

# REPORT OF THE 412<sup>th</sup> CELL EXCHANGE

## SEPTEMBER 9, 2019

B-cell Lines	565-566
Cells	1645-1648
Sera	1273-1276

### B-cell Line Exchange #283

The results for B-cell Line Exchange #283 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. The reference cells examined in this study were generously donated by **Welsh Blood Service, Pontyclun**. We would like to also acknowledge

and thank the labs performing NGS for sharing their results and encourage other NGS labs to share their findings. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Ter-565.** The consensus type for this cell from a Caucasian donor was DRB1\*13:01-DRB1\*13:02-DRB3\*01:01-DRB3\*03:01-DQA1\*01:02-DQA1\*01:03-DQB1\*06:03-DQB1\*06:04-DPA1\*01:03-DPB1\*02:01-DPB1\*03:01/A\*02:01-A\*68:01-B\*40:38-B\*51:01-C\*03:04-C\*14:02. One possible association present was A\*02:01-B\*51:01-DRB1\*13:01-DQB1\*06:03, observed in Caucasians, with HF = 0.00340. The other likely association present may then be A\*68:01-B\*40:38-DRB1\*13:02-DQB1\*06:04.

This cell was 45305, one of the reference cells for B\*40:38. It was previously examined for class I in the Extract Exchange as extract 470 (2009). In this present retyping, B\*40:38 was reported by 91% of labs, reporting at high resolution. B\*40:01 was assigned by 2 labs. B\*40:38 differs from B\*40:01:01 in exon 3 by a single nucleotide substitution at codon 116 (TAC → TCC), which results in amino acid substitution from tyrosine to serine. B\*51:01 (100%) was reported as the second B-locus type, with 8 labs assigning B\*51:01:01. Two subtypes of DRB1\*13 and DQB1\*06 were present in this cell. DRB1\*13:01 and DRB1\*13:02 were each assigned by 100%, with 9 labs reporting DRB1\*13:01:01 and DRB1\*13:02:01. DQB1\*06:03 and DQB1\*06:04 were also assigned in complete consensus, with 6 labs reporting DQB1\*06:03:01 and DQB1\*06:04:01.

**Ter-566.** The consensus type for this cell from a donor of unknown ethnicity was DRB1\*01:01-DRB1\*04:01-DRB4\*01:03-DQA1\*01:01-DQA1\*03-DQB1\*03:01-DQB1\*05:01-DPA1\*01:03-DPB1\*04:01-DPB1\*04:02/A\*01:01-A\*26:08-B\*15:01-C\*03:03-C\*04:01. One possible haplotype present in this cell was A\*01:01-B\*15:01-DRB1\*01:01-DQB1\*05:01, observed in Caucasians, with HF = 0.00037. The other likely association present may then be A\*26:08-B\*15:01-C\*04:01-DRB1\*04:01-DQB1\*03:01. The association of A\*26:08-B\*15:01-C\*04:01 was observed exclusively in Hispanics, with HF = 0.00025.

This cell was previously examined in the Extract Exchange as extract 454 (2009). In this present retyping, A\*26:08 was reported by 100% of labs reporting at high resolution, with 3 labs assigning A\*26:08:01. A\*01:01 (100%) was well assigned as the second A-locus type, with 8 labs reporting A\*01:01:01. The reported DRB1 types were DRB1\*01:01 (100%) and DRB1\*04:01 (100%), with 9 labs reporting DRB1\*01:01:01 and 11 labs reporting DRB1\*04:01:01. DQA1\*01:01 was reported by 96% of labs. No consensus was achieved for the second DQA1 type, as 18 labs assigned DQA1\*03:03, 2 labs assigned DQA1\*03:01, 1 lab assigned DQA1\*03:01:01G, and 1 lab reported DQA1\*01:03.



**Table 2: Summary of the 283<sup>rd</sup> B-cell Line Exchange**

**Ter-566**

DNA Typing - class II		<u>33 labs High; 28 labs low-DRB1</u>		<u>20 labs High; 18 labs Low-DRB3/4/5</u>		<u>22 labs High; 25 labs Low-DQA1</u>		<u>32 Labs High; 26 labs Low-DQB1</u>		<u>16 labs High; 13 labs Low-DPA1</u>		<u>28 labs High; 15 labs Low-DPB1</u>			
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)		
		DRB1*01:01:01	27(9)	DRB4*01:03:01	30(6)	DQA1*01:01:01:01	4 (1)	DQB1*03:01:01:01	6 (2)	DPA1*01:03:01:02	19(3)	DPB1*04:01:01:01	4 (1)		
		DRB1*01:01P	3 (1)	DRB4*01:01P	5 (1)	DQA1*01:01:01G	4 (1)	DQB1*03:01:01	13(4)	DPA1*01:03:01	13(2)	DPB1*04:01:01	21(6)		
		DRB1*01:01	70(23)	DRB4*01:03	65(13)	DQA1*01:01:01	14(3)	DQB1*03:01:01G	6 (2)	DPA1*01:03:01G	6 (1)	DPB1*04:01:01G	21(6)		
		DRB1*01	100(28)	DRB4*01	78(14)	DQA1*01:01	73(16)	DQB1*03:01P	3 (1)	DPA1*01:03P	6 (1)	DPB1*04:01P	11(3)		
				DRB4*PRESENT	22(4)	DQA1*01:03	4 (1)	DQB1*03:01	72(23)	DPA1*01:03	56(9)	DPB1*04:01	43(12)		
						DQA1*01	100(25)	DQB1*03 (DQ7)	4 (1)	DPA1*01	100(13)	DPB1*04(DP401)	60(9)		
								DQB1*03	96(25)			DPB1*04	40(6)		
				<u>33 labs High; 28 labs low-DRB1</u>	%(n)			<u>22 labs High; 25 labs Low-DQA1</u>	%(n)	<u>32 Labs High; 26 labs Low-DQB1</u>	%(n)			<u>28 labs High-DPB1</u>	%(n)
				DRB1*04:01:01:03	3 (1)			DQA1*03:03:01:01	9 (2)	DQB1*05:01:01:03	6 (2)			DPB1*04:02:01	25(7)
DRB1*04:01:01	30(10)					DQA1*03:03:01	9 (2)	DQB1*05:01:01	16(5)			DPB1*04:02:01G	18(5)		
DRB1*04:01	67(22)					DQA1*03:01:01G	4 (1)	DQB1*05:01:01G	3 (1)			DPB1*04:02P	14(4)		
DRB1*04	100(28)					DQA1*03:03	64(14)	DQB1*05:01P	3 (1)			DPB1*04:02	43(12)		
						DQA1*03:01	9 (2)	DQB1*05:01	72(23)						
						DQA1*01:03	4 (1)	DQB1*05	100(26)						
						DQA1*03	96(24)								
						DQA1*01	4 (1)								

  

DNA Typing - class I		<u>23 labs High; 21 labs low- A</u>		<u>23 labs High; 21 labs low- B</u>		<u>23 labs High; 21 labs low- C</u>	
			%(n)		%(n)		%(n)
		A*01:01:01:01	9 (2)	B*15:01:01:01	4 (1)	C*03:03:01:01	4 (1)
		A*01:01:01	26(6)	B*15:01:01	30(7)	C*03:03:01	26(6)
		A*01:01P	4 (1)	B*15:01P	4 (1)	C*03:03P	4 (1)
		A*01:01	61(14)	B*15:01	61(14)	C*03:03	65(15)
		A*01	100(21)	B*15(B62)	5 (1)	C*03	100(21)
				B*15	95(20)		
		<u>24 labs High; 21 labs low- A</u>	%(n)	<u>20 labs High; 24 labs low- B</u>	%(n)	<u>23 labs High; 21 labs low- C</u>	%(n)
		A*26:08:01	12(3)			C*04:01:01:06	4 (1)
		A*26:08	88(21)			C*04:01:01	26(6)
		A*26	100(21)			C*04:01:01G	4 (1)
						C*04:01P	4 (1)
						C*04:01	61(14)
						C*04	100(21)

**Table 3a: Individual laboratory results for B-cell #565 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*13	*13	3*01	3*03	*01	*01	*06	*06	*01	*01	*02	*03		
725	*13		3*PRESENT		*01		*06						SSP SSO	
731	*13	*13			*01	*01	*06	*06					SSP SSO SBT	
735	*13	*13	3*01	3*03	*01	*01	*06	*06	*01	*01	*02(DP201)	*03	SSP SSO SBT	
747	*13	*13	3*PRESENT	3*PRESENT	*01	*01	*06	*06	*01	*01	*02	*03	SSP SSO NGS	
771	*13	*13			*01	*01	*06	*06					SSP SSO	
774	*13	*13	3*01	3*03	*01	*01	*06	*06			*02(DP201)	*03	SSP SSO	
792	*13	*13	3*01	3*03	*01	*01	*06	*06	*01	*01	*02	*03	SSO SBT	
793	*13		3*01	3*03	*01	*01	*06				*02(DP201)	*03	SSP	
794	*13		3*01	3*03	*01		*06		*01		*02	*03	SSP SSO NGS	
2400	*13	*13	3*01	3*03	*01	*01	*06	*06			*02	*03	RT-PCR	
2847	*13	*13											SSO SBT	
3519	*13				*01		*06		*01		*02(DP201)	*03	SSO	
3632	*13	*13	3*01	3*03	*01	*01	*06	*06	*01		*02	*03	SSP NGS RT-PCR	
3753			3*01	3*03	*01	*01			*01	*01			SSP SSO	
4079	*13	*13	3*01	3*03	*01	*01	*06	*06	*01		*02(DP201)	*03	SSO SBT	
4251	*13	*13	3*01	3*03	*01	*01	*06	*06	*01	*01	*02(DP201)	*03	SSP SSO NGS	
4492	*13		3*PRESENT	3*PRESENT	*01		*06		*01		*02	*03	SSO NGS	
5130	*13	*13	3*01	3*03	*01	*01	*06	*06			*02	*03	BioLinkage	
5214	*13	*13	3*01	3*03	*01	*01	*06	*06	*01	*01	*02(DP201)	*03	SSO NGS	
5219	*13	*13					*06	*06					SSO	
5451	*13	*13	3*01	3*03	*01	*01	*06	*06					SSO NGS	
5462	*13	*13	3*01	3*03	*01	*01	*06	*06	*01		NT	NT	SSO SBT	
5488			3*01	3*03									SSO RT-PCR	
5642	*13	*13	3*PRESENT				*06	*06					SSO SBT NGS	
6649	*13												SSO	
8001	*13	*13	3*01	3*03	*01		*06	*06					SSP SSO	
8029	*13	*13			*01	*01	*06	*06					SSO	
8043	*13	*13			*01	*01	*06	*06					SSP SSO	
8068	*13	*13			*01	*01	*06	*06					SSO	

