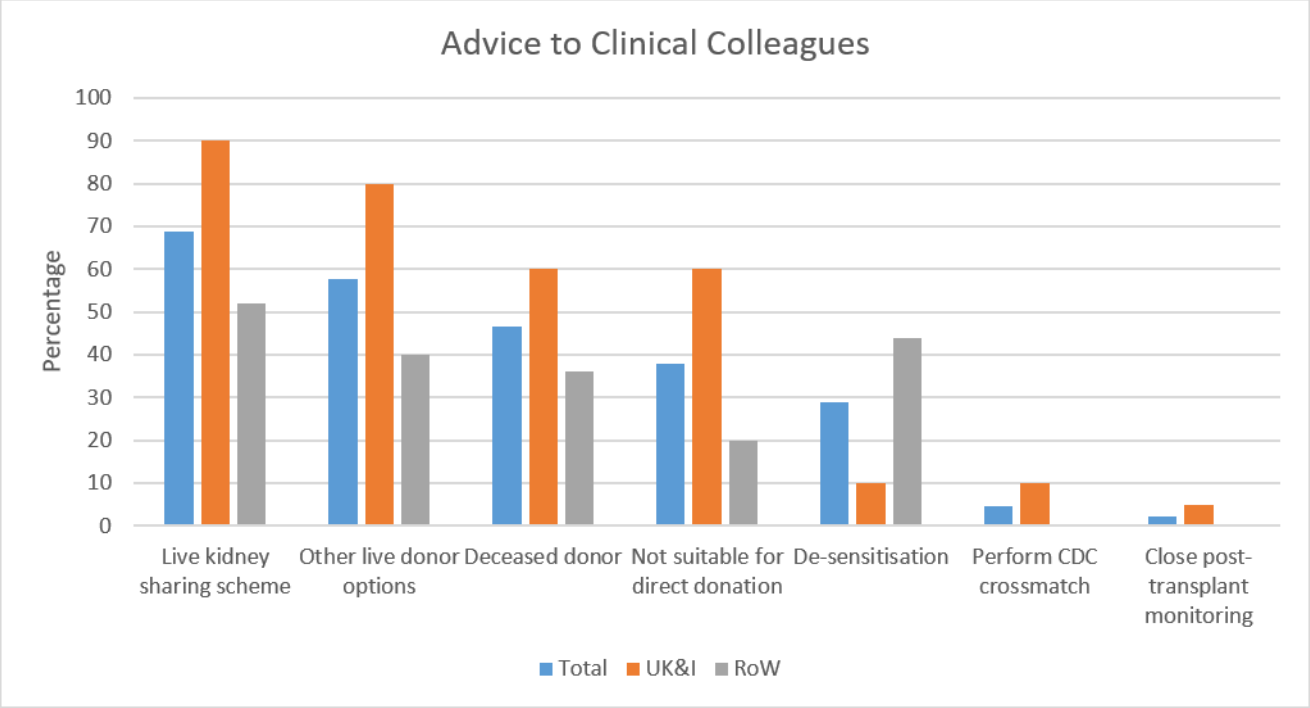
Q3b – Please give further details

Further Details on Risk	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Positive T and B cell crossmatch	39	**87**	18	**90**	21	**84**
Donor specific antibody detected	34	**76**	17	**85**	17	**68**
Negative autologous crossmatch	8	**18**	6	**30**	2	**8**
Veto to transplantation	6	**13**	2	**10**	4	**16**
CDC crossmatch required to assess risk	2	**4**	1	**5**	1	**4**



Q3c – What advice would you provide to clinicians?

Advice to Clinicians	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Live kidney sharing scheme	31	**69**	18	**90**	13	**52**
Other live donor options	26	**58**	16	**80**	10	**40**
Deceased donor	21	**47**	12	**60**	9	**36**
Not suitable for direct donation	17	**38**	12	**60**	5	**20**
De-sensitisation	13	**29**	2	**10**	11	**44**
Perform CDC crossmatch	2	**4**	2	**10**	0	**0**
Close post-transplant monitoring	1	**2**	1	**5**	0	**0**



The decision was taken to enter the patient into a living kidney donor sharing scheme with her sister. Additional test results of two Class I SAB samples are provided in Table 5.

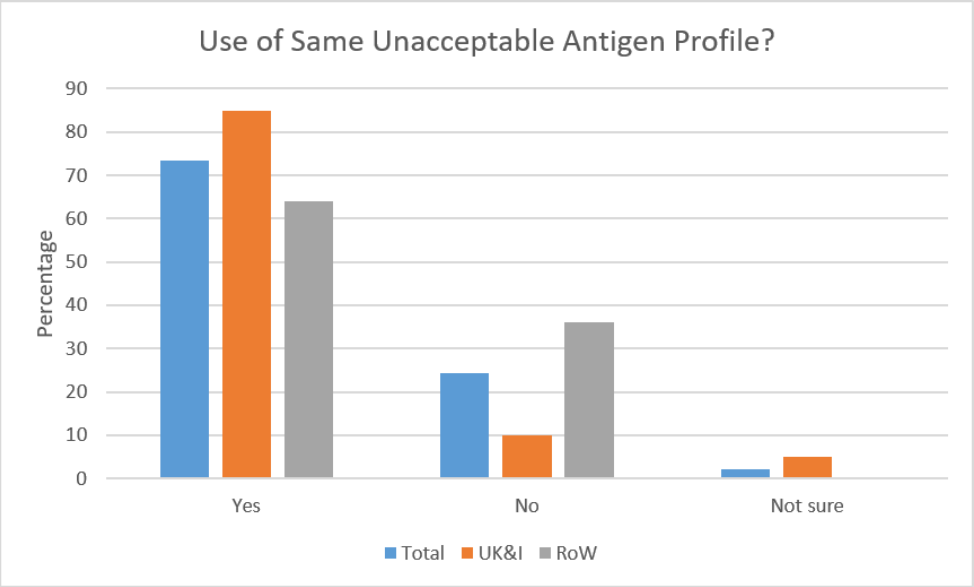
Table 5: Additional Patient Class I SAB Results

