

REPORT OF THE 400th CELL EXCHANGE

SEPTEMBER 28, 2017

B-cell Lines	541-542
Cells	1597-1600
Sera	1225-1228

B-cell Line Exchange #271

The results for B-cell Line Exchange #271 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 8. We would like to express our appreciation to the labs performing

NGS typing 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/>.

Ter-541. The consensus type for this sample from a Caucasian donor is DRB1*01:01-DRB1*12:01-DRB3*02:02-DQA1*01:01-DQA1*05:05-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPA1*02:01-DPB1*02:01-DPB1*04:01/A*02:01-A*02:291-B*35:03-B*44:12-C*04:01-C*05:01. A likely association present in this cell is B*35:03-C*04:01-DRB1*12:01-DQB1*03:01, observed in Caucasians, with HF = 0.00204. The other likely association present may then be B*44:12-C*05:01-DRB1*01:01-DQB1*05:01.

This cell is MOV002AN, a reference cell for A*02:291 and B*44:12. It was previously studied in the class I DNA extract exchange as extracts 522 (2011), 497 (2010), 274 (2004), and 201 (2002). In this present retyping, the rare A*02:291 allele was assigned by 78% of labs reporting at high resolution, an improvement from a 40% detection level in 2011. A*02:01 was assigned by 2 labs. A*02:291 differs from A*02:01 in exon 4 by a single nucleotide substitution at codon 270 (CTC → TTC), which results in an amino acid change from leucine to phenylalanine. B*35:03 and B*44:12 were each assigned in complete consensus, with 5 labs assigning B*35:03:01. The C-locus types were reported as C*04:01 (100%) and C*05:01 (100%), with 3 NGS labs assigning C*04:01:01:01 and C*05:01:01:02.

DRB1*01:01 and DRB1*12:01 were each reported in complete consensus as the DRB1 types, with 8 labs assigning DRB1*01:01:01 and DRB1*12:01:01. DQA1*01:01, DQA1*05:05, DQB1*03:01, and DQB1*05:01 were all reported by 100% of labs reporting at high resolution. DPA1*01:03 and DPA1*02:01 were also reported in complete consensus, with 4 NGS labs assigning DPA1*01:03:01:02 and DPA1*02:01:01:02.

Ter-542. The consensus type for this sample from a Caucasian donor is DRB1*01:01-DRB1*13:01-DRB3*01:01-DQA1*01:01-DQA1*01:03-DQB1*05:01-DQB1*06:03-DPA1*01:03-DPB1*03:01-DPB1*04:01/A*02:230-A*03:01-B*35:01-B*38:01-C*04:01-C*12:03. One likely association present in this cell is A*02:30-B*38:01-C*12:03-DRB1*13:01, observed in NM332, one of the reference cells for A*02:30:01. The other likely association present is A*03:01-B*35:01-C*04:01-DRB1*01:01, observed commonly in Caucasians, with HF = 0.01255.

This cell is FH21, a reference cell for A*02:30:01, B*35:01:01:05 and C*04:01:01:11. It was previously examined in the workshops as IHW9403 and in the exchange as extract 408 (2007) and extract 225 (2002). In this present retyping, A*02:30 was assigned by 100% of labs reporting at high resolution, with 5 labs (4 NGS and 1 SBT) assigning A*02:30:01. A*02:01 was assigned by 2 labs. A*02:30 differs from A*02:01 by a single nucleotide substitution in exon 2 at codon 3 (CAC → CAG), which results in an amino acid change from histidine to glutamine. A*03:01 was reported as the second A-locus type, with 4 NGS labs assigning A*03:01:01:01. B*35:01, B*38:01, C*04:01, and C*12:03 were all assigned in complete consensus by labs reporting at high resolution.