**Table 3b: Individual laboratory results for B-cell #565 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*13:01	*13:02					*06:03	*06:04			*02:01	*03:01	SSO SBT	
278	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01		
731	*13:01:01G	*13:02:01G					*06:03:01G	*06:04:01G					SSP SSO SBT	
735	*13:01	*13:02	3*01:01P	3*03:01P	01:02P	*01:03	*06:03	*06:04	*01:03P	*01:03P	*02:01	*03:01	SSP SSO SBT	
747	*13:01:01	*13:02:01	3*01:01:02	3*01:01	*01:02	*01:03	*06:03:01	*06:04:01	*01:03:01:01	*01:03:01:03	*02:01:02	*03:01:01	SSP SSO NGS	DQB1*06:39 DQB1*06:41 DPB1*124:01 DPB1*414:01
762	*13:01:01	*13:02:01	3*01:01:02	3*03:01:01	*01:02:01	*01:03:01:02	*06:03:01	*06:04:01	*01:03:01:01	*01:03:01:03	*02:01:02	*03:01:01	NGS	DQB1*06:39 DQB1*06:41
771	*13:01	*13:02					*06:03	*06:04					SSP SSO	
774	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04			*02:01	*03:01	SSP SSO	DRB1*13:166 DRB1*13:185N DRB1*13:186 DRB1*13:173 DRB1*13:183 DRB1*13:184
792	*13:01	*13:02					*06:03	*06:04			*02:01	*03:01	SSO SBT	
793					*01:02	*01:03					*02:01	*03:01	SSP	
794	*13:01:01	*13:02:01	3*01:01:02	3*03:01:01	*01:02	*01:03	*06:03:01	*06:04:01	NT	NT	*02:01:02	*03:01:01	SSP SSO NGS RT-PCR	
2344	*13:01:01	*13:02:01					*06:03:01G	*06:04:01G			*02:01:02G	*03:01:01G	NGS	
2400	*13:01	*13:02			*01:02	*01:03	*06:03	*06:04			*02:01:02G	*03:01P	SSO SBT	DQB1*06:41 DQB1*06:39
3135	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01		
3224	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01	NGS	
3511	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01	SSP SSO	
3519	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01	SSP NGS RT-PCR	
3632	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03		*02:01P	*03:01P	SSP SSO	
3753	*13:01	*13:02					*06:03	*06:04			*02:01	*03:01	SSO SBT	DQB1*06:07 DQB1*06:27 DQB1*06:08 DQB1*06:21 DQB1*06:32 DQB1*06:39 DQB1*06:41 DQB1*06:92 DQB1*06:230 DQB1*06:280 DQB1*06:283
3966	*13:01	*13:02	3*01:01	3*03:01			*06:03	*06:04					SSP	
4079	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03		*02:01	*03:01	SSP SSO NGS	
4251	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01	SSO NGS	
4337	*13:01	*13:02					*06:03	*06:04			*02:01	*03:01	SSP SBT NGS	

**Table 3b: Individual laboratory results for B-cell #565 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
4492	*13:01:01	*13:02:01	3*01:01:02G	3*03:01P	*01:02:01	*01:03:01	*06:03	*06:04	*01:03:01	*01:03:01	*02:01:02	*03:01:01	SSP SSO NGS BioLinkage	
5130	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04			*02:01	*03:01	SSO NGS	DRB3*01:06 DQB1*06:39 DQB1*06:41
5133	*13:01:01	*13:02:01:02	3*01:01:02	3*03:01:01	*01:02:01	*01:03:01	*06:03:01:01	*06:04:01	*01:03:01:01	*01:03:01:03	*02:01:02:22	*03:01:01	NGS	
5219	*13:01:01	*13:02:01					*06:03:01	*06:04:01			*02:01:02	*03:01:01	SSO NGS	
5451	*13:01:01	*13:02:01											SSO SBT	
5488	*13:01:01	*13:02:01			*01:02:01	*01:03:01	*06:03:01	*06:04:01	*01:03:01		*02:01:02	*03:01:01	SSO SBT NGS	DQB1*06:39 DQB1*06:41
5642	*13:01	*13:02					*06:03	*06:04						
8001	*13:01	*13:02	3*01:01	3*03:01			*06:03	*06:04			*02:01	*03:01:01G	SSP SSO	
8021	*13:01	*13:02	3*01:01	3*03:01	*01:02	*01:03	*06:03	*06:04	*01:03		*02:01	*03:01	SSO NGS	
8029													SSO	
8043	*13:01	*13:02			*01:02	*01:03	*06:03	*06:04					SSP SSO	
8086	*13:01	*13:02			*01:02	*01:03	*06:03	*06:04	*01:03	*01:03	*02:01	*03:01	SSO SBT	

**Table 4: Individual laboratory results for B-cell #565 - Class I**

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*02:01	*68:01	*40:01	*51:01	*03:04	*14:02	SSO SBT	
278	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02		
725	*02	*68	*40	*51	*03	*14							SSP SSO	
735	*02	*68	*40	*51	*03	*14	*02:01P	*68:01P	*40:38	*51:01P	*03:04P	*14:02	SSP SSO SBT	
747	*02	*68	*40	*51	*03	*14	*02:01:01:01	*68:01:02:02	*40:38	*51:01:01:01	*03:04:01:01	*14:02:01:01	SSP SSO NGS	A*02:614 A*68:164
774	*02	*68	*40	*51	*03	*14							SSP SSO	
792	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSO SBT	A*02:01:01:02L
793	*02	*68	*40	*51	*03	*14							SSP	
794	*02	*68	*40	*51	*03	*14	*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04:01	*14:02:01	SSP SSO NGS	
2344							*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04:01	*14:02:01	RT-PCR	
2400	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	NGS	
2847	*02	*68	*40	*51	*03	*14							SSO SBT	A*02:614 A*68:164
3135							*02:01P	*68:01P	*40:38	*51:01P	*03:04	*14:02	SSO	
3224							*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04	*14:02:01	NGS	
3511							*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSP SSO	
3519	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSP NGS	
													RT-PCR	A*68:104 A*02:217 A*02:614 A*68:164 C*03:279 A*02:245 A*02:246 A*02:234 A*68:03 A*68:05 A*68:75 A*68:08 A*68:23 A*68:105 A*68:152 B*40:07 A*02:22 A*02:34 A*02:04 A*02:35 A*68:83 C*14:06 C*14:20 C*14:55 B*40:01 B*40:222 B*40:38 B*40:353 B*51:01 B*51:63 B*51:193 B*51:230 B*51:232 C*03:28 C*03:92 B*51:24 B*51:237 B*51:251
3753			*40	*51			*02:01	*68:01			*03:04	*14:02	SSO SBT	
3966	*02	*68	*40	*51	*03	*14							SSP	
4079	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSP SSO NGS	
4251	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSO NGS	
4337							*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSP SBT NGS	
4492	*02	*68	*40	*51	*03	*14	*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04:01	*14:02:01	SSP SSO NGS	
5130	*02	*68	*40	*51	*03	*14	*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	BioLinkage	
5133							*02:01:01:01	*68:01:02:02	*40:38	*51:01:01	*03:04:01:01	*14:02:01	SSO NGS	
5214	*02	*68	*40	*51	*03	*14							NGS	
5219	*02	*68	(B60)	*51	(Cw10)	*14							SSO	
5219	*02	*68	*40	*51	*03	*14	*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04:01	*14:02:01	SSO NGS	
5462	*02	*68	*40	*51	*03	*14							SSO RT-PCR	
5488							*02:01:01	*68:01:02	*40:38	*51:01:01	*03:04:01	*14:02:01	SSO SBT NGS	

**Table 4: Individual laboratory results for B-cell #565 - Class I**

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
8021							*02:01	*68:01	*40:01	*51:01	*03:04	*14:02	SSO NGS	
8029	*02	*68	*40	*51	*03	*14							SSO	
8068	*02	*68	*40	*51	*03	*14							SSO	
8086							*02:01	*68:01	*40:38	*51:01	*03:04	*14:02	SSO SBT	



**Table 5a: Individual laboratory results for B-cell #566 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*01	*04	NT	4*01	*01	*01	*03	*05	*01	*01	*04	*04		
725	*01	*04	4*PRESENT		*01	*03	*03	*05					SSP SSO	
731	*01	*04			*01	*03	*03	*05					SSP SSO SBT	
735	*01	*04	4*01		*01	*03	*03	*05	*01	*01	*04(DP401)	*04(DP402)	SSP SSO SBT	
747	*01	*04	4*PRESENT		*01	*03	*03	*05	*01	*01	*04	*04	SSP SSO NGS	
771	*01	*04			*01	*03	*03	*05					SSP SSO	
774	*01	*04	4*01		*01	*03	*03	*05			*04(DP401)	*04(DP402)	SSP SSO	
792	*01	*04	4*01		*01	*03	*03	*05	*01	*01	*04(DP401)	*04(DP402)	SSO SBT	
793	*01	*04	4*01		*01	*03	*03	*05			*04(DP401)	*04(DP402)	SSP	
794	*01	*04	4*01	NP	*01	*03	*03	*05	*01		*04		SSP SSO NGS RT-PCR	
2400	*01	*04	4*01	NP	*01	*03	*03	*05			*04	*04	SSO SBT	
2847	*01	*04											SSO	
3519	*01	*04			*01	*03	*03	*05	*01		*04(DP401)	*04(DP402)	SSP NGS RT-PCR	
3632	*01	*04	4*01		*01	*03	*03	*05	*01		*04	*04	SSP SSO	
3753			4*01	NP	*01	*03			*01	*01			SSO SBT	
4079	*01	*04	4*01		*01	*03	*03	*05	*01		*04(DP401)	*04(DP402)	SSP SSO NGS	
4251	*01	*04	4*01		*01	*03	*03	*05	*01	*01	*04(DP401)	*04(DP402)	SSO NGS	
4492	*01	*04	4*PRESENT		*01	*03	*03	*05	*01		*04(DP401)	*04(DP402)	SSP SSO NGS BioLinkage	
5130	*01	*04	4*01		*01	*03	*03	*05			*04	*04	SSO NGS	
5214	*01	*04	4*01		*01	*03	*03 (DQ7)	*05	*01	*01	*04(DP401)	*04(DP402)	SSO	
5219	*01	*04					*03	*05					SSO NGS	
5451	*01	*04	4*01		*01	*03	*03	*05					SSO SBT	
5462	*01	*04		4*01	*01	*03	*03	*05	*01		NT	NT	SSO RT-PCR	
5488													SSO SBT NGS	
5642	*01	*04	4*PRESENT				*03	*05						
6649	*01	*04											SSO	
8001	*01	*04	4*01		*01	*03	*03	*05					SSP SSO	
8029	*01	*04			*01	*03	*03	*05					SSO	
8043	*01	*04			*01	*03	*03	*05					SSP SSO	
8068	*01	*04			*01	*03	*03	*05					SSO	