Specificity	Antigen	MFI 12/09/2021	MFI 15/02/2022
B*51:02	B51,Bw4	24,177	17,965
A*32:01	A32	26,542	22,874
B*49:01	B49,Bw4	24,334	21,304
A*25:01	A25	25,094	21,442
B*51:01	B51,Bw4	25,178	20,108
B*15:13	B77,Bw4	21,912	18,473
A*23:01	A23	21,896	17,756
B*52:01	B52,Bw4	22,874	16,538
B*59:01	B59,Bw4	22,948	18,778

B*15:16	B63,Bw4	22,343	17,919
B*57:01	B57,Bw4	21,093	17,341
B*13:02	B13,Bw4	20,165	16,163
B*38:01	B38,Bw4	21,922	17,512
B*53:01	B53,Bw4	21,851	17,582
B*57:03	B57,Bw4	19,371	16,921
B*58:01	B58,Bw4	19,659	15,226
A*24:02	A24	21,306	16,536
A*24:03	A24	20,437	16,550
B*44:03	B44,Bw4	10,743	6,446
B*37:01	B37,Bw4	15,157	11,331
B*27:05	B27,Bw4	8,388	5,104
B*44:02	B44,Bw4	9,361	6,222
B*13:01	B13,Bw4	6,190	5,514
B*78:01	B78,Bw6	8,762	3,661
B*15:02	B75,Bw6	3,437	1,830
B*35:01	B35,Bw6	5,304	2,394
B*47:01	B47,Bw4	3,149	1,800
B*15:11	B75,Bw6	3,564	1,794
B*18:01	B18,Bw6	2,433	1,249
B*15:10	B71,Bw6	2,207	1,020
A*02:06	A2	794	390
A*02:01	A2	775	368
B*45:01	B45,Bw6	568	333
B*14:01	B64,Bw6	1,027	503
A*02:03	A2	736	353
B*14:02	B65,Bw6	782	411
B*15:01	B62, Bw6	593	242

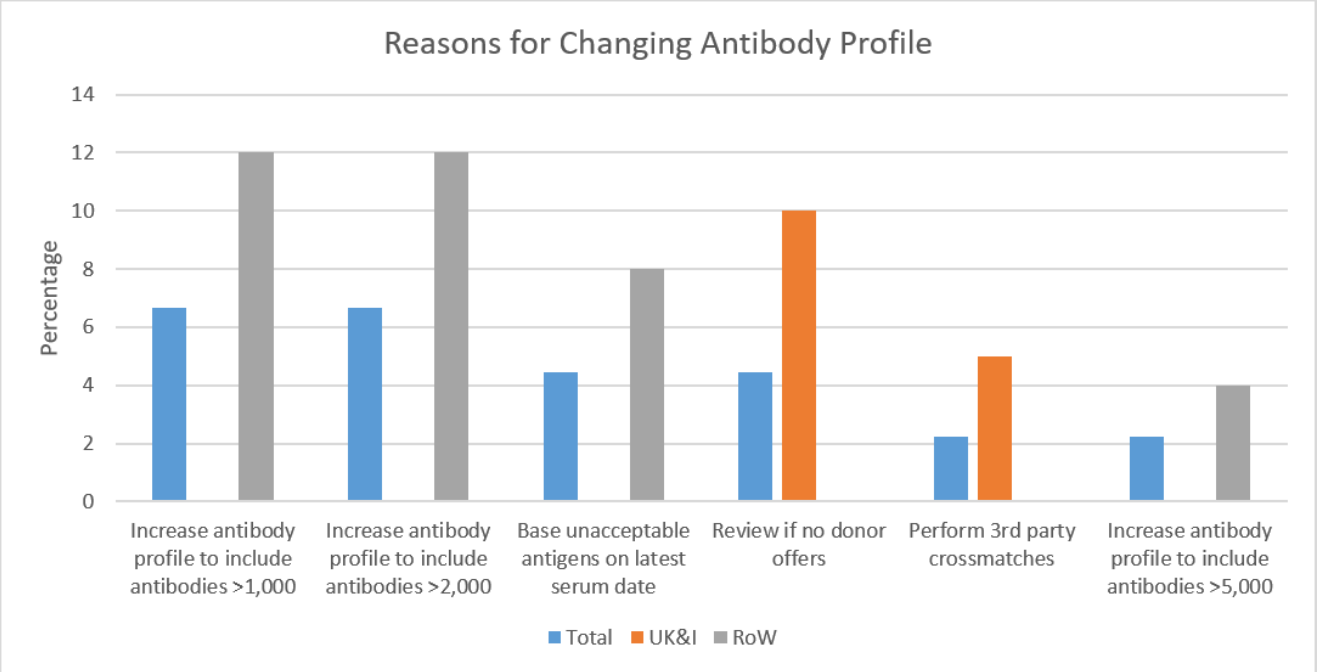
Q4a – Would you use the same unacceptable antibody profile as in Q1?

Antibody Profile Same	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Yes	33	**73**	17	**85**	16	**64**
No	11	**24**	2	**10**	9	**36**
Not sure	1	**2**	1	**5**	0	**0**



Q4b – If No, what would you list as unacceptable antigens for the kidney sharing scheme?