DRB1*01:01, DRB1*13:01, DQA1*01:01, DQA1*01:03, DQB1*05:01 and DQB1*06:03 were all reported in complete consensus, with 5 NGS labs assigning DQA1*01:03:01:02 and 3 NGS labs assigning DQB1*05:01:01:03. DPA1*01:03 was reported as the sole DPA1 type, with NGS assigning DPA1*01:03:01:03 along with DPA1*01:03:01:04.

Table 1: Summary of the 271st B-cell Line Exchange

Ter-541

Ter-541																		
DNA Typing - class II	<u>32 labs High; 36 labs low-DRB1</u> % (n)			<u>19 labs High; 27 labs Low-DRB3/4/5</u> % (n)			<u>21 labs High; 28 labs Low-DQA1</u> % (n)			<u>31 High Labs; 34 labs Low-QQB1</u> % (n)			<u>14 High Labs; 14 labs Low-DPA1</u> % (n)			<u>29 High Labs; 19 labs Low-DPB1</u> % (n)		
	DRB1*01:01:01	25(8)		DRB3*02:02:01	26(5)		DQA1*01:01:01:01	5(1)		DQB1*03:01:01	23(7)		DPA1*01:03:01:02	29(4)		DPB1*02:01:02	21(6)	
	DRB1*01:01:01G	6(2)		DRB3*02:02:01G	5(1)		DQA1*01:01:01	24(5)		DQB1*03:01:01G	6(2)		DPA1*01:03:01	7(1)		DPB1*02:01:02G	3(1)	
	DRB1*01:01	69(22)		DRB3*02:02	68(13)		DQA1*01:01	71(15)		DQB1*03:01	71(22)		DPA1*01:03	64(9)		DPB1*02:01	76(22)	
	DRB1*01	100(36)		DRB3*02	74(20)		DQA1*01	100(28)		DQB1*03(DQ7)	3(1)		DPA1*01	100(14)		DPB1*02(DP201)	42(8)	
				DRB3*Present	26(7)					DQB1*03	97(33)					DPB1*02	58(11)	
							<u>22 labs High; 27 labs Low-DQA1</u> % (n)			<u>31 High Labs; 34 labs Low-QQB1</u> % (n)			<u>15 High Labs; 14 labs Low-DPA1</u> % (n)			<u>29 High Labs; 19 labs Low-DPB1</u> % (n)		
	DRB1*12:01:01	25(8)					DQA1*05:05:01:03	5(1)		DQB1*05:01:01:03	10(3)		DPA1*02:01:01:02	27(4)		DPB1*04:01:01:01	7(2)	
	DRB1*12:01:01G	13(4)					DQA1*05:05:01:06	5(1)		DQB1*05:01:01	13(4)		DPA1*02:01:01	7(1)		DPB1*04:01:01	17(5)	
	DRB1*12:01P	6(2)					DQA1*05:05:01	18(4)		DQB1*05:01:01G	6(2)		DPA1*02:01	66(10)		DPB1*04:01:01G	10(3)	
	DRB1*12:01	56(18)					DQA1*05:05	72(16)		DQB1*05:01	71(22)		DPA1*02	100(14)		DPB1*04:01	66(19)	
	DRB1*12	100(36)					DQA1*05	100(27)		DQB1*05	100(34)					DPB1*04(DP401)	53(10)	
																DPB1*04	47(9)	
DNA Typing - class I	<u>20 labs High; 27 labs low- A</u> % (n)			<u>20 labs High; 28 labs low- B</u> % (n)			<u>19 labs High; 28 labs low- C</u> % (n)											
	A*02:01:01:01	10(2)		B*35:03:01	25(5)		C*04:01:01:01	16(3)										
	A*02:01:01	20(4)		B*35:03:01G	5(1)		C*04:01:01	11(2)										
	A*02:01:01G	10(2)		B*35:03	70(14)		C*04:01P	5(1)										
	A*02:01P	5(1)		B*35	100(28)		C*04:01	68(13)										
	A*02:01	55(11)					C*04	100(28)										
	A*02	100(27)																
				<u>22 labs High; 27 labs low- B</u> % (n)			<u>19 labs High; 28 labs low- C</u> % (n)											
	A*02:291	78(14)		B*44:12	100(22)		C*05:01:01:02	16(3)										
	A*02:01:01G	5(1)		B*44	100(27)		C*05:01:01	11(2)										
A*02:01/291	5(1)					C*05:01P	5(1)											
A*02:01	11(2)					C*05:01	68(13)											
						C*05	100(28)											