**Table 5b: Individual laboratory results for B-cell #566 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*01:01	*04:01					*03:01	*05:01			*04:01	*04:02	SSO SBT	
278	*01:01	*04:01	4*01:03	NT	*01:03	*01:03	*03:01	*05:01	*01:03	*01:03	*04:01	*04:02		DPB1*105:01 DPB1*126:01
731	*01:01	*04:01:01					*03:01	*05:01					SSP SSO SBT	
735	*01:01P	*04:01	4*01:01P		*01:01	*03:03	*03:01P	*05:01P	*01:03P	*01:03P	*04:01:01G	*04:02P	SSP SSO SBT	
747	*01:01:01	*04:01:01	4*01:03:01		*01:01	*03:01	*03:01:01:01	*05:01:01:03	*01:03:01:02	*01:03:01:05	*04:01:01:01	*04:02:01	SSP SSO NGS	DPB1*126:01 DPB1*105:01
762	*01:01:01	*04:01:01	4*01:03:01		*01:01:01:01	*03:03:01:01	*03:01:01:01	*05:01:01:03	*01:03:01:02	*01:03:01:05	*04:01:01	*04:02:01	NGS	DPB1*126:01 DPB1*105:01
771	*01:01	*04:01					*03:01	*05:01					SSP SSO	
774	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01			*04:01	*04:02	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:67 DRB1*04:171 DRB1*04:175
792	*01:01	*04:01					*03:01	*05:01			*04:01	*04:02	SSO SBT	DPB1*126:01 DPB1*105:01
793					*01:01	*03:03					*04:01:01G	*04:02:01G	SSP	
794	*01:01:01	*04:01:01	4*01:03:01	NP	*01:01	*03:03	*03:01:01	*05:01:01	NT	NT	*04:01:01	*04:02:01	SSP SSO NGS RT-PCR	
2344	*01:01:01	*04:01:01					*03:01:01G	*05:01:01G			*04:01:01G	*04:02:01G	NGS	
2400	*01:01	*04:01			*01:01	*03:03	*03:01	*05:01			*04:01P	*04:02P	SSO SBT	
3135	*01:01	*04:01	4*01:03		*01:01:01G	*03:01:01G	*03:01	*05:01	*01:03	*01:03	*04:01	*04:02		
3224	*01:01:01	*04:01:01	4*01:03		*01:01	*03:03	*03:01	*05:01	*01:03		*04:01:01G	*04:02:01G	NGS	
3511	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01	*01:03	*01:03	*04:01	*04:02	SSP SSO	
3519	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01	*01:03	*01:03	*04:01P	*04:02P	SSP NGS RT-PCR	DPB1*126:01 DPB1*665:01
3632	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01	*01:03		*04:01P	*04:02P	SSP SSO	
3753	*01:01	*04:01					*03:01	*05:01			*04:01:01G	*04:02:01G	SSO SBT	DRB1*01:08 DRB1*01:10 DRB1*04:08 DRB1*04:21 DQB1*03:10 DQB1*03:29 DQB1*03:256 DQB1*03:264+ DQB1*05:18 DQB1*03:73 DQB1*05:11 DQB1*05:63 DPB1*23:01 DPB1*51:01 DPB1*138:01 DPB1*190:01 DPB1*642:01+
3966	*01:01	*04:01	4*01:03				*03:01	*05:01					SSP	
4079	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01	*01:03		*04:01	*04:02	SSP SSO NGS	
4251	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01:01G	*05:01	*01:03:01G	*01:03:01G	*04:01:01G	*04:02:01G	SSO NGS	
4337	*01:01	*04:01					*03:01	*05:01			*04:01	*04:02	SSP SBT NGS	

**Table 5b: Individual laboratory results for B-cell #566 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
4492	*01:01	*04:01:01	4*01:03:01		*01:01:01	*03:03:01	*03:01	*05:01:01	*01:03:01	*01:03:01	*04:01:01	*04:02:01	SSP SSO NGS BioLinkage	DQB1*03:276N DQB1*03:292 DQB1*03:293 DQB1*03:294
5130	*01:01	*04:01	4*01:03		*01:01	*03:03	*03:01	*05:01			*04:01	*04:02	SSO NGS	DPB1*126:01 DPB1*665:01
5133	*01:01:01	*04:01:01:03	4*01:03:01		*01:01:01	*03:03:01:01	*03:01:01	*05:01:01	*01:03:01:02	*01:03:01:05	*04:01:01	*04:02:01	NGS	DPB1*126:01 DPB1*665:01
5219	*01:01:01	*04:01:01					*03:01:01	*05:01:01			*04:01:01	*04:02:01	SSO NGS	
5451	*01:01:01	*04:01:01											SSO SBT	
5488	*01:01:01	*04:01:01	4*01:03:01		*01:01:01	*03:03:01	*03:01:01	*05:01:01	*01:03:01		*04:01:01	*04:02:01	SSO SBT NGS	DQB1*03:276N DPB1*105:01 DPB1*126:01 DPB1*665:01
5642	*01:01	*04:01					*03:01	*05:01						
8001	*01:01	*04:01	4*01:03				*03:01	*05:01			*04:01	*04:02	SSP SSO	
8021	*01:01	*04:01	4*01:03		*01:01	*03:01	*03:01	*05:01	*01:03		*04:01	*04:02	SSO NGS	
8029													SSO	
8043	*01:01	*04:01			*01:01	*03:03	*03:01	*05:01					SSP SSO	
8086	*01:01	*04:01			*01:01	*03:03	*03:01	*05:01	*01:03	*01:03	*04:01	*04:02	SSO SBT	

**Table 6: Individual laboratory results for B-cell #566 - Class I**

Table 6: Individual laboratory results for B-cell #566 - Class I														
Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO SBT	
278	*01	*26	*15	*15	*03	*04	*01:01	*26:08	*15:01	*15:01	*03:03	*04:01		
725	*01	*26	*15		*03	*04							SSP SSO	
735	*01	*26	*15	*15	*03	*04	*01:01P	*26:08	*15:01P	*15:01P	*03:03P	*04:01P	SSP SSO SBT	
747	*01	*26	*15	*15	*03	*04	*01:01:01:01	*26:08	*15:01:01:01	*15:01:01	*03:03:01:01	*04:01:01	SSP SSO NGS	
774	*01	*26	*15		*03	*04		*26:08					SSP SSO	A*26:08
792	*01	*26	*15	*15	*03	*04	*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO SBT	
793	*01	*26	*15	*15	*03	*04							SSP	
													SSP SSO NGS	
794	*01	*26	*15		*03	*04	*01:01:01	*26:08:01	*15:01:01		*03:03:01	*04:01:01	RT-PCR	
2344							*01:01:01	*26:08	*15:01:01	*15:01:01	*03:03:01	*04:01:01	NGS	
2400	*01	*26	*15	*15	*03	*04	*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO SBT	
2847	*01	*26	*15		*03	*04							SSO	
3135							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01:01G		
3224							*01:01:01	*26:08	*15:01:01		*03:03	*04:01	NGS	
3511							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSP SSO	
3519	*01	*26	*15		*03	*04	*01:01	*26:08	*15:01		*03:03	*04:01	SSP NGS RT-PCR	
														A*01:11N A*01:248Q A*01:251 A*01:252 A*01:280 C*03:04 C*03:13 C*03:49 C*03:55 C*03:69 C*03:151 C*04:04 C*04:29 C*04:52 C*04:55 C*04:110 C*04:10 C*03:276 C*04:08 C*04:15 B*15:456 B*15:457 C*03:268 C*03:297 C*04:201 B*15:465
3753							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO SBT	
3966	*01	*26	*15	*15	*03	*04							SSP	
4079	*01	*26	*15		*03	*04	*01:01	*26:08	*15:01		*03:03	*04:01	SSP SSO NGS	
4251	*01	*26	*15	*15	*03	*04	*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO NGS	
4337							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSP SBT NGS	
													SSP SSO NGS	
4492	*01	*26	*15		*03	*04	*01:01:01:01	*26:08:01	*15:01:01	*15:01:01	*03:03:01	*04:01:01	BioLinkage	
5130	*01	*26	*15	*15	*03	*04	*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO NGS	
5133							*01:01:01	*26:08:01	*15:01:01		*03:03:01	*04:01:01:06	NGS	
			*15		*03									
5214	*01	*26	(B62)	*15	(Cw9)	*04							SSO	
5219	*01	*26	*15	*15	*03	*04	*01:01:01	*26:08	*15:01:01	*15:01:01	*03:03:01	*04:01:01	SSO NGS	
5462	*01	*26	*15		*03	*04							SSO RT-PCR	
5488							*01:01:01	*26:08	*15:01:01		*03:03:01	*04:01:01	SSO SBT NGS	
8021							*01:01	*26:08	*15:01		*03:03	*04:01	SSO NGS	
8029	*01	*26	*15	*15	*03	*04							SSO	
8068	*01	*26	*15	*15	*03	*04							SSO	
8086							*01:01	*26:08	*15:01	*15:01	*03:03	*04:01	SSO SBT	

## CELL EXCHANGE #412

The results for Cell Exchange #412 are summarized in Table 7 and Table 8. Molecular typing results for individual laboratories are listed in Tables 9 -12 for each sample and individual serological results for each sample are listed

in Table 13. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Cell 1645.** The reported consensus for this cell from a Filipino donor was A\*11:01(A11)-A\*24:07(A24)-B\*35:05(B35)-B\*40:01(B60)-C\*04:01-C\*07:02. Likely associations present in this cell were A\*11:01-B\*40:01-C\*07:02 and A\*24:07-B\*35:05-C\*04:01, with respective HF = 0.01558 and 0.00620, in Asians. Good agreement (100%) was achieved among DNA labs in the reporting of class I assignments. Among the labs reporting by high resolution, 5 labs assigned A\*24:07:01 and B\*35:05:01, and 4 labs assigned A\*11:01:01, B\*40:01:02, C\*04:01:01, and C\*07:02:01. A11 (100%), A24 (100%), B35 (100%), and B60 (91%) were well assigned by serology.