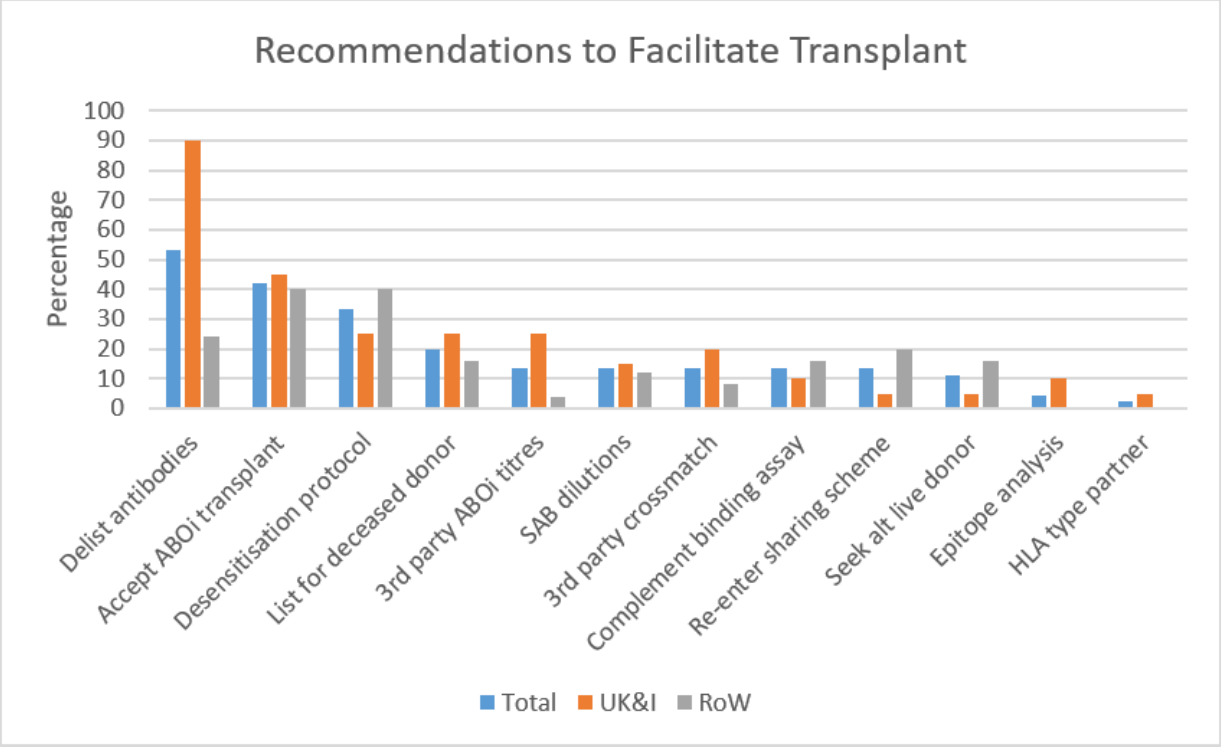
Changes to Antibody Profile	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Increase antibody profile to include antibodies >1,000	3	**7**	0	**0**	3	**12**
Increase antibody profile to include antibodies >2,000	3	**7**	0	**0**	3	**12**
Base unacceptable antigens on latest serum date	2	**4**	0	**0**	2	**8**
Keep profile the same initially but review if no donor offers	2	**4**	2	**10**	0	**0**
Perform 3rd party crossmatches to determine if an antibody can be delisted	1	**2**	1	**5**	0	**0**
Increase antibody profile to include antibodies >5,000	1	**2**	0	**0**	1	**4**



After 6 attempts (approx. 18 months) the patient had not received any potential matches in the kidney sharing scheme. The patients HLA antibody profile had remained stable, with MFI values consistent with those outlined in Table 5.

Q5 – Would you make any recommendations in order to facilitate a transplant?

Recommendations	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Delist antibodies	24	**53**	18	**90**	6	**24**
Accept ABOi transplant	19	**42**	9	**45**	10	**40**
Desensitisation protocol	15	**33**	5	**25**	10	**40**
List for deceased donor	9	**20**	5	**25**	4	**16**
3rd party ABOi titres	6	**13**	5	**25**	1	**4**
SAB dilutions	6	**13**	3	**15**	3	**12**
3rd party crossmatch	6	**13**	4	**20**	2	**8**
Complement binding assay	6	**13**	2	**10**	4	**16**
Re-enter to kidney sharing scheme	6	**13**	1	**5**	5	**20**
Seek alternative live donor	5	**11**	1	**5**	4	**16**
Epitope analysis	2	**4**	2	**10**	0	**0**
HLA type children's father	1	**2**	1	**5**	0	**0**



The Transplant Centre has an ABO incompatible (ABOi) programme, and the multidisciplinary team decided to allow an ABOi donor to be considered in the living donor kidney sharing scheme.
Prior to entry, ABO titres using surrogate red blood cells were undertaken to assess the anti-A level. Titres were performed using Diamed cards containing either saline, to detect IgM antibodies, or Anti-Human Globulin (AHG), to detect both IgM and IgG antibodies. The titre endpoint was the highest dilution of patient plasma in which agglutination can still be observed.

Surrogate ABO Titre Results	
Anti-A Titre Endpoint	
Saline	1:16
AHG	1:16

The patient was re-entered into the kidney sharing scheme and received a match with a blood group A donor, in the subsequent matching run. The results are summarised in Table 6.