Table 2: Summary of the 271st B-cell Line Exchange

Ter-542

DNA Typing - class II		DNA Typing - class I										
DNA Typing - class II	<u>32 labs High; 36 labs low-DRB1</u>	%(n)	<u>19 labs High; 26 labs Low-DRB3/4/5</u>	%(n)	<u>22 labs High; 27 labs Low-DQA1</u>	%(n)	<u>30 High Labs; 34 labs Low-DQB1</u>	%(n)	<u>15 High Labs; 14 labs Low-DPA1</u>	%(n)	<u>29 High Labs; 19 labs Low-DPB1</u>	%(n)
	DRB1*01:01:01	25(8)	DRB3*01:01:02	21(4)	DQA1*01:01:01	27(6)	DQB1*05:01:01:03	10(3)	DPA1*01:03:01	13(5)	DPB1*03:01:01	21(6)
	DRB1*01:01:01G	6 (2)	DRB3*01:01:01	5 (1)	DQA1*01:01P	5 (1)	DQB1*05:01:01	13(4)	DPA1*01:03	67(10)	DPB1*03:01:01G	10(3)
	DRB1*01:01	69(22)	DRB3*01:01G	5 (1)	DQA1*01:01	68(15)	DQB1*05:01	77(23)	DPA1*01	93(13)	DPB1*03:01P	7 (2)
	DRB1*01	100(36)	DRB3*01:01	68(13)	DQA1*01	100(27)	DQB1*05	100(34)	DPA1*02	7 (1)	DPB1*03:01	62(18)
			DRB3*01	73(19)					DPA1*02	7 (1)	DPB1*03	95(18)
			DRB3*PRESENT	27(7)							DPB1*11	5 (1)
DNA Typing - class I	<u>32 labs High; 36 labs low-DRB1</u>	%(n)	<u>20 labs High; 27 labs low- B</u>	%(n)	<u>21 labs High-DQA1</u>	%(n)	<u>29 High Labs; 35 labs Low-DQB1</u>	%(n)			<u>29 High Labs; 18 labs Low-DPB1</u>	%(n)
	DRB1*13:01:01	25(8)	B*35:01:01:01	5 (1)	DQA1*01:03:01:02	24(5)	DQB1*06:03:01	21(6)			DPB1*04:01:01:01	17(5)
	DRB1*13:01:01G	3 (1)	B*35:01:01	25(5)	DQA1*01:03:01	5 (1)	DQB1*06:03:01G	3 (1)			DPB1*04:01:01	3(1)
	DRB1*13:01	72(23)	B*35:01P	5 (1)	DQA1*01:03	71(15)	DQB1*06:03	76(22)			DPB1*04:01:01G	14(4)
	DRB1*13	100(36)	B*35:01	65(13)			DQB1*06	100(35)			DPB1*04:01P	7 (2)
			B*35	100(27)							DPB1*04:01	59(17)
											DPB1*04(DP401)	50(9)
											DPB1*04	44(8)
											DPB1*11	6 (1)
DNA Typing - class I	<u>20 labs High; 27 labs low- A</u>	%(n)	<u>19 labs High; 28 labs low- B</u>	%(n)	<u>19 labs High; 28 labs low- C</u>	%(n)						
	A*02:30:01	25(5)	B*35:01:01:01	5 (1)	C*04:01:01:01	16(3)						
	A*02:30	60(12)	B*35:01:01	25(5)	C*04:01:01	11(2)						
	A*02:01/30	5 (1)	B*35:01P	5 (1)	C*04:01P	5 (1)						
	A*02:01	10(2)	B*35:01	65(13)	C*04:01	68(13)						
	A*02	100(27)	B*35	100(27)	C*04	100(28)						
DNA Typing - class I	<u>20 labs High; 27 labs low- A</u>	%(n)	<u>19 labs High; 28 labs low- B</u>	%(n)	<u>20 labs High; 27 labs low- C</u>	%(n)						
	A*03:01:01:01	20(4)	B*38:01:01	26(5)	C*12:03:01:01	15(3)						
	A*03:01:01	10(2)	B*38:01	74(14)	C*12:03:01	15(3)						
	A*03:01	70(14)	B*38	100(28)	C*12:03P	5 (1)						
	A*03	100(27)			C*12:03	65(13)						
					C*12	100(27)						