**Cell 1646.** The reported consensus for this cell from a Hispanic donor was A\*02:05(A2)-A\*11:01(A11)-B\*41:01(B41)-B\*44:02(B44)-C\*05:01-C\*07:01. The likely associations present in this cell were A\*02:05-B\*41:01-C\*07:01 and A\*11:01-B\*44:02-C\*05:01, with respective HF = 0.00152 and 0.00097. Good agreement (100%) was achieved among DNA labs in the reporting of high and low resolution class I results. Among the labs reporting by high resolution, 5 labs assigned A\*02:05:01, A\*11:01:01, B\*41:01:01, and 4 labs assigned B\*44:02:01, C\*05:01:01:02, and C\*07:01:01. Good agreement was also achieved among serology labs, as A2 (100%), A11 (100%), B41 (91%), and B44 (91%) were well assigned.

**Cell 1647.** The reported consensus for this cell from a Caucasian donor was A\*02:01(A2)-A\*02:24-B\*07:02(B7)-B\*27:05(B27)-C\*02:02-C\*07:02. One likely association present was A\*02:24-B\*07:02-C\*07:02, exclusively observed in Caucasians, with HF = 0.00019. The other likely association present, A\*02:01-B\*27:05-C\*02:02, is observed across all populations, with HF = 0.00706, in Caucasians. Good agreement (100%) was achieved among labs reporting high and low resolution typing results. Among the high resolution class I assignments, A\*02:24:01 and B\*07:02:01 were assigned by 4 labs, while A\*02:01:01, B\*07:02:01, B\*27:05:02, C\*02:02:02:01, and C\*07:02:01 were each assigned by 3 labs. By serology, A2, B7, and B27 were each assigned in complete consensus.

**Cell 1648.** The reported consensus for this cell from a Hispanic donor was A\*02:01(A2)-A\*33:01(A33)-B\*39:11(B39)-B\*44:03(B44)-C\*02:02-C\*07:02. One likely association present in this cell was A\*33:01-B\*44:03-C\*02:02, observed in Hispanics, with HF = 0.00136. The other likely association present may then be A\*02:01-B\*39:11-C\*07:02. The association of B\*39:11-C\*07:02, was observed exclusively in Hispanics, with HF = 0.00125. Good agreement (100%) was observed among DNA labs in the reporting of class I specificities. Among labs reporting by high resolution, 4 labs assigned B\*44:03:01 and 3 labs assigned A\*02:01:01, A\*33:01:01:01, C\*02:02:02:01, and C\*07:02:01. A2 (100%), A33 (100%), B39 (89%), and B44 (89%) were reported by serology.

**Table 7. Summary of the 412<sup>th</sup> Cell Exchange (Cell #1645-1648)**

**DNA typing**

<b>Cell 1645</b>	
16 low/12 high labs - A	%(n)
A*11:01:01:01	25(3)
A*11:01:01	8 (1)
A*11:01:01G	17(2)
A*11:01	50(6)
A*11	100(16)
16 low/12 high labs - A	%(n)
A*24:07:01	42(5)
A*24:07	58(7)
A*24	100(16)
16 low/13 high labs - B	%(n)
B*35:05:01:01	8 (1)
B*35:05:01	31(4)
B*35:05	61(8)
B*35	100(16)
16 low/12 high labs - B	%(n)
B*40:01:02	33(4)
B*40:01:01G	17(2)
B*40:01	50(6)
B*40(B60)	12(2)
B*40	88(14)
15 low/12 high Labs - C	%(n)
C*04:01:01:01	8 (1)
C*04:01:01	25(3)
C*04:01P	8 (1)
C*04:01	58(7)
C*04	100(15)
15 low/12 high Labs - C	%(n)
C*07:02:01:01	8 (1)
C*07:02:01	25 (3)
C *07:02:01G	8 (1)
C*07:02	58(7)
C*07	100(15)

<b>Cell 1646</b>	
16 low/13 high labs - A	%(n)
A*02:05:01:01	8 (1)
A*02:05:01	31(4)
A*02:05	61(8)
A*02	100(16)
16 low/12 high labs - A	%(n)
A*11:01:01:01	25(3)
A*11:01:01	17(2)
A*11:01:01G	8 (1)
A*11:01	50(6)
A*11	100(16)
16 low/12 high labs - B	%(n)
B*41:01:01:01	8 (1)
B*41:01:01	33(4)
B*41:01	58(7)
B*41	100(16)
16 low/12 high labs - B	%(n)
B*44:02:01:01	17(2)
B*44:02:01	17(2)
B*44:02:01G	17(2)
B*44:02	50(6)
B*44	100(16)
15 low/12 high Labs - C	%(n)
C*05:01:01:02	33(4)
C*05:01:01G	17(2)
C*05:01	50(6)
C*05	100(15)
15 low/12 high Labs - C	%(n)
C*07:01:01:01	8 (1)
C*07:01:01:09	8 (1)
C*07:01:01	17(2)
C*07:01:01G	17(2)
C*07:01	50(6)
C*07	100(15)

<b>Cell 1647</b>	
14 low/10 high labs - A	%(n)
A*02:01:01:01	20(2)
A*02:01:01	10(1)
A*02:01:01G	20(2)
A*02:01	50(5)
A*02	100(14)
10 high labs - A	%(n)
A*02:24:01	40(4)
A*02:24	60(6)
14 low/10 high labs - B	%(n)
B*07:02:01:01	10(1)
B*07:02:01	30(3)
B*07:02:01G	10(1)
B*07:02	50(5)
B*07	100(14)
14 low/10 high labs - B	%(n)
B*27:05:02	30(3)
B*27:05:02G	20(2)
B*27:05	50(5)
B*27	100(14)
13 low/10 high Labs - C	%(n)
C*02:02:02:01	30(3)
C*02:02:02G	10(1)
C*02:02	60(6)
C*02	100(13)
13 low/10 high Labs - C	%(n)
C*07:02:01:03	20(2)
C*07:02:01	10(1)
C*07:02:01G	20(2)
C*07:02	50(5)
C*07	100(13)

<b>Cell 1648</b>	
14 low/10 high labs - A	%(n)
A*02:01:01:01	20(2)
A*02:01:01	10(1)
A*02:01:01G	10(1)
A*02:01	60(6)
A*02	100(14)
16 low/10 high labs - A	%(n)
A*33:01:01:01	30(3)
A*33:01	70(7)
A*33	100(14)
14 low/11 high labs - B	%(n)
B*39:11	100(11)
B*39	100(14)
14 low/11 high labs - B	%(n)
B*44:03:01:02	9(1)
B*44:03:01	27(3)
B*44:03	64(7)
B*44	100(14)
13 low/10 high labs - C	%(n)
C*02:02:02:01	30(3)
C*02:02:02G	10(1)
C*02:02	60(6)
C*02	100(13)
13 low/10 high labs - C	%(n)
C*07:02:01	30(3)
C*07:02:01G	20(2)
C*07:02	50(5)
C*07	100(13)



**Table 9. Individual laboratory results for Cell #1645**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02		
725	*11	*24	*35	*40	*04	*07							SSO	
731	*11	*24	*35	*40	*04	*07	*11:01:01G	*24:07:01	*35:05:01	*40:01:01G	*04:01	*07:02	SSP SSO SBT	
745							*11:01:01:01	*24:07:01	*35:05:01	*40:01:02	*04:01:01	*07:02:01	SSP SBT NGS	
747	*11	*24	*35	*40	*04	*07	*11:01:01:01	*24:07:01	*35:05:01	*40:01:02	*04:01:01:01	*07:02:01:01	SSP SSO NGS	
762							*11:01:01:01	*24:07:01	*35:05:01	*40:01:02	*04:01:01	*07:02:01	NGS	
771	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02	SSO SBT	
774	*11	*24	*35	*40	*04	*07			*35:05				SSP SSO	B*35:97 B*35:114 B*35:89
														A*11:295 A*11:303 A*11:306 B*40:379 B*40:386 C*07:665 C*07:666 C*07:667 C*07:684 C*07:688 C*07:703 C*07:704 C*07:722 C*04:277 A*11:263 A*11:270 A*11:278 A*11:280 B*40:353 C*04:30 C*04:82 C*04:226 C*04:275 C*04:298 C*04:306 C*04:308 C*04:320 C*04:321 C*04:322 C*04:327 C*04:330 C*04:339 C*04:348 C*04:358 C*07:50 C*07:349 C*07:566 C*07:592 C*07:594 C*07:595 C*07:596 C*07:612
3545	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02	SSO SBT	
3632	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02	SSP SSO	
3808	*11	*24	*35	*40	*04	*07							SSP	
4079	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02	SSP SSO	
4251	*11	*24	*35	*40	*04	*07	*11:01:01G	*24:07	*35:05	*40:01:01G	*04:01P	*07:02:01G	SSO SBT	
5133							*11:01:01	*24:07:01	*35:05:01:01	*40:01:02	*04:01:01	*07:02:01	NGS	
5214	*11	*24	*35	*40(B60)	*04	*07							RT-PCR	
5462	*11	*24	*35	*40	*04	*07	*11:01	*24:07	*35:05	*40:01	*04:01	*07:02	SSO NGS	
6649	*11	*24	*35	*40									SSO	
8001	*11	*24	*35	*40(B60)	*04	*07								
8043	*11	*24	*35	*40	*04	*07							SSO	



**Table 10. Individual laboratory results for Cell #1646**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01		
725	*02	*11	*41	*44	*05	*07							SSO	
731	*02	*11	*41	*44	*05	*07	*02:05:01	*11:01:01	*41:01:01	*44:02:01G	*05:01:01G	*07:01:01G	SSP SSO SBT	
745							*02:05:01	*11:01:01:01	*41:01:01	*44:02:01	*05:01:01:02	*07:01:01	SSP SBT NGS	
747	*02	*11	*41	*44	*05	*07	*02:05:01	*11:01:01:01	*41:01:01	*44:02:01:01	*05:01:01:02	*07:01:01:01	SSP SSO NGS	
762							*02:05:01	*11:01:01:01	*41:01:01	*44:02:01:01	*05:01:01:02	*07:01:01	NGS	
771	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01	SSO SBT	
774	*02	*11	*41	*44	*05	*07	*02:05						SSP SSO	A*02:433 A*02:484 A*02:489 A*02:507 A*02:232 A*02:286 A*02:324 A*02:359 A*02:337 A*02:344 A*02:373N A*02:376 A*02:421 A*02:532
3545	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01	SSO SBT	A*11:263 A*11:270 A*11:278 A*11:280 B*44:19N B*44:270 B*44:292 B*44:301 B*44:306N C*05:172 C*05:187 C*07:06 C*07:18 C*07:343 C*07:419 C*07:458 C*07:591 C*07:610 C*07:615 C*07:617 C*07:618 C*07:619 C*07:657 C*07:682 C*07:687 C*07:696 C*07:721 A*11:295 A*11:303 A*11:306
3632	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01	SSP SSO	
3808	*02	*11	*41	*44	*05	*07							SSP	
4079	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01	SSP SSO	
4251	*02	*11	*41	*44	*05	*07	*02:05	*11:01:01G	*41:01	*44:02:01G	*05:01:01G	*07:01:01G	SSO SBT	
5133							*02:05:01:01	*11:01:01	*41:01:01:01	*44:02:01	*05:01:01:02	*07:01:01:09	NGS	
5214	*02	*11	*41	*44	*05	*07							RT-PCR	
5462	*02	*11	*41	*44	*05	*07	*02:05	*11:01	*41:01	*44:02	*05:01	*07:01	SSO NGS	
6649	*02	*11	*41	*44									SSO	
8001	*02	*11	*41	*44	*05	*07								
8043	*02	*11	*41	*44	*05	*07							SSO	