Table 6: Summarised results of a FCXM between patient and ABOi kidney sharing scheme donor

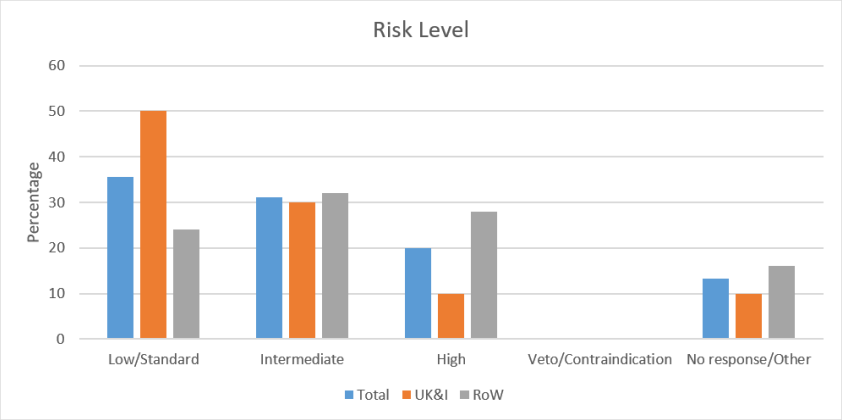
Sharing Scheme Donor									
HLA Type	**A***	**B***	**C***	**DRB1***	**DRB4/5***	**DQB1***	**DQA1***	**DPB1***	**DPA1***
	01:01 03:01	07:02 08:01	07:01 07:02	07:01 15:01	4*01:01 5*01:01	02:02 06:02	01:02 02:01	01:01 04:01	01:03 02:01
Blood Group	A								

Allogeneic					
Serum Date	**DSA (MFI)**	**T Cell**	**LCS**	**B Cell**	**LCS**
12/09/2021	N/A	Negative	0	Negative	0
15/02/2022	N/A	Negative	0	Negative	0
15/05/2024	N/A	Negative	0	Negative	0
**Linear Channel Shift (LCS) ≥ 40 is positive.*					

Sharing Scheme Donor	
Anti-A Titre Endpoint	
Saline	1:32
AHG	1:32

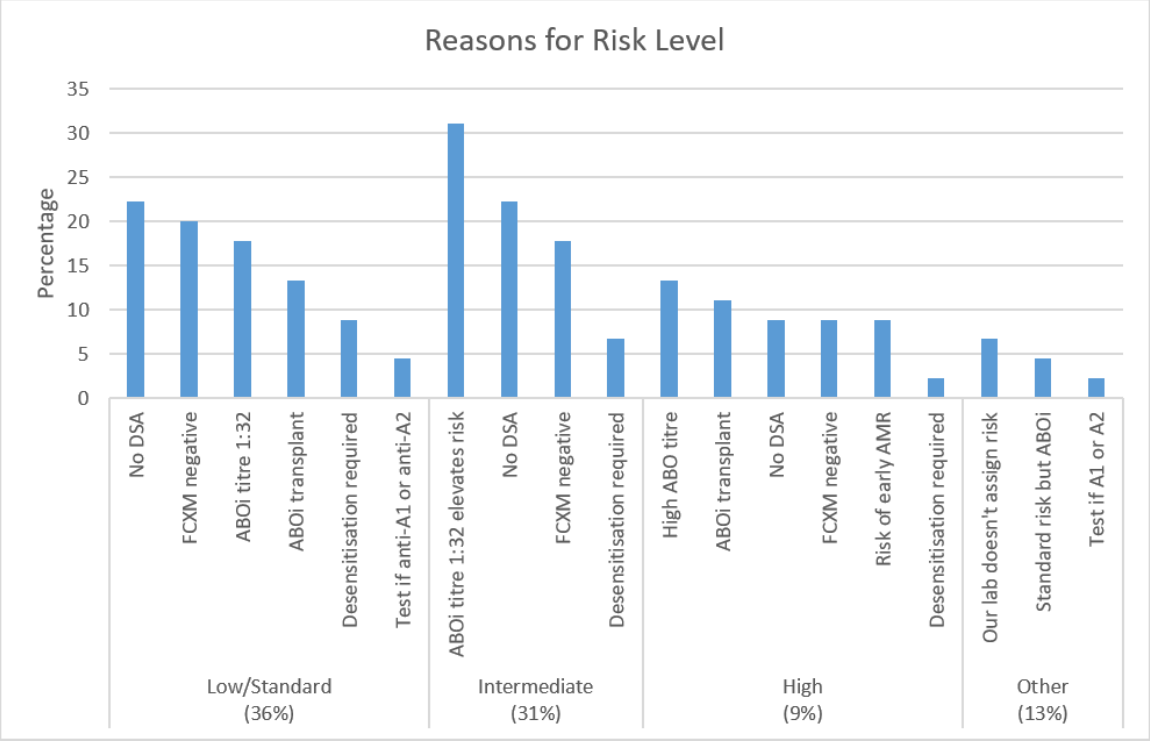
Q5a – What risk level would you assign this potential transplant?

Risk Level	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Low/Standard	16	**36**	10	**50**	6	**24**
Intermediate	14	**31**	6	**30**	8	**32**
High	9	**20**	2	**10**	7	**28**
Veto/Contraindication	0	**0**	0	**0**	0	**0**
No response/Other	6	**13**	2	**10**	4	**16**