Table 3a: Individual laboratory results for B-cell #541-Class II

Center	Investigator	Low resolution												METHOD	Other Alleles
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1			
5488	Adams, Sharon			3*02		*01								SSP SSO SBT	
5462	Arnold , Paula	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO RT-PCR	
4492	Caillat-Zucman , S	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04(DP401)	SSP SSO NGS	
774	Cecka , J. Michael	*01	*12	3*02		*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP SSO	
9916	Charlton , Ronald	*01	*12	3*PRESENT				*03	*05					SSP	
3224	Chen , Dong-Feng	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO	
3632	Colombe , Beth W	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO	
5130	Costeas , Paul A.	*01	*12	3*02		*01	*05	*03	*05			*02	*04	SSP NGS	
779	Daniel , Claude	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)		
5219	Daniel , Dolly	*01	*12			*01	*05	*03	*05					SSO	
87	Di Paola , Nichola	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04(DP401)	RT-PCR	
5214	Eckels/CPMC ,	*01	*12	3*02		*01	*05	*03 (DQ7)	*05	*01	*02	*02(DP201)	*04(DP401)	SSO	
747	Ferrari-Lacruz , S	*01	*12	3*PRESENT		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO NGS	
4079	Fort , Marylise	*01	*12					*03	*05					SSP	
792	Gandhi , Manish	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO SBT	
8043	Gideoni , Osnat	*01	*12			*01	*05	*03	*05						
810	Hamdi , Nuha	*01	*12			*01	*05	*03	*05					SSO	
8087	Hernandez Rosale	*01	*12			*01	*05	*03	*05						
771	Israel , Shoshana	*01	*12			*01	*05	*03	*05					SSP SSO	
794	Jaatinen , Taina	*01	*12	3*02	NP	*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO SBT RT-PCR	
725	Lardy , N.M.	*01	*12	3*PRESENT		*01	*05	*03	*05					SSO	
278	Lee , Jar-How	*01	*12	3*02	NT	*01	*05	*03	*05	*01	*02	*02	*04	SSP SSO	
6649	Lim , Young Ae	*01	*12	3*PRESENT										SSP	
2400	Liu , Chang	*01	*12	3*02		*01	*05	*03	*05			*02	*04	SSP SSO SBT	
731	Loewenthal , Ron	*01	*12			*01	*05	*03	*05					SSP SSO SBT	
206	McAlack , Robert	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04	SSO	
735	Moussa , Omar	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02	*04		
8042	Muncher , Liora	*01	*12	3*02	NP	NT	NT	*03	*05	NT	NT	NT	NT	SSP SSO	
8001	Rao , Prakash	*01	*12	3*PRESENT		*01	*05	*03	*05					SSP SSO	
3519	Renac , Virginie	*01	*12					*03	*05			*02(DP201)	*04(DP401)	SSP NGS	
793	Rubocki , Ronald	*01	*12	3*02		*01	*05	*03	*05			*02(DP201)	*04(DP401)	SSP	
4251	Schiller , Jennifer	*01	*12	3*02		*01	*05	*03	*05	*01	*02	*02(DP201)	*04(DP401)	SSO NGS	
8068	Shanmugam , He	*01	*12	3*02	3*02			*03	*05					SSO	
8029	Tarigopula , Anil	*01	*12			*01	*05	*03	*05					SSO	
5451	Tilanus , Marcel G	*01	*12	3*PRESENT				*03	*05					SSP SBT	
5642	Varnavidou-Nicola	*01	*12	3*PRESENT				*03	*05						
2847	Wakita , Atsushi	*01	*12											SSO	