**Table 11. Individual laboratory results for Cell #1647**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*02	*07	*27	*02	*07	*02:01	*02:24	*07:02	*27:05	*02:02	*07:02		
725	*02		*07	*27	*02	*07							SSO	
731	*02	*02	*07	*27	*02	*07	*02:01:01G	*02:24:01	*07:02:01	*27:05:02G	*02:02:02G	*07:02:01G	SSP SSO SBT	
745							*02:01:01:01	*02:24:01	*07:02:01	*27:05:02	*02:02:02:01	*07:02:01:03	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*02:01:01:01	*02:24:01	*07:02:01:01	*27:05:02	*02:02:02:01	*07:02:01:03	NGS	
771	*02	*02	*07	*27	*02	*07	*02:01	*02:24	*07:02	*27:05	*02:02	*07:02	SSO SBT	
774	*02		*07	*27	*02	*07							SSP SSO	
														C*07:592 A*02:629 A*02:642 A*02:665 A*02:686 A*02:689 A*02:704 A*02:716 A*02:719 A*02:722 A*02:724 A*02:740 A*02:742 A*02:744 A*02:753 A*02:761 A*02:765 A*02:762 A*02:763 A*02:776 A*02:779 A*02:786 A*02:792N A*02:795 A*02:810 A*02:812 A*02:819 B*07:61 B*07:161N B*07:271 B*07:294 B*07:298 B*07:312 B*27:13 C*07:50 C*07:349 C*07:566 C*07:594 C*07:595 C*07:596 C*07:612 B*07:311+
3545	*02	*02	*07	*27	*02	*07	*02:01	*02:24	*07:02	*27:05	*02:02	*07:02	SSO SBT	
3632	*02	*02	*07	*27	*02	*07	*02:01	*02:24	*07:02	*27:05	*02:02	*07:02	SSP SSO	
3808	*02		*07	*27	*02	*07							SSP	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
4251	*02	*02	*07	*27	*02	*07	*02:01:01G	*02:24	*07:02:01G	*27:05:02G	*02:02	*07:02:01G	SSO SBT	
5133							*02:01:01	*02:24:01	*07:02:01	*27:05:02	*02:02:02:01	*07:02:01	NGS	
5214	*02	*02	*07	*27	*02	*07							RT-PCR	
5462	*02	*02	*07	*27	*02	*07	*02:01	*02:24	*07:02	*27:05	*02:02	*07:02	SSO NGS	
6649	*02		*07	*27									SSO	
8001	*02		*07	*27	*02	*07								
8043	*02		*07	*27	*02	*07							SSO	

**Table 12. Individual laboratory results for Cell #1648**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03	*02:02	*07:02		
725	*02	*33	*39	*44	*02	*07							SSO	
731	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03:01	*02:02:02G	*07:02:01G	SSP SSO SBT	
745							*02:01:01:01	*33:01:01:01	*39:11	*44:03:01	*02:02:02:01	*07:02:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*02:01:01:01	*33:01:01:01	*39:11	*44:03:01	*02:02:02:01	*07:02:01	NGS	
771	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03	*02:02	*07:02	SSO SBT	
774	*02	*33	*39	*44	*02	*07			*39:11	*44:03			SSP SSO	B*44:198N
														C*02:145 C*02:151 C*02:153 C*02:154 C*02:163 C*07:665 C*07:666 C*07:667 C*07:684 C*07:688 C*07:703 C*07:704 C*07:722 A*02:762 A*02:629 A*02:642 A*02:665 A*02:686 A*02:689 A*02:704 A*02:716 A*02:719 A*02:722 A*02:724 A*02:740 A*02:742 A*02:744 A*02:753 A*02:761 A*02:763 A*02:765 A*02:776 A*02:779 A*02:786 A*02:792N A*02:795 A*02:810 A*02:812 A*02:819 B*44:298 B*44:302 B*44:309N C*07:50 C*07:349 C*07:566 C*07:592 C*07:595 C*07:596 C*07:612 C*07:594
3545	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03	*02:02	*07:02	SSO SBT	
3632	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03	*02:02	*07:02	SSP SSO	
3808	*02	*33	*39	*44	*02	*07							SSP	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
4251	*02	*33	*39	*44	*02	*07	*02:01:01G	*33:01	*39:11	*44:03	*02:02	*07:02:01G	SSO SBT	
5133							*02:01:01	*33:01:01:01	*39:11	*44:03:01:02	*02:02:02:01	*07:02:01	NGS	
5214	*02	*33	*39	*44	*02	*07							RT-PCR	
5462	*02	*33	*39	*44	*02	*07	*02:01	*33:01	*39:11	*44:03	*02:02	*07:02	SSO NGS	
6649	*02	*33	*39	*44									SSO	
8001	*02	*33	*39	*44	*02	*07								
8043	*02	*33	*39	*44	*02	*07							SSO	

**Table 13. Individual laboratory results for Cell #1645-1648 by serology**

Investigator	Days Old	Cell No 1645 (Filipino)									Cell No 1646 (Hispanic)									Cell No 1647 (Caucasian)									Cell No 1648 (Hispanic)									
		Viab %	A11	A24	B35	B60	Cw4	Cw7	Bw6	OTHERS	Viab %	A2	A11	B41	B44	Cw5	Cw7	Bw4	Bw6	OTHERS	Viab %	A2	B7	B27	Cw2	Cw7	Bw4	Bw6	OTHERS	Viab %	Bw6	A2	A33	B39	B44	Cw2	Cw7	Bw4
Cecka, J. Mic	2	>95	+	+	+	+		+		>95	+	+	+	+			+	+		>95	+	+	+			+	+		>95	+	+	+	+	+			+	
D'Orsogna, L	8	90	+	+	+	+	+	+		90	+	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+	+	
Fort, Marylis	3	98	+	+	+	+		+		98	+	+	+	+			+	+		NT								NT										
Latham, Katy		90	+	+	+	+		+		90	+	+	+	+			+	+		90	+	+	+			+	+		90	+	+	+	+	+			+	
Loewenthal,		80	+	+	+	+	+	+		85	+	+	+	+	+	+	+	+		80	+	+	+	+	+	+	+		80	+	+	+	B16	+	+	+	+	
Permpikul, Ve	7	90	A11.1	+	+	+		+		90	+	A11.1	+	+			+	+		90	+	+	+			+	+		90	+	+	+	+	+			+	
Renac, Virgin		100	+	+	+	+		+		100	+	+	+	+			+	+		100	+	+	+			+	+		100	+	+	+	+	+			+	
Shai, Isaac	9	84	+	+	+	+	+	+	B48,Cw3	88	+	+		+	+		+	+	B45,Cw3	84	+	+	+	+	+	+	A34,Cw3	82	+	+	+	+	+	+	+	+	A28,Cw5	
Tabata, Lucas		90	+	+	+	+	+	+		90	+	+	+	B12		+	+	+		90	+	+	+	+		+	+	A10	80	+	+	+	+	B12	+	+		
Vidan-Jeras,	6	95	+	+	+	+	+	+		100	+	+	+	+	+	+	+	+		100	+	+	+	+	+	+		100	+	+	+	+	+	+	+	+	+	
Villard, Jean		75	+	+	+	B40	+	+		95	+	+	+	+	+	+	+	+		NT								NT										

## SERUM EXCHANGE #570

The results for **Serum Exchange 570 (sera 1273 - 1276)**, are summarized in Tables 14 - 20 and individual laboratory results by method are listed

in Tables 21 - 31. Sera strongly positive to A1, A2, B45, DQ2, and DQ7 were examined in this study.

1273	method	#abs	A1	A23	A11	A1101	A1102	A10	B8	A26	A34	A66	A6601	A36	A24	B48	Cw7	A80	A25	A43	B64	B65	B38	
class I	NIH-Std	1	no consensus																					
	NIH-Ext	2	50%	50%	50%				50%															
	AHG	2	100%	50%	100%			50%	100%	50%	50%	50%		50%	50%	50%	50%					50%		
	Luminex	29	100%	100%	93%	21%	24%		100%	100%	100%	72%	48%	100%	100%	86%	100%	100%	100%	100%	100%	100%	90%	
	Flow	3	no specificities assigned																					
	C1q	2	100%	100%	50%	50%	50%		100%	100%	100%	50%	50%	100%	100%	50%	100%	100%	100%	100%	50%		50%	
	Other	2	no consensus																					
1273	method	#abs	B39	B3901	B42	B54	B59	B60	B73	B81	B8101	B75	B76	Cw6	Cw18	B18	Bw6	B44	B46	B35	B41	B45	B50	
	AHG	2	50%		50%					50%						50%	50%							
	Luminex	29	86%	24%	100%	100%	100%	97%	100%	86%	28%	100%	100%	100%	100%	97%	28%			100%	100%	100%	100%	
	C1q	2				50%	100%	50%	100%			50%	100%	100%	100%			50%	50%					
1273	method	#abs	B55	B56	B62	B71	B72	B78	B7801	B82	B77	B51	B53	B67	B7	B703	B61	B37	B2708	B27	Cw4	Cw17	Cw15	
	Luminex	29	100%	100%	100%	100%	97%	90%	21%	90%	86%	86%	83%	100%	100%	21%	97%	86%	66%	55%	72%	48%	34%	

1273	method	#abs	DQ2	DR7	DP19
class II	NIH-Ext	1	undetermined		
	Luminex	27	100%	67%	26%
	Flow	3	no specificities assigned		
	C1q	1	NT		
	Other	2	no consensus		

**Serum 1273** was reported as broadly reactive to a number of class I specificities, including A1, A11, A23, and B8. Each were reported by all methods except flow, with respective MFI = 19983, 17974, 14132, and 21114. Additional reactivity to a number of 1C, 10C, 5C, and 8C specificities was reported by various methods. Anti-Cw6, -Cw7, and -Cw18 reactivity was also re-

ported by various methods, with Luminex reporting each in complete consensus. Allele specific A\*11:01, A\*11:02, A\*66:01, B\*39:01, and B\*81:01 was also reported by labs reporting by Luminex and/or C1q. Luminex labs also detected class II reactivity in this sample, with 100% of labs reporting anti-DQ2 reactivity, with MFI = 8273.