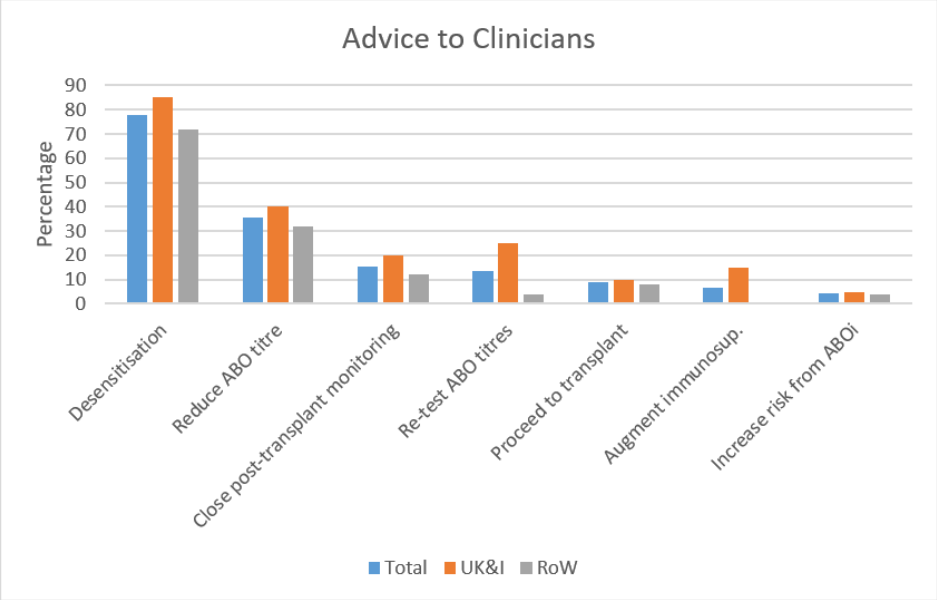
Q5b – Please give further details

Risk Level	Details	Total (n=45)	
		Count	%
Low/Standard (36%)	No DSA	10	**22**
	FCXM negative	9	**20**
	ABOi titre 1:32	8	**18**
	ABOi transplant	6	**13**
	Desensitisation required	4	**9**
	Test if anti-A1 or anti-A2	2	**4**
Intermediate (31%)	ABOi titre 1:32 elevates risk	14	**31**
	No DSA	10	**22**
	FCXM negative	8	**18**
	Desensitisation required	3	**7**
High (9%)	High ABO titre	6	**13**
	ABOi transplant	5	**11**
	No DSA	4	**9**
	FCXM negative	4	**9**
	Risk of early AMR	4	**9**
	Desensitisation required	1	**2**
Other (13%)	Our lab doesn't assign risk	3	**7**
	Standard risk but ABOi	2	**4**
	Test if A1 or A2	1	**2**



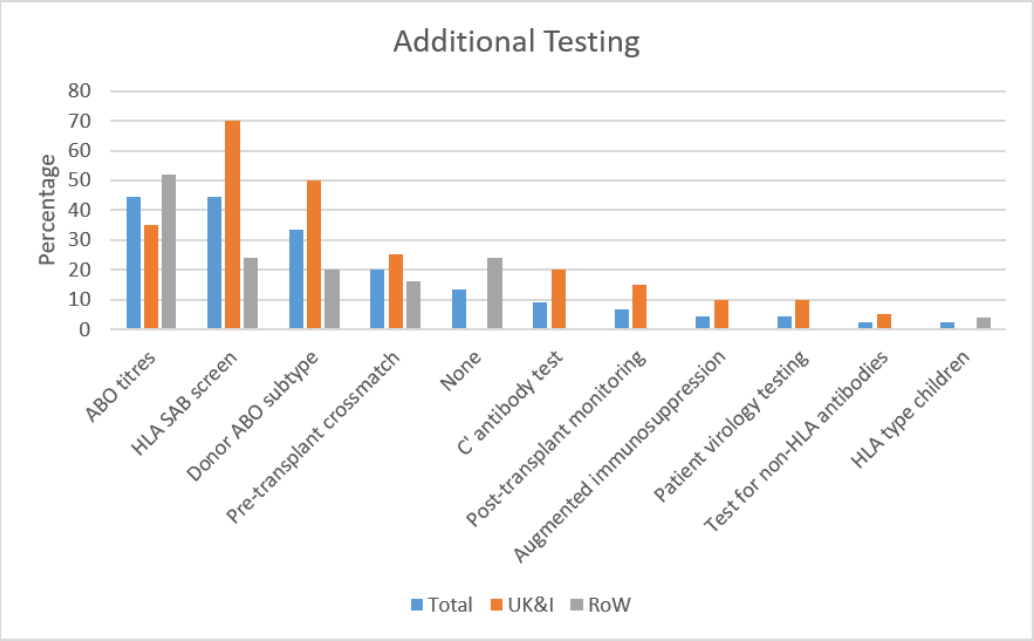
Q5c – What advice would you provide to clinicians?

Advice to Clinicians	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Pre-transplant desensitisation	35	**78**	17	**85**	18	**72**
Reduce ABO titre to 1:8	16	**36**	8	**40**	8	**32**
Close post-transplant monitoring (HLA and ABO)	7	**16**	4	**20**	3	**12**
Re-test ABO titres	6	**13**	5	**25**	1	**4**
Proceed to transplant	4	**9**	2	**10**	2	**8**
Augment standard immunosuppression	3	**7**	3	**15**	0	**0**
Increase risk from ABOi	2	**4**	1	**5**	1	**4**



Q5d – What additional testing, if any, would you recommend?