Table 3b: Individual laboratory results for B-cell #541-Class II

Center	Investigator	High resolution										METHOD	Other Alleles	
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1			
5488	Adams, Sharon	*01:01:01	*12:01:01			*05:05	*03:01:01	*05:01:01			*02:01	*04:01:01	SSP SSO SBT	DRB1*12:10 DPB1*433:01 DPB1*444:01 DPB1*452:01 DPB1*457:01 DPB1*469:01 DPB1*502:01 DPB1*510:01 DPB1*464:01 DPB1*468:01 DPB1*475:01 DPB1*476:01 DPB1*479:01 DPB1*485:01 DPB1*486:01 DPB1*497:01 DPB1*500:01 DPB1*592:01 DPB1*593:01 DPB1*607:01 DPB1*614:01 DPB1*615:01 DPB1*618:01 DPB1*625:01 DPB1*467:01 DPB1*511:01 DPB1*513:01 DPB1*528:01 DPB1*537:01 DPB1*557:01 DPB1*602:01 DPB1*617:01 DPB1*622:01 DPB1*628:01 DPB1*418:01 DPB1*426:01 DPB1*428:01 DPB1*434:01 DPB1*453:01 DPB1*454:01 DPB1*455:01N DPB1*459:01 DPB1*520:01 DPB1*523:01 DPB1*524:01 DPB1*529:01 DPB1*534:01 DPB1*553:01 DPB1*554:01 DPB1*569:01 DPB1*591:01
5462	Arnold , Paula	NT	NT	NT	NT	NT	NT	NT	NT	NT	*02:01	*04:01	SSO RT-PCR	
5133	Askar , Medhat	*01:01:01	*12:01:01	3*02:02:01	*01:01:01:01	*05:05:01:06	*03:01:01	*05:01:01	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01	NGS	
4492	Caillat-Zucman ,	*01:01:01	*12:01:01	3*02:02	*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03	*02:01	*02:01:02	*04:01:01	SSP SSO NGS	DRB1*12:10 DPA1*01:13
774	Cecka , J. Micha	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP SSO	DRB1*01:64 DRB1*01:67 DRB3*02:28 DQB1*03:92 DRB3*02:29N DQB1*03:73 DQB1*03:93 DRB1*01:50 DRB1*01:62N
8070	Chang , Uckjin	*01:01	*12:01										SBT	
8021	Clark , Brendan	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO NGS	
3632	Colombe , Beth V	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO	
5130	Costeas , Paul A	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP NGS	
779	Daniel , Claude				*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01		
8086	Du , Keming	*01:01	*12:01		*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO SBT	
5214	Eckels/CPMC ,									*02:01	*02:01	*04:01:01G	SSO	
3135	Enczmann , J	*01:01	*12:01	3*02:02			*03:01	*05:01			*02:01	*04:01		DRB1*12:10
747	Ferrari-Lacraz , S	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01:01	SSP SSO NGS	DRB1*12:10
762	Fischer , Gottfrie	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01	NGS	DRB1*12:10
4079	Fort , Marylise										*02:01	*04:01	SSP	
792	Gandhi , Manish	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SSP SSO SBT	
8043	Gideoni , Osnat	*01:01	*12:01		*01:01	*05:05	*03:01	*05:01						
810	Hamdi , Nuha												SSO	
2344	Hurley & Hartzma	*01:01:01	*12:01:01		*01:01:01	*05:05:01:03	*03:01:01	*05:01:01:03	*01:03:01:02	*02:01:01:02	*02:01:02	*04:01:01:01	NGS	DPB1*04:01:01:02 DQA1*05:05:01:06