1274	method	#labs	A1	B64	B65	B14	B8	B18	A23	A24	A36	A80	A26	A34	B39	B37	B76	B59	B54	B55	A29	A43	A33	A68	A69
class I	NIH-Std	1	no consensus																						
	NIH-Ext	2	100%			50%	100%																		
	AHG	2	100%	50%	50%		100%	50%	50%	50%	50%		50%	50%	50%										
	Luminex	29	100%	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%
	Flow	3	no specificities assigned																						
	C1q	2	100%	100%	100%		100%	100%	100%	100%	100%					100%	100%	100%							
	Other	2	no consensus																						
1274	method	#labs	B44	B45	B46	B38	B51	B42	A11	A1101	A1102	A25	B82	B75	B41	B78	A66	A6601	B67	B77	Cw15	B35	B3901	B71	B53
	Luminex	29	100%	100%	100%	97%	97%	93%	86%	24%	24%	86%	83%	83%	76%	69%	69%	45%	45%	34%	34%	28%	28%	28%	17%

1274	method	#labs	DQ2	DR11	DR13	DR14	DR1403	DR7	DR17	DR18	DR52	DQA1*05	DR9	DQ5	DP14	DR12	DPw5	DP9	DP10	DP17	DPA1*02	DQ7
class II	NIH-Ext	1	undetermined																			
	Luminex	26	100%	100%	100%	100%	27%	100%	96%	96%	96%	62%	58%	42%	38%	38%	35%	35%	35%	35%	31%	23%
	Flow	3	no specificities assigned																			
	C1q	1	no consensus																			
	Other	2	no consensus																			

**Serum 1274**, was reported as strongly reactive to a number of class I specificities, including A1 and B8. Each were reported by all methods, except Flow, with median MFI = 20457 and 21929. Additional reactivity to a number of 8C and 10C specificities was also reported by various methods. In addition, Luminex single antigen reported anti-A29, -B44, -B45 reactivity, as well as reactivity to a number of 5C and 7C specificities. Strong class II reac-

tivity was reported in this sample, with Luminex single antigen, Luminex PRA, and C1q reporting reactivity to DQ2, DR17, and DR18. Median MFI values reported for each were 16774, 21942, and 20042, respectively. Additional reactivity to other DR specificities, as well as reactivity to a number of DP antigens (DP14, DP5, DP9, DP10, DP17) was also reported by Luminex labs.

1275	method	#abs	A2	A203	B57	B62	B63	B75	B58	B13	A32	B39	B3901	B76	B77	B46	B37	B38	B52	B71	B72	Cw9	B27	B2708	A69	B49
class I	NIH-Std	1	no consensus																							
	NIH-Ext	2	50%		50%	50%		50%																		
	AHG	2	100%		50%	50%	50%		50%	50%	50%															
	Luminex	29	100%	24%	100%	100%	100%	97%	100%	100%	97%	79%	24%	97%	97%	100%	97%	97%	97%	97%	97%	97%	97%	45%	97%	93%
	Flow	3	no specificities assigned																							
	C1q	2	100%	50%	100%	100%	100%	50%						50%	100%	50%										
	Other	2	no consensus																							
1275	method	#abs	B51	B18	B65	B64	B67	Cw10	A24	A2403	B44	B61	B78	B7801	B47	A23	A25	B59	Cw8	B53	B50	B56	A74	Cw12	Bw4	Cw1
	Luminex	29	93%	93%	93%	90%	90%	90%	90%	31%	86%	86%	83%	21%	79%	76%	76%	66%	66%	62%	59%	48%	45%	45%	31%	28%

1275	method	#abs	DQ7	DQ8	DQ9	DR11	DR12	DR13	DR14	DR4	DR7	DR8	DR9	DPw2	DR17	DR18	DR52	DP18	DQ2	DP28	DP10	DR53	DPw4	DQA1*03	DP402	DQ4	DR1403	DR1404
class II	NIH-Ext	1	undetermined																									
	Luminex	27	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	96%	96%	96%	92%	92%	88%	69%	69%	69%	58%	50%	42%	27%	27%
	Flow	3	no specificities assigned																									
	C1q	1	no consensus																									
	Other	2	no consensus																									

Strong class I reactivity was detected in **Serum 1275**, as all methods, except Flow, reported anti-A2, -B57, and -B62 reactivity. Median MFI values reported for each were 17732, 15913, and 15624, respectively. Additional reactivity to B13, A32, B39, as well as reactivity to a number of 5C, specificities was reported by various methods. In addition, >90% of Luminex labs

reported anti-B65, -B64, -B67, -Cw9, and -Cw10 reactivity. Strong class II reactivity was also detected in this sample, with Luminex and C1q reporting anti -DR9, -DR11, and -DR52 reactivity, with respective MFI = 13288, 18187, and 13364. Reactivity to a number of other DR specificities, as well as to DP antigens (DP2, DP402, DP10, DP18, and DP28) was also reported by Luminex.

1276	method	#labs	B45	B50	B41	B42	B44	B39	B3901	B76	B82	B8201	B67	B7	B18	B35	B54	B55	B56	B60	B61
class I	NIH-Std	1	no consensus																		
	NIH-Ext	2	50%	50%																	
	AHG	2	50%	50%			50%	50%													
	Luminex	29	100%	100%	100%	100%	100%	83%	31%	100%	93%	14%	100%	100%	97%	97%	97%	97%	97%	97%	97%
	Flow	3	no specificities assigned																		
	C1q	2	100%				50%			50%		50%									
	Other	2	no consensus																		
1276	method	#labs	B62	B64	B71	B72	B75	B8	B65	B48	B78	B81	B8101	B2708	B27	Bw6	B703	B49	B7801	Cw2	Cw6
	Luminex	29	97%	97%	97%	97%	97%	97%	93%	90%	90%	83%	21%	59%	59%	31%	24%	21%	21%	50%	50%

1276	method	#labs	NEG			
class II	NIH-Ext	1	undetermined			
	Luminex	14	100%			
	Flow	3	100%			
	Other	2	100%			

Anti-B45 (11484) reactivity was detected in **Serum 1276** by all methods, except NIH-standard and Flow. Additional reactivity to B50, B44, B39, B76, and B82 was also reported by various methods, with Luminex reporting respective median MFI values of 4747, 10094, 4321, 10928, and 10911 for

each. In addition, Luminex reported reactivity to B8, B64, B65, as well as reactivity to a number of 5C and 7C specificities. Allele specific B\*39:01, B\*82:01, B\*81:01, and B\*27:08 reactivity was reported by some labs. This sample was reported as negative for class II.

***NEXT MAILING DATE: November 6, 2019***

*Arlene Locke, David Gjertson, Qiheng Zhang, and Elaine F. Reed*



**Table 14. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by NIH-Standard and NIH-Extended - class I**

Method: NIH-Standard											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		

Method: NIH-Extended											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A1	50%	100%	A1	100%	100%	A2	50%	100%	B45	50%	100%
A11	50%	100%	B8	100%	100%	B62	50%	100%	B50	50%	100%
A23	50%	100%	B14	50%	83%	B75	50%	100%			
B8	50%	100%				B57	50%	50%			

**Table 15. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Antiglobulin and Flow Cytometry - class I**

Method: Antiglobulin											
*** Serum 1273 ***			*** Serum 1274 ***			*** Serum 1275 ***			*** Serum 1276 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A1	100%	100%	A1	100%	100%	A2	100%	100%	B44	50%	100%
A11	100%	100%	B8	100%	100%	B13	50%	100%	B45	50%	100%
B8	100%	100%	A23	50%	100%	B62	50%	100%	B50	50%	100%
A10	50%	100%	A24	50%	100%	B63	50%	100%	B39	50%	75%
A23	50%	100%	A36	50%	100%	A32	50%	86%			
A24	50%	100%	B18	50%	100%	B57	50%	80%			
A26	50%	100%	B39	50%	100%	B58	50%	33%			
A34	50%	100%	B64	50%	100%						
A36	50%	100%	B65	50%	100%						
A66	50%	100%	A34	50%	67%						
B18	50%	100%	A26	50%	60%						
B39	50%	100%									
B48	50%	100%									
B65	50%	100%									
B81	50%	100%									
Cw7	50%	95%									
Bw6	50%	94%									
B42	50%	67%									

Method: Flow Cytometry											
*** Serum 1273 ***			*** Serum 1274 ***			*** Serum 1275 ***			*** Serum 1276 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		

**Table 16. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Other and C1q - class I**

Method: Other											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		

Other = Luminex PRA

Method: C1q											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A1	100%	100%	A1	100%	100%	A2	100%	100%	B45	100%	100%
A23	100%	100%	A23	100%	100%	B57	100%	100%	B44	50%	100%
A24	100%	100%	A24	100%	100%	B62	100%	100%	B76	50%	100%
A25	100%	100%	A36	100%	100%	B63	100%	100%	B8201	50%	100%
A26	100%	100%	A80	100%	100%	B77	100%	100%	Cw2	50%	100%
A34	100%	100%	B18	100%	100%	A203	50%	100%	Cw6	50%	100%
A36	100%	100%	B59	100%	100%	B46	50%	100%			
A43	100%	100%	B64	100%	100%	B75	50%	100%			
A80	100%	100%	B65	100%	100%	B76	50%	100%			
B59	100%	100%	B76	100%	100%						
B73	100%	100%	B8	100%	100%						
B76	100%	100%	B37	50%	100%						
B8	100%	100%									
Cw18	100%	100%									
Cw6	100%	100%									
Cw7	100%	100%									
A11	50%	100%									
A1101	50%	100%									
A1102	50%	100%									
A66	50%	100%									
A6601	50%	100%									
B38	50%	100%									
B44	50%	100%									
B46	50%	100%									
B48	50%	100%									
B54	50%	100%									
B60	50%	100%									
B64	50%	100%									
B75	50%	100%									