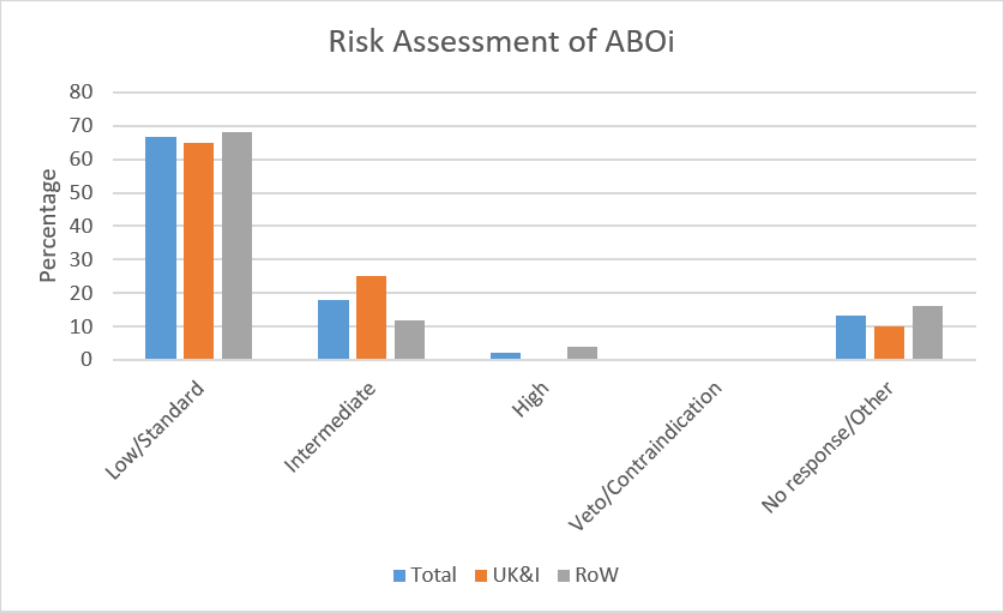
Additional Testing	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Repeat ABO titres	20	**44**	7	**35**	13	**52**
HLA antibody SAB screen	20	**44**	14	**70**	6	**24**
Donor ABO subtype	15	**33**	10	**50**	5	**20**
Pre-transplant crossmatch	9	**20**	5	**25**	4	**16**
None	6	**13**	0	**0**	6	**24**
Complement-fixing antibody test	4	**9**	4	**20**	0	**0**
Post-transplant monitoring HLA/ABO	3	**7**	3	**15**	0	**0**
Augmented immunosuppression	2	**4**	2	**10**	0	**0**
Patient virology testing	2	**4**	2	**10**	0	**0**
Test for non-HLA antibodies	1	**2**	1	**5**	0	**0**
HLA type children	1	**2**	0	**0**	1	**4**



A treatment plan was produced to reduce the anti-A antibody titre pre-transplant using rituximab and double filtration plasmapheresis. Following treatment and prior to transplant the titres reduced to 1:2.

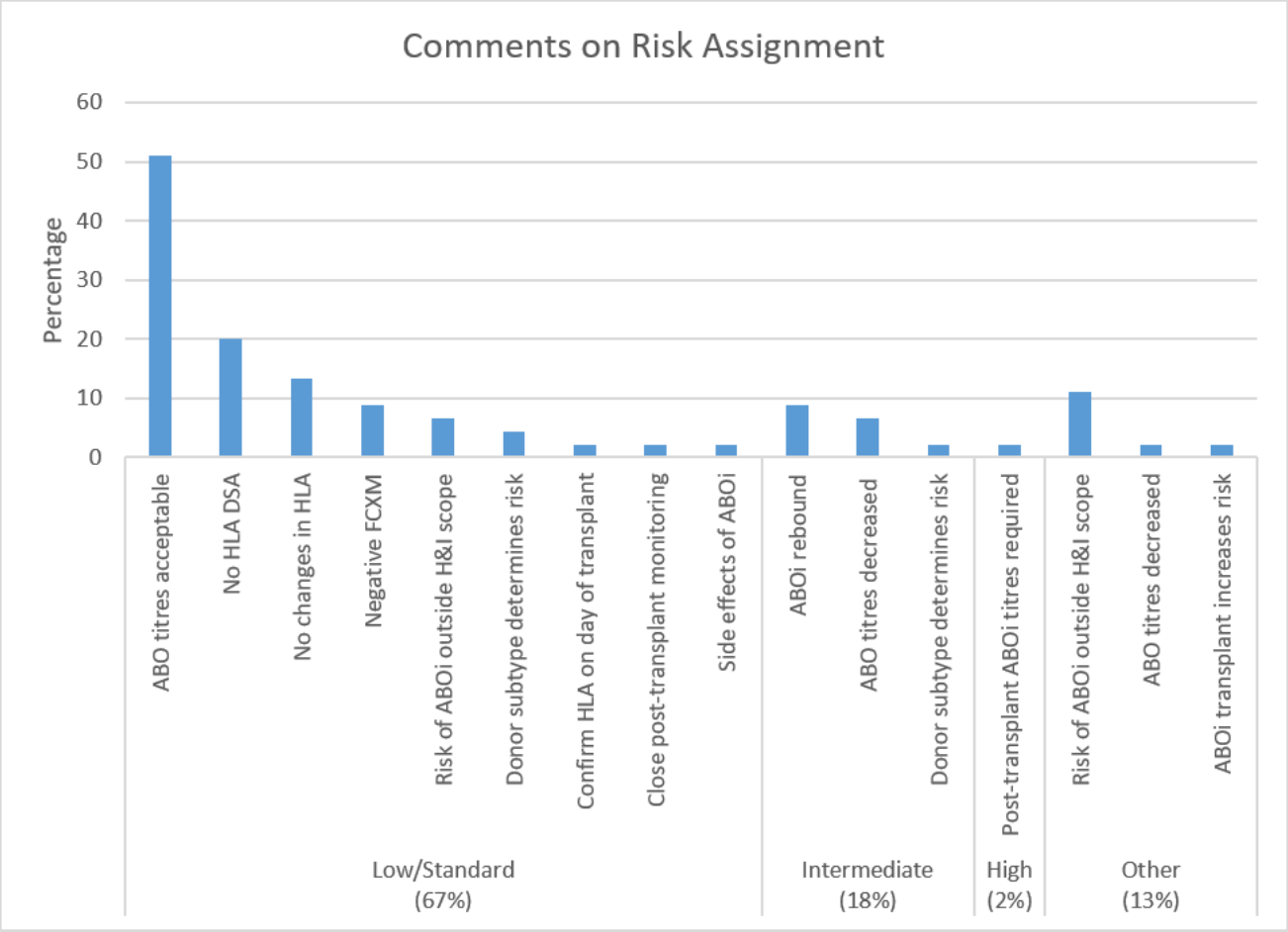
Q6a – What risk level would you assign this potential transplant?