Table 3b: Individual laboratory results for B-cell #541-Class II														
Center	Investigator	High resolution											METHOD	Other Alleles
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1			
771	Israel , Shoshana	*01:01	*12:01				*03:01	*05:01					SSP SSO	
794	Jaatinen , Taina	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO SBT RT-PCR	DRB1*12:17 DQA1*05:09 DQA1*05:11 DRB1*01:50 DRB1*01:67 DQA1*01:04 DQA1*01:05 DPA1*01:13 DPB1*459:01 DPB1*464:01
4337	Kim , Tai-Gyu	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SBT	
278	Lee , Jar-How	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSP SSO	
2400	Liu , Chang	*01:01	*12:01:01G		*01:01	*05:05	*03:01	*05:01			*02:01:02G	*04:01:01G	SSP SSO SBT	
731	Loewenthal , Ro	*01:01:01G	*12:01:01G				*03:01:01G	*05:01:01G					SSP SSO SBT	
735	Moussa , Omar	*01:01	*12:01P	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01		DQA1*05:09 DQA1*05:11 DRB3*02:29N DRB3*02:33 DQA1*01:05 DPA1*01:13 DRB3*02:28 DQA1*01:04
8042	Muncher , Liora	*01:01	*12:01	3*02:02:01	NT	NT	*03:01	*05:01	NT	NT	NT	NT	SSP SSO	
3966	Permpikul , Vejba	*01:01	*12:01	3*02:02			*03:01	*05:01					SSP	
8001	Rao , Prakash	*01:01:01G	*12:01:01G	3*02:02:01G			*03:01:01G	*05:01:01G			*02:01	*04:01	SSP SSO	
3753	Reed , Elaine F.	*01:01:01	*12:01:01	3*02:02:01	*01:01:01	*05:05:01	*03:01:01	*05:01:01	*01:03:01	*02:01:01	*02:01:02	*04:01:01	NGS	DRB1*12:10
3519	Renac , Virginie	*01:01	*12:01P	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP NGS	DRB1*12:10
793	Rubocki , Ronald				*01:01	*05:05					*02:01	*04:01:01G	SSP	
4251	Schiller , Jennifer	*01:01	*12:01:01G	3*02:02	*01:01	*05:05	*03:01	*05:01	*01:03	*02:01	*02:01	*04:01	SSO NGS	
230	Thoni , Deborah	*01:01	*12:01				*03:01	*05:01			*02:01	*04:01	SSO SBT	
5451	Tilanus , Marcel	*01:01:01	*12:01:01										SSP SBT	
5642	Varnavidou-Nico	*01:01	*12:01				*03:01	*05:01						
3511	Zeevi , Adriana	*01:01	*12:01	3*02:02	*01:01	*05:05	*03:01	*05:01			*02:01	*04:01	SSP SSO	

Table 4: Individual laboratory results for B-cell #541-Class II

Serology										
CTR	DIRNAME	DRB1		DRB3/4/5		DQB1		Others		
910	Hahn,Amy B.	DR1	DR12	DR52		DQ7	DQ1	DR14	DR10	