**Table 17. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Luminex - class I**

Method: Luminex												
*** Serum 1273 ***			*** Serum 1274 ***			*** Serum 1275 ***			*** Serum 1276 ***			
29 typing Labs			29 typing Labs			29 typing Labs			29 typing Labs			
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	
A1	100%	100%	A1	100%	100%	A2	100%	100%	B41	100%	100%	
A23	100%	100%	A23	100%	100%	B13	100%	100%	B42	100%	100%	
A25	100%	100%	A26	100%	100%	B46	100%	100%	B44	100%	100%	
A26	100%	100%	A29	100%	100%	B57	100%	100%	B45	100%	100%	
A34	100%	100%	A36	100%	100%	B58	100%	100%	B50	100%	100%	
A36	100%	100%	A43	100%	100%	B62	100%	100%	B67	100%	100%	
A43	100%	100%	A80	100%	100%	B63	100%	100%	B7	100%	100%	
A80	100%	100%	B18	100%	100%	A32	97%	100%	B76	100%	100%	
B35	100%	100%	B37	100%	100%	B37	97%	100%	B18	97%	100%	
B41	100%	100%	B45	100%	100%	B38	97%	100%	B35	97%	100%	
B42	100%	100%	B54	100%	100%	B52	97%	100%	B54	97%	100%	
B45	100%	100%	B55	100%	100%	B71	97%	100%	B55	97%	100%	
B50	100%	100%	B59	100%	100%	B72	97%	100%	B56	97%	100%	
B54	100%	100%	B64	100%	100%	B75	97%	100%	B60	97%	100%	
B55	100%	100%	B65	100%	100%	B76	97%	100%	B61	97%	100%	
B56	100%	100%	B76	100%	100%	B77	97%	100%	B62	97%	100%	
B59	100%	100%	B8	100%	100%	Cw9	97%	100%	B64	97%	100%	
B62	100%	100%	A24	100%	90%	B27	97%	80%	B71	97%	100%	
B64	100%	100%	A33	100%	83%	A69	97%	33%	B72	97%	100%	
B65	100%	100%	A34	100%	83%	B49	93%	100%	B75	97%	100%	
B67	100%	100%	A68	100%	71%	B51	93%	100%	B8	97%	100%	
B7	100%	100%	B44	100%	67%	B18	93%	80%	B82	93%	100%	
B71	100%	100%	B46	100%	67%	B65	93%	75%	B65	93%	50%	
B73	100%	100%	A69	97%	100%	B64	90%	100%	B48	90%	100%	
B75	100%	100%	B38	97%	100%	B67	90%	100%	B78	90%	67%	
B76	100%	100%	B51	97%	60%	Cw10	90%	100%	B39	83%	100%	
B8	100%	100%	B42	93%	100%	A24	90%	50%	B81	83%	100%	
Cw18	100%	100%	A11	86%	100%	B44	86%	75%	B2708	59%	100%	
Cw6	100%	100%	A25	86%	100%	B61	86%	75%	B27	59%	60%	
Cw7	100%	91%	B39	83%	100%	B78	83%	100%	B3901	31%	100%	
A24	100%	90%	B82	83%	100%	B47	79%	100%	Bw6	31%	90%	
B18	97%	100%	B75	83%	60%	B39	79%	67%	B703	24%	100%	
B60	97%	100%	B41	76%	100%	A23	76%	100%	B49	21%	100%	
B61	97%	100%	B78	69%	100%	A25	76%	100%	B7801	21%	100%	
B72	97%	100%	A66	69%	50%	B59	66%	100%	B8101	21%	100%	

**Table 17. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Luminex - class I**

<b>Method: Luminex - cont.</b>											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
29 typing Labs			29 typing Labs			29 typing Labs			29 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A11	93%	100%	A6601	45%	100%	Cw8	66%	100%	B8201	14%	100%
B38	90%	100%	B67	45%	100%	B53	62%	100%			
B82	90%	100%	B77	34%	100%	B50	59%	100%			
B78	90%	67%	Cw15	34%	100%	B56	48%	100%			
B39	86%	100%	B35	28%	100%	A74	45%	100%			
B48	86%	100%	B3901	28%	100%	B2708	45%	100%			
B77	86%	100%	B71	28%	100%	Cw12	45%	100%			
B81	86%	100%	A1101	24%	100%	A2403	31%	100%			
B51	86%	80%	A1102	24%	83%	Bw4	31%	100%			
B37	86%	67%	B53	17%	100%	Cw1	28%	100%			
B53	83%	100%				A203	24%	100%			
A66	72%	100%				B3901	24%	100%			
Cw4	72%	100%				B7801	21%	100%			
B2708	66%	100%									
B27	55%	50%									
A6601	48%	100%									
Cw17	48%	100%									
Cw15	34%	100%									
B8101	28%	100%									
Bw6	28%	100%									
A1102	24%	100%									
B3901	24%	100%									
A1101	21%	100%									
B703	21%	100%									
B7801	21%	100%									

**Table 18. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by NIH-Extended and Flow Cytometry - class II**

Method: NIH-Extended											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
Undetermined			Undetermined			Undetermined			Undetermined		
Method: Flow Cytometry											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no specificities assigned			no specificities assigned			no specificities assigned			NEG	100%	100%

**Table 19. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Other and C1q - class II**

Method: Other											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			NEG	100%	100%

Method: C1q											
<b>*** Serum 1273 ***</b>			<b>*** Serum 1274 ***</b>			<b>*** Serum 1275 ***</b>			<b>*** Serum 1276 ***</b>		
1 typing Lab			1 typing Lab			1 typing Lab			1 typing Lab		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
NT			no consensus			no consensus			NT		

**Table 20. Summary of the 570<sup>th</sup> Serum Exchange (Serum #1273-1276) by Luminex - class II**

Method: Luminex											
*** Serum 1273 ***			*** Serum 1274 ***			*** Serum 1275 ***			*** Serum 1276 ***		
27 typing Labs			26 typing Labs			27 typing Labs			15 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ2	100%	80%	DQ2	100%	100%	DQ7	100%	100%	NEG	100%	100%
DR7	67%	100%	DR11	100%	100%	DQ8	100%	100%			
DP19	26%	100%	DR13	100%	100%	DQ9	100%	100%			
			DR14	100%	100%	DR11	100%	100%			
			DR7	100%	100%	DR12	100%	100%			
			DR17	96%	100%	DR13	100%	100%			
			DR18	96%	100%	DR14	100%	100%			
			DR52	96%	100%	DR4	100%	100%			
			DQA1*05	62%	100%	DR7	100%	100%			
			DR9	58%	100%	DR8	100%	100%			
			DQ5	42%	100%	DR9	100%	100%			
			DP14	38%	100%	DPw2	96%	100%			
			DR12	38%	100%	DR17	96%	100%			
			DP10	35%	100%	DR18	96%	100%			
			DP17	35%	100%	DR52	96%	100%			
			DP9	35%	100%	DP18	92%	100%			
			DPw5	35%	100%	DQ2	92%	100%			
			DPA1*02	31%	100%	DP28	88%	100%			
			DR1403	27%	100%	DP10	69%	100%			
			DQ7	23%	40%	DR53	69%	100%			
						DPw4	69%	86%			
						DQA1*03	58%	100%			
						DP402	50%	100%			
						DQ4	42%	73%			
						DR1403	27%	100%			
						DR1404	27%	100%			



**Table 21. Individual laboratory results for Serum #1273 - 1276 by NIH-Standard and NIH-Extended - class I**

		**** Serum 1273 ****				**** Serum 1274 ****				**** Serum 1275 ****				**** Serum 1276 ****				
Ctr	% POS	A1	B8	Other	% POS	A1	B8	Other	% POS	A2		Other	% POS				Method	
786		+	+		11	+	+		4	+			0				STD	

		**** Serum 1273 ****				**** Serum 1274 ****				**** Serum 1275 ****				**** Serum 1276 ****				
Ctr	% POS	A1	A11	Other	% POS	A1	B8	Other	% POS	A2	B62	Other	% POS	B45	B50	Other	Method	
725	81				35	+	+	B14	42	+	+	B75,B57	7	+	+		EXT	
3753	95	+	+	A23,B8	18	+	+		15				1				EXT	

**Table 22. Individual laboratory results for Serum #1273 - 1276 by Antiglobulin and Flow Cytometry - class I**

**** Serum 1273 ****						**** Serum 1274 ****				**** Serum 1275 ****			**** Serum 1276 ****				
Ctr	% POS	A1	A11	B8	Other	% POS	A1	B8	Other	% POS	A1	Other	% POS	B44	B45	Other	Method
774	93	+	+	+	A24,B48,A66,A26 >	63	+	+	A24,A26,A34,A23 >	50	+	B62,B13,A32,B63 >	44	+	+	B50,B39	Antiglobulin
786	24	+	+	+	A10	17	+	+		11	+		0				Antiglobulin

**** Serum 1273 ****						**** Serum 1274 ****				**** Serum 1275 ****			**** Serum 1276 ****				
Ctr	% POS					% POS				% POS			% POS				Method
3224	100					94				93			85				FC
5214	99					95				96			85				FC
8067	100					96				96			87				FC

**Table 23. Individual laboratory results for Serum #1273 - 1276 by Other and C1q - class I**

**** Serum 1273 ****														**** Serum 1274 ****																								
Ctr	% POS	A1	A11	A23	A24	A25	A26	A34	A36	A80	B18	B35	B50	B51	B8				Other	% POS	A1	A11	A23	A24	A25	A26	A29	A30	A34	A36	B18	B35	B8				Other	Method
3753	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+				B8	92	+	+	+	+	+	+	+	+	+	+	+	+	+				Other	Other
8112	57																			45																		

**** Serum 1275 ****														**** Serum 1276 ****																								
Ctr	% POS	A2	B38	B39	B49	B50	B57	B58	B62	B63	B71	B72	B75	B77					Other	% POS	B13	B18	B35	B39	B41	B42	B44	B45	B54	B55	B56	B60	B61	B8			Other	Method
3753	80	+	+	+	+	+	+	+	+	+	+	+	+	+						88	+	+	+	+	+	+	+	+	+	+	+	+	+	+			B67,B7,B82	Other
8112	54																			32																		Other

Other = Luminex PRA

**** Serum 1273 ****														**** Serum 1274 ****																								
Ctr	% POS	A1	A23	A24	A25	A26	A34	A36	A43	A80	B59	B73	B76	B8	Cw18	Cw6	Cw7		Other	% POS	A1	A23	A24	A36	A80	B18	B59	B64	B65	B76	B8					Other	Method	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A11,A66		+	+	+	+	+	+	+	+	+	+	+	+					Other	C1q
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		B60,B48,B44,B75 >		+	+	+	+	+	+	+	+	+	+	+	+					B37	C1q

**** Serum 1275 ****														**** Serum 1276 ****																								
Ctr	% POS	A2	B57	B62	B63	B77													Other	% POS	B45	B44	B76	B8201												Other	Method	
2400		+	+	+	+	+															+	+	+	+													Other	C1q
786		+	+	+	+	+														A203,B75,B76,B46	+	+	+	+													Cw6,Cw2	C1q