Risk Level	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Low/Standard	30	**67**	13	**65**	17	**68**
Intermediate	8	**18**	5	**25**	3	**12**
High	1	**2**	0	**0**	1	**4**
Veto/Contraindication	0	**0**	0	**0**	0	**0**
No response/Other	6	**13**	2	**10**	4	**16**



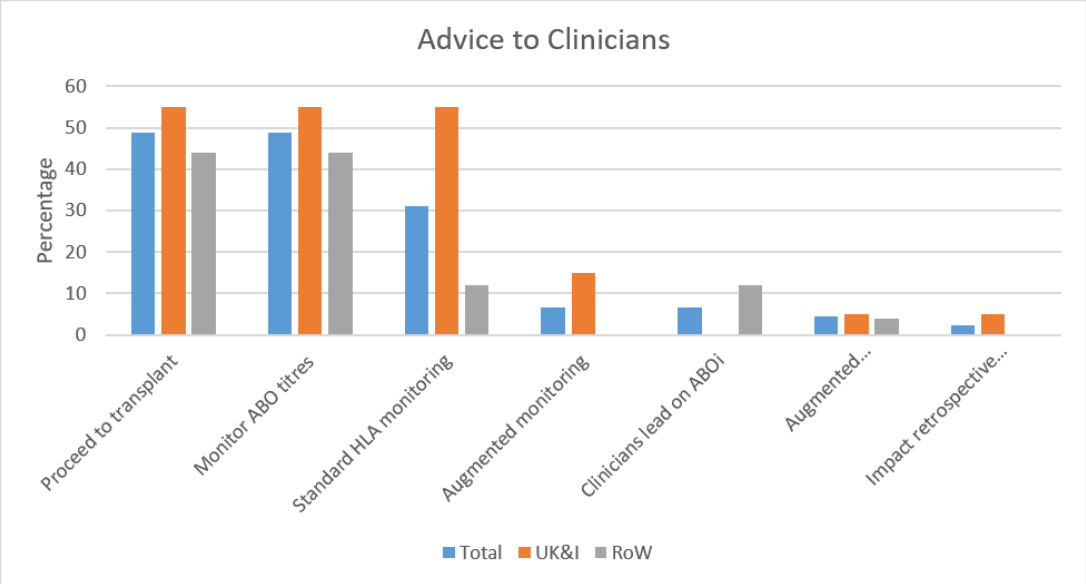
Q6b – Please give further details

Risk	Comment	Total (n=45)	
		Count	%
Low/Standard (67%)	ABO titres decreased to acceptable level	23	**51**
	No HLA DSA	9	**20**
	No changes in HLA profile	6	**13**
	Negative FCXM	4	**9**
	Risk of ABOi outside H&I lab scope	3	**7**
	Donor subtype determines risk	2	**4**
	Confirm HLA on day of transplant sample	1	**2**
	Close post-transplant monitoring required	1	**2**
	Side effects of ABOi	1	**2**
Intermediate (18%)	ABOi higher risk of antibody rebound	4	**9**
	ABO titres decreased to acceptable level	3	**7**
	Donor subtype determines risk	1	**2**
High (2%)	Post-transplant ABOi titres required	1	**2**
Other (13%)	Risk of ABOi outside H&I lab scope	5	**11**
	ABO titres decreased to acceptable level	1	**2**
	ABOi transplant increases risk	1	**2**



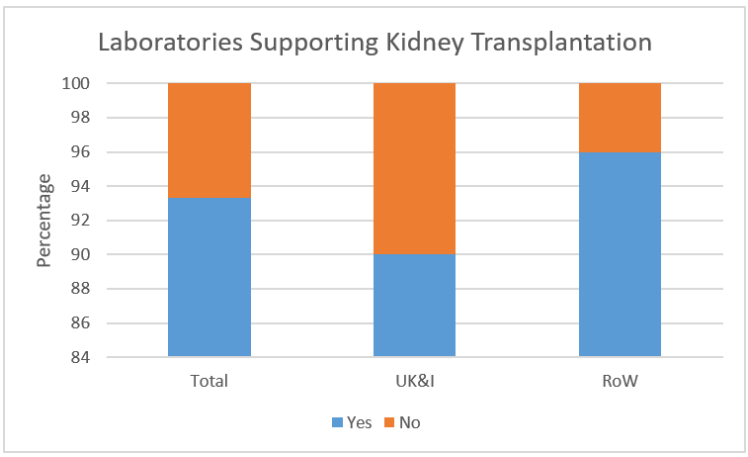
Q6c – What advice would you provide to clinicians?

Clinical Advice	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Proceed to transplant	22	**49**	11	**55**	11	**44**
Monitor ABO titres post-transplant	22	**49**	11	**55**	11	**44**
Standard HLA post-transplant monitoring	14	**31**	11	**55**	3	**12**
Augmented post-transplant monitoring	3	**7**	3	**15**	0	**0**
Clinicians lead on ABOi transplants	3	**7**	0	**0**	3	**12**
Augmented immunosuppression required	2	**4**	1	**5**	1	**4**
Immunosuppression will impact retrospective crossmatching	1	**2**	1	**5**	0	**0**



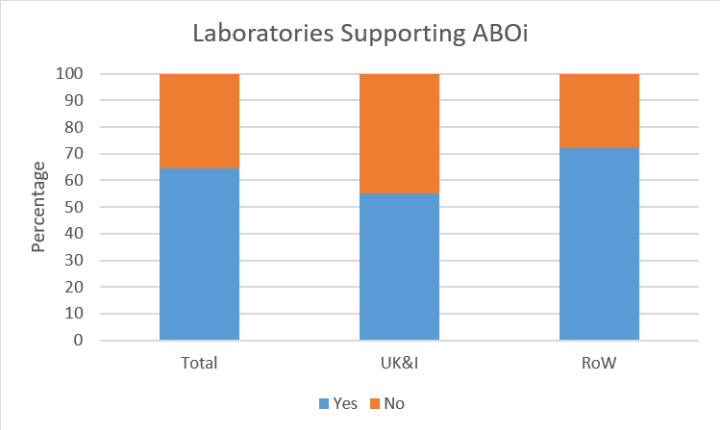
Q7a – Does your centre support testing for kidney transplantation

Kidney Transplantation Support	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Yes	42	**93**	18	**90**	24	**96**
No	3	**7**	2	**10**	1	**4**



Q7b – Does your centre support ABOi transplantation?

