Educational Crossmatching Scheme

Dispatched on the 22nd July 2025

Summary of Results

A total of 32 reports were received but not all laboratories reported results for all tests.

Consensus HLA type of 'donor' sample EDXM 01/2025: 34% (n=11/32) of participants reported a phenotype or at the first field, 50% (n=16/32) reported to the 2nd field and 16% (n=5/32) reported to the 3rd field.

	A*	B*	C*	DRB1*	DRB3*	DRB5*	DQA1*	DQB1*	DPA1*	DPB1*
	03:01	07:02	07:02	13:01	01:01	01:01	01:02	06:02	01:03	02:01
	03:01	15:18	07:04	15:01			01:03	06:03	01:03	04:01
Number of reports	32	32	32	32	26	25	29	32	25	30
% Labs in consensus	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

EDXM 01 Serum 1/2025 Results

HLA Antibody Detection and Definition

(Based on 75% Consensus)

		HLA Class I	No of labs	% consensus	HLA Class II	No of labs	% consensus
Detection	IgG	Positive	32/32	100%	Positive	32/32	100%
	IgM	Negative*	2/2*	100%*	Negative*	2/2*	100%*
Definition[1]	Total Number of Specificities Reported (by ≥ 1 lab, >1,000 MFI)	42			19		
	Number of Specificities Absent (reported by < 5% labs)	47			27		
	Number of Specificities Present (reported by ≥ 75% labs)	30			12		
	MFI >10000	A1 A3 A11 A24 A36 A80 B7 B13 B27 B2708 B42 B48 B60 B61 B67 B81	31	87-100%	DR7 DR8 DR11 DR12 DR13 DR14 DR17 DR18 DR52	31	97-100%
	MFI 5000 - 9999	A32 A74 B55 B56 B73 B82		97-100%	DQ2		100%
	MFI 2000 - 4999	A23 A29 A30 A31 A66 B47 B54		77-100%	DR9		100%
	MFI 1000-1999	B57		84%	DR15		77%

[1] 75% consensus 'present' specificities are displayed within the MFI value range reported by the **majority** of participants. Class I specificities n=89, Class II specificities n=46.

* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Crossmatching
(Based on 75% Consensus)

	CDC						Flow Cytometry	
	PBL		T Cells		B Cells		T Cells	B Cells
	Without DTT	With DTT	Without DTT	With DTT	Without DTT	With DTT		
	Positive*	Positive*	Positive	*Not Assessed*	Positive	Positive	Positive	Positive
Number of reports	2/2*	2/2*	9/10	*7/10 Pos*	8/8	8/8	27/27	25/25
% Labs in consensus	100%*	100%*	90%	*70%*	100%	100%	100%	100%

* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Interpretation

Identification of Donor Specific Antibodies:

Specificity	No of Participants (n=31)	MFI Range Reported
A3	31 (100%)	7245-25,643
B7	31 (100%)	9297-27,929
DR13	31 (100%)	9952-28,575
DR15	23 (74%)	965-3728
DR52	30 (97%)	9353-31,318
DQ6	2 (6%)	965-2198
DQA1*01	1 (3%)	1129-1512
DP2	1 (3%)	1035
DP4	1 (3%)	1413

Crossmatch interpretation:

	The most common responses included:
Interpretation based on results	• CDC crossmatch POSITIVE • Flow cytometry crossmatch POSITIVE • Class I and II donor specific antibodies present
Assigned risk	High/Contraindication 100% (n = 31/31)
Immunological advice	• Not suitable for direct transplantation • Patient at risk of hyperacute rejection • Use dilution testing to determine if antibody removal pre-transplant a feasible option
If advice is not to transplant, recommendations for future transplants	• Seek alternative donor (live or deceased) or via a kidney sharing scheme • Consider de-sensitisation • Investigate whether the patient is a suitable for a higher risk transplant • Discuss risk with patient • Obtain patient's sensitisation history

EDXM 01 Serum 2/2025 Results

HLA Antibody Detection and Definition

(Based on 75% Consensus)

		HLA Class I	No of labs	% consensus	HLA Class II	No of labs	% consensus
Detection	IgG	Positive	31/32	97%	Positive	31/32	97%
	IgM	Negative*	2/2*	100%*	Negative*	2/2*	100%*
Definition [1]	Total Number of Specificities Reported (by ≥ 1 lab, >1,000 MFI)	24			13		
	Number of Specificities Absent (reported by < 5% labs)	65			33		
	Number of Specificities Present (reported by ≥ 75% labs)	5			9		
	MFI >10000	N/A	31	N/A	N/A	31	N/A
	MFI 5000 - 9999	B7		100%	DR17 DR18 DR52		100%
	MFI 2000 - 4999	A3 A11 A80 B81		77-94%	DR7 DR8 DR11 DR12 DR13 DR14		94-100%
	MFI 1000-1999	N/A		N/A	N/A		N/A

[1] 75% consensus 'present' specificities are displayed within the MFI value range reported by the **majority** of participants. Class I specificities n=89, Class II specificities n=46.

* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Crossmatching Results

(Based on 75% Consensus)

	CDC						Flow Cytometry	
	PBL		T Cells		B Cells		T Cells	B Cells
	Without DTT	With DTT	Without DTT	With DTT	Without DTT	With DTT		
	Negative*	Negative*	Negative	Negative	Negative	Negative	Positive	Positive
Number of reports	2/2*	2/2*	10/10	10/10	7/8	7/8	21/27	22/25
% Labs in consensus	100%*	100%*	100%	100%	87.5%	87.5%	78%	88%

* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Interpretation

Identification of Donor Specific Antibodies:

Specificity	No of Participants (n=31)	MFI Range Reported
A3	29 (94%)	628-5512
B7	31 (100%)	1217-8675
DR13	31 (100%)	1357-10,732
DR52	29 (94%)	1939-12,133

Crossmatch interpretation:

	The most common responses included:
Interpretation based on results	• CDC crossmatch NEGATIVE • Flow cytometry crossmatch POSITIVE • Class I and II donor specific antibodies present
Assigned risk	Medium 19% (n = 6/31) High/Contraindication 81% (n = 25/31)
Immunological advice	• Not suitable for direct transplantation • Patient at risk of antibody mediated rejection • Possible antibody removal pre-transplant • If transplant proceeds use frequent post-transplant monitoring
If advice is not to transplant, recommendations for future transplants	• Seek alternative donor (live or deceased) or via a kidney sharing scheme • Consider de-sensitisation • Investigate whether the patient is a suitable for a higher risk transplant • Discuss risk with patient • Obtain patient's sensitisation history

EDXM 01 Serum 3/2025 Results

HLA Antibody Detection and Definition
(Based on 75% Consensus)

		HLA Class I	No of labs	% consensus	HLA Class II	No of labs	% consensus
Detection	IgG	*Not Assessed*	*20/32*	*62.5% Pos*	Negative	25/32	78%
	IgM	Negative*	2/2*	100%*	Negative*	2/2*	100%*
Definition[1]	Total Number of Specificities Reported (by ≥ 1 lab, >1,000 MFI)	20			10		
	Number of Specificities Absent (reported by < 5% labs)	69			36		
	Number of Specificities Present (reported by ≥ 75% labs)	0			0		
	MFI >10000	N/A	31	N/A	N/A	31	N/A
	MFI 5000 - 9999	N/A		N/A	N/A		N/A
	MFI 2000 - 4999	N/A		N/A	N/A		N/A
	MFI 1000-1999	N/A		N/A	N/A		N/A

[1] 75% consensus 'present' specificities are displayed within the MFI value range reported by the **majority** of participants. Class I specificities n=89, Class II specificities n=46.
* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Crossmatching
(Based on 75% Consensus)

	CDC						Flow Cytometry	
	PBL		T Cells		B Cells			
	Without DTT	With DTT	Without DTT	With DTT	Without DTT	With DTT	T Cells	B Cells
	Negative*	Negative*	Negative	Negative	Negative	Negative	Negative	Negative
Number of reports	2/2*	2/2*	10/10	10/10	8/9	8/8	27/27	25/25
% Labs in consensus	100%*	100%*	100%	100%	89%	100%	100%	100%

* For indication only. Does not meet minimum number requirements for establishing a consensus result.

Interpretation

Identification of Donor Specific Antibodies (DSA):

Specificity	No of Participants (n=31)	MFI Range Reported
No DSA	29 (93.5%)	-
Cw7	1 (3%)	3136
DR13	1 (3%)	2805
DR52	1 (3%)	5323

Crossmatch interpretation:

	The most common responses included:
Interpretation based on results	• CDC crossmatch NEGATIVE • Flow cytometry crossmatch NEGATIVE • No donor specific antibodies detected
Assigned risk	Low/Standard 94% (n = 29/31) Medium 3% (n = 1/31) High/Contraindication 3% (n = 1/31)
Immunological advice	• Suitable for direct transplantation • HLA antibody present but not donor directed
If advice is not to transplant, recommendations for future transplants	• Proceed to transplant • Standard immunosuppression and post-transplant monitoring • Post-transplant monitoring if clinical indication of rejection

UK NEQAS for H&I Comments

The same sample was used for both Serum 1 and Serum 2. The sample was provided undiluted for Serum 1 and at a dilution of 1:16 for Serum 2.

All antibodies reduced in MFI value upon dilution. The donor specific antibodies reaching consensus present in Serum 2 (1:16 dilution) were A3, B7, DR13 and DR52 detected at a range of 628-12,133 MFI. 81% of participants noted this was a contraindication to transplantation. In contrast, in Serum 1 (neat) donor specific antibodies reaching consensus were A3, B7, DR13, DR15 and DR52 detected at a range of 965-31,318 MFI. 100% of participants noted this was a contraindication to transplantation.