**Table 25. Individual laboratory results for Serum #1274 by Luminex - class I**

		**** Serum 1274 ****																																				
Ctr	% POS	A1	A23	A26	A29	A36	A43	A80	B18	B37	B45	B54	B55	B59	B64	B65	B76	B8	A24	A33	A34	A68	B44	B46	A69	B38	B51	B42	A11	A25	B39	B82	B75	B41	Other	Method		
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B62,B53 >	LMX		
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B71	LMX	
731	43	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B71,B7801,A1101,A1102 >	LMX		
774	78	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,A1102	LMX		
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B53,B67,B77 >	LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B67,B77,B35 >	LMX	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66	LMX	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78	LMX	
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B67,B77,B35 >	LMX	
3632	89	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B67,B77,B35 >	LMX		
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B67,B77,A6601	LMX	
3766	90	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B67,Cw15 >	LMX		
3808	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,A1101,A1102 >	LMX	
3966	43	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,Cw15	LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B62,B53 >	LMX
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B67,B77,A6601	LMX
5219	33	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A9,B15,A66,A10 >	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	LMX	
6649	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78	LMX	
8045	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B3901	LMX	
8058	39	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,Bw4,Bw6	LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B53,B67,B77 >	LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B53,B67 >	LMX
8086	35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	LMX	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B67	LMX
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B12C,B5C >	LMX
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,Cw15,B8C >	LMX
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B15,A66,B14,A1101 >	LMX
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A66,B78,B67	LMX

**Table 26. Individual laboratory results for Serum #1275 by Luminex - class I**

		**** Serum 1275 ****																																					
Ctr	% POS	A2	B13	B46	B57	B58	B62	B63	A32	B37	B38	B52	B71	B72	B75	B76	B77	Cw9	B27	A69	B49	B51	B18	B65	B64	B67	Cw10	A24	B44	B61	B78	B47	B39	A23	A25	Other	Method		
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A34 >	LMX		
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B59,B2708	LMX	
731	49	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+		+	+	+				+	+	B53,A74,A36,B59 >	LMX		
774	78	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+							LMX	
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B50,B53,B56 >	LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50	LMX	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,Cw8	LMX	
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B50,B53,B56 >	LMX	
3632	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX		
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX	
3766	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A80 >	LMX	
3808	41	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B59,Cw3,A2403 >	LMX	
3966	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw8	LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX
5219	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A9,A203,B40,B15 >	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B59,Cw8 >	LMX
6649	45	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B53,B59,Bw4,B2708	LMX
8045	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A2403,B2708,B3901	LMX
8058	19	+	+	+	+	+	+				+		+	+	+	+	+	+																			Bw4,Bw6	LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX
8086	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	LMX	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,Cw8,A2403,B12C >	LMX
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,B59 >	LMX
8103		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B15,A29,B14 >	LMX	
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B50,B53,B56,A74 >	LMX

**Table 27. Individual laboratory results for Serum #1276 by Luminex - class I**

		**** Serum 1276 ****																														
Ctr	% POS	B41	B42	B44	B45	B50	B67	B7	B76	B18	B35	B54	B55	B56	B60	B61	B62	B64	B71	B72	B75	B8	B82	B65	B48	B78	B39	B81	B2708	B27	Other	Method
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49,B52,B73,Cw1 >	LMX
725		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
731	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,B8101,B3901	LMX	
774	84	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw6	LMX	
786		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49,B8101,B7801,B8201 >	LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49	LMX	
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B7801,B8201	LMX	
3632	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49,B52,Bw6	LMX	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
3766	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49,B8101,B7801,B8201 >	LMX	
3808	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,B3901	LMX	
3966	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B49,B52,B46,B73 >	LMX	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw6	LMX	
5219	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B15,B70,B21 >	LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8101,B7801,B8201,B3901	LMX	
6649	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,Bw6	LMX	
8045	31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,B8101,B3901	LMX	
8058	12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4,Bw6	LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw6	LMX	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8086	32	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B703,Bw6,B12C,B5C >	LMX	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B40,B15,B703 >	LMX	
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	

**Table 28. Individual laboratory results for Serum #1273 - #1276 by NIH-Extended and Flow Cytometry - class II**

		**** Serum 1273 ****			**** Serum 1274 ****			**** Serum 1275 ****			**** Serum 1276 ****						
Ctr	% POS			Other	% POS			Other	% POS			Other	% POS			Other	Method
3753	86				82				64				23				EXT

Ext = NIH-Extended

		**** Serum 1273 ****			**** Serum 1274 ****			**** Serum 1275 ****			**** Serum 1276 ****						
Ctr	% POS			Other	% POS			Other	% POS			Other	% POS			Other	Method
3224	32				85				96				0				FC
5214	31				88				96				0				FC
8067	29				90				97				0				FC

FC = Flow Cytometry



**Table 29. Individual laboratory results for Serum #1273 - #1276 by Other and C1q - class II**

**** Serum 1273 ****					**** Serum 1274 ****										**** Serum 1275 ****															**** Serum 1276 ****								
Ctr	% POS	DQ2	DR7	Other	% POS	DQ2	DQ7	DR11	DR12	DR13	DR14	DR17	DR18	DR7	Other	% POS	DQ2	DQ4	DQ7	DQ8	DQ9	DR11	DR12	DR13	DR14	DR17	DR18	DR4	DR7	DR8	DR9	Other	% POS		Other	Method		
3753	27	+	+		67	+	+	+	+	+	+	+	+	+		80	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0			Other
8112	7				34											55																		0				

Other = Luminex PRA

**** Serum 1273 ****					**** Serum 1274 ****										**** Serum 1275 ****															**** Serum 1276 ****						
Ctr	% POS			Other	% POS	DQ2	DR17	DR18	DR52						Other	% POS	DR11	DR52	DR9													Other	% POS		Other	Method
2400	NT					+	+	+	+								+	+	+														NT			C1q

**Table 30. Individual laboratory results for Serum #1273 - #1274 by Luminex - class II**

**** Serum 1273 ****						**** Serum 1274 ****																	Method						
Ctr	% POS	DQ2	DR7	DP19	Other	% POS	DQ2	DR11	DR13	DR14	DR7	DR17	DR18	DR52	DQA1*05	DR9	DQ5	DP14	DR12	DP10	DP17	DP9		DPw5	DPA1*02	DR1403	DQ7	Other	
615		+	+																									DR51,DPA1*04,DQA1*06	LMX
731	95	+				21	+	+	+	+	+															+	DR3	LMX	
774	20	+				83	+	+	+	+	+	+	+	+															LMX
910		+	+				+	+	+	+	+	+	+	+	+	+				+									LMX
1647		+	+				+	+	+	+	+	+	+	+	+														LMX
2400		+					+	+	+	+	+	+	+	+	+														LMX
3224		+	+				+	+	+	+	+	+	+	+	+	+												DPw3,DPw6,DP13	LMX
3632	41	+	+	+		77	+	+	+	+	+	+	+	+			+	+		+	+	+	+	+		+	DR51	LMX	
3753		+	+				+	+	+	+	+	+	+	+															LMX
3766	44	+	+	+	DR14	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				DR51,DPw1,DPw3,DPw6 >	LMX	
3808	5	+				23	+	+	+	+	+	+	+	+	+	+									+	DR3	LMX		
3966	6	+	+		DQA1*05	40	+	+	+	+	+	+	+	+	+	+	+		+									LMX	
4322		+	+	+	DQ5,DQA1*01,DQA1*04,DQA1*05		+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+			DR51,DPw1,DPw3,DPw6 >	LMX	
5214		+			DQ5		+	+	+	+	+	+	+	+	+	+	+							+				LMX	
5219	5	+				23	+	+	+	+	+	+	+	+	+	+			+						+		DR3,DR5,DR6	LMX	
5462		+	+				+	+	+	+	+	+	+	+														LMX	
6649	5	+				34	+	+	+	+	+	+	+	+		+									+		DPA1*05	LMX	
8045	6	+	+			24	+	+	+	+	+	+	+	+		+									+	+	DQ4	LMX	
8058	8	+	+		DQ5	NT																						LMX	
8062		+	+	+	DR16,DQA1*01		+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+		+		LMX	
8082		+	+		DQA1*05		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DR51	LMX	
8086	7	+	+	+		21	+	+	+	+	+	+	+	+												+		LMX	
8090		+	+	+			+	+	+	+	+	+	+	+	+	+	+											LMX	
8098		+					+	+	+	+	+	+	+	+	+	+									+			LMX	
8100		+	+				+	+	+	+	+	+	+	+	+	+	+									+	DPw1,DPw3	LMX	
8103		+					+	+	+	+	+	+	+	+	+	+	+							+	+	DR3	LMX		
8112		+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	DPw1,DPw3,DPw6,DP13	LMX	

**Table 31. Individual laboratory results for Serum #1275 - #1276 by Luminex - class II**

Ctr	**** Serum 1275 ****																			**** Serum 1276 ****		Method									
	% POS	DQ7	DQ8	DQ9	DR11	DR12	DR13	DR14	DR4	DR7	DR8	DR9	DPw2	DR17	DR18	DR52	DP18	DQ2	DP28	DP10	DR53		DPw4	DQA1*03	DP402	DQ4	DR1403	DR1404	Other	% POS	Other
615		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			DPw1,DPw5	0		LMX
731	46	+	+	+	+	+	+	+	+	+	+	+	+				+		+				+	+	+	+	DR3	0		LMX	
774	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					+						0		LMX	
910		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+							LMX
1647		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			+	+			DPA1*01,DPA1*04,DQA1*05			LMX	
2400		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+						LMX
3224		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+						LMX
3632	93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							0		LMX	
3753		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+				0		LMX	
3766	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				0		LMX		
3808	45	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	DR3,DQ3	0		LMX	
3966	55	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+				DPA1*01,DPA1*04,DQA1*02,DQA1*05>			LMX	
4322		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		DPA1*01,DPA1*04,DQA1*01,DQA1*02>			LMX	
5214		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+			DQA1*02			LMX	
5219	45	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	DR3,DR5,DR6,DQ3	0		LMX	
5462		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+		+				0		LMX	
6649	50	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+	DPA1*03			LMX	
8045	48	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	DPA1*01,DPA1*02	0		LMX	
8058	55	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					+			0		LMX	
8062		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+						LMX	
8082		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		DPA1*01,DPA1*04,DQA1*02,DQA1*05>	0		LMX	
8086	54	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+						LMX
8090		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			0		LMX	
8098		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		+	+				LMX	
8100		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			0		LMX	
8103		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR3,DQ3,DQA1*05			LMX
8112		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		0		LMX	