ABOi Transplant Support	Total (n=45)		UK&I (n=20)		RoW (n=25)	
	Count	%	Count	%	Count	%
Yes	29	**64**	11	**55**	18	**72**
No	16	**36**	9	**45**	7	**28**



Comments on the scenario:

- The immunological risk assessment for ABOi transplants should be a joint assessment by the H&I team, with expert opinion from transfusion specialists.
- Would be useful to have her partners HLA type when assigning unacceptable antigens.
- Locally, we do not advise on ABO compatibility.
- As a lab who doesn't support ABOi transplants, a webinar to review the results would be helpful.
- Interesting to revisit ABOi as this is not something that is performed in our centres since the UKLKSS is now used to find ABO compatible donors. Interested to know if centres are using the UKLKSS to find an ABOi transplant which is a more suitable alternative ("upgrade") to their HLAi transplant option.
- Great scenario.
- Interesting case study. This case study shows that focus can be shifted to ABOi transplant instead of HLA incompatible transplant as this option was a better solution in this case. This option allowed for a Live Donor Transplant rather than a Deceased Donor Transplant with view of a better outcome for the patient.
- The UK guidance on ABOi is currently out-of-date and needs updating. Difficult to comment without recent local experience of ABOi.
- DRB4 homozygosity not expected with DR associations in the sister's HLA type. Unusual HLA-B and HLA-C association in the sister's HLA type.
- Considering the initial PRA, this patient have a PRA >85% and would be in a hyperimmunized patient list for priority with deceased donor transplant in our center.
- Interesting case.
- Very interesting scenario.
- This case highlights the importance of kidney-sharing schemes and ABO-incompatible transplantation in expanding transplant opportunities for highly sensitised patients with broad HLA antibody profiles.
- Interesting case. With respect to the first donor, it would be useful to identify whether the donor -specific antibodies are complement binding by performing a standard CDC which could be positive due to Bw4 pattern or by C3d /C1q. Titre is always a whole number while dilutions are written as ratio.
- ABO titre testing and blood grouping are not performed by our laboratory, and we cannot provide comment on ABO titres. HLA compatibility is assessed and clinical units retain final decision-making control over accepting ABO-incompatible living donors and maintain centre-specific acceptance criteria.
- The scenario demonstrates value of integrating DSA interpretation, flow cytometry crossmatch results and ABOi transplant to safely expand transplant opportunity to sensitized patient.

Comments and suggested responses from the UK H&I experts providing this scenario*

Question 1

UK NEQAS for H&I cannot comment on the validity of unacceptable antigen definition strategies, but we note some variability between individual responses. Laboratories should have robust processes to align testing to expected crossmatch results or clinical outcome. We would encourage all laboratories to complete regular clinical audits to determine if their definition of unacceptable antigens remains relevant.

The antibody results suggest that the patient has antibody directed towards the Bw4 public epitope, potentially pregnancy derived.

Question 2

The patient's sibling may not be suitable for direct transplantation. The patient has donor specific antibodies to A2 and B27 at a level that would likely cause a positive virtual crossmatch.

Question 3

A positive flow cytometry crossmatch confirmed the risk. Depending on local guidelines it is likely that the immunological risk of proceeding to transplant would be classified as high and direct transplantation would not be recommended.

Advice to clinical teams would likely recommend seeking an alternative live or deceased donor. Inclusion in a local kidney sharing scheme could also be considered with appropriate consent.

Question 4

The patient and her sister were entered into a living kidney donor sharing scheme. Additional single antibody testing demonstrated that antibody levels were consistent with those previously tested prompting the majority of respondents to use the same unacceptable antigen profile they had identified in question 1. It may be worth regularly reviewing the patient's profile to determine if delisting is an option to increase the opportunity of a donor offer.

Question 5

After multiple attempts to find a match in the kidney sharing scheme recommendations to improve the chance of transplantation could include: reviewing and delisting antibodies, using a desensitisation protocol, accepting an ABO incompatibility (ABOi) donor offer, listing the patient for a deceased donor or seeking alternative live donors.

The local transplant centre pursued an ABOi transplant and received an offer in the sharing scheme. Testing showed the patient had donor specific anti-A antibodies at a titre of 1:32. The patient had no HLA antibodies and was flow cytometry crossmatch negative.

Depending on local guidelines it is likely that the immunological risk of proceeding to transplant would be classified as standard in terms of HLA compatibility but may be elevated by the ABO incompatibility.

The patient would likely required desensitisation to reduce the anti-A antibody titre prior to transplant. This would necessitate regular monitoring of ABO antibody levels to gauge the impact of treatment and determine when anti-A levels reduced to an acceptable level to enable transplantation.

Question 6

Depending on local guidelines it is likely that the immunological risk of proceeding to transplant would be classified as standard in terms of HLA compatibility but may be elevated by the ABO incompatibility. It is likely the transplant team would support proceeding to transplant after a successful reduction in anti-A antibody titre.

Please note:

These comments have been compiled by subject matter experts from the UK NEQAS for H&I Steering Committee in accordance with current guidelines. We accept that guidelines are not always explicit for every situation and therefore the responses may be aligned with the clinical practices of an individual transplant centre and may not be directly applicable across all settings. UK NEQAS are not necessarily endorsing these responses as the only correct action, just one possible view which, we acknowledge, may be biased towards UK practice.