Table 5: Individual laboratory results for B-cell #541-Class I

Center	Investigator	Low resolution						High/Intermediate						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams, Sharon			*35		*04	*05	*02:01:01	*02:291		*44:12			SSP SSO SBT	
5462	Arnold , Paula	*02		*35	*44	*04	*05	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5133	Askar , Medhat							*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01	NGS	
4492	Caillat-Zucman , S	*02		*35	*44	*04	*05	*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01	*05:01:01:02	SSP SSO NGS	
774	Cecka , J. Michael	*02		*35	*44	*04	*05			*35:03	*44:12			SSP SSO	B*35:70 B*35:195
9916	Charlton , Ronald	*02		*35	*44	*04	*05							SSP	
3224	Chen , Dong-Feng	*02	*02	*35	*44	*04	*05							SSO	
8021	Clark , Brendan							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO NGS	
5130	Costeas , Paul A.	*02	*02	*35	*44	*04	*05	*02:01	*02:01/291	*35:03	*44:12	*04:01	*05:01	SSP NGS	
779	Daniel , Claude	*02		*35	*44	*04	*05								
5219	Daniel , Dolly	*02	*02	*35	*44	*04	*05							SSO	
87	Di Paola , Nicholas	*02	*02	*35	*44	*04	*05							RT-PCR	
8086	Du , Keming							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO SBT	
5214	Eckels/CPMC ,	*02	*02	*35	*44	*04	*05				*44:12			SSO	
3135	Enczmann , J							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01		C*04:09N
747	Ferrari-Lacraz , S	*02	*02	*35	*44	*04	*05	*02:01:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01:02	SSP SSO NGS	
792	Gandhi , Manish	*02	*02	*35	*44	*04	*05	*02:01:01G	*02:01:01G	*35:03	*44:12	*04:01	*05:01	SSP SSO SBT	A*02:291
810	Hamdi , Nuha	*02	*02	*35	*44	*04	*05							SSO	
8087	Hernandez Rosale	*02	*02	*35	*44	*04	*05								
2344	Hurley & Hartzma							*02:01:01:01	*02:291	*35:03:01	*44:12	*04:01:01:01	*05:01:01:02	NGS	
794	Jaatinen , Taina	*02	*02	*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSP SSO SBT	
4337	Kim , Tai-Gyu							*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	RT-PCR	C*04:82 C*04:30
278	Lee , Jar-How	*02	*02	*35	*44	*04	*05	*02:01	*02:01	*35:03	*44:12	*04:01	*05:01	SBT	
2400	Liu , Chang	*02		*35	*44	*04	*05	*02:01:01G		*35:03:01G	*44:12	*04:01	*05:01	SSP SSO	
206	McAlack , Robert	*02	*02	*35	*44	*04	*05							SSP SSO SBT	
735	Moussa , Omar	*02	*02	*35	*44	*04	*05							SSO	
735	Moussa , Omar	*02	*02	*35	*44	*04	*05	*02:01P	*02:291	*35:03	*44:12	*04:01P	*05:01P		
8042	Muncher , Liora	*02	*02	*35	*44	*04	*05	*02:01	*02:01	*35:03	*44:12	*04:01	*05:01	SSP SSO	
3966	Permpikul , Vejba	*02	*02	*35	*44	*04	*05							SSP	
3753	Reed , Elaine F.							*02:01:01	*02:291	*35:03:01	*44:12	*04:01:01	*05:01:01	NGS	
3519	Renac , Virginie	*02		*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSP NGS	A*02:01L
793	Rubocki , Ronald	*02		*35	*44	*04	*05							SSP	
4251	Schiller , Jennifer	*02	*02	*35	*44	*04	*05	*02:01	*02:291	*35:03	*44:12	*04:01	*05:01	SSO NGS	
8068	Shanmugam , He	*02	*02	*35	*44	*04	*05							SSO	
8029	Tarigopula , Anil	*02	*02	*35	*44	*04	*05							SSO	
230	Thoni , Deborah							*02:01		*35:03	*44:12	*04:01	*05:01	SSO SBT	
2847	Wakita , Atsushi	*02		*35	*44	*04	*05							SSO	

Table 6a: Individual laboratory results for B-cell #542-Class II

Center	Investigator	Low resolution										METHOD	Other Alleles		
		DRB1		DRB3/4/5		DQA1		DQB1		DPA1				DPB1	
5488	Adams, Sharon			3*01			*01	*06						SSP SSO SBT	
5462	Arnold , Paula	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04(DP401)	SSO RT-PCR	
4492	Caillat-Zucman , S	*01	*13		3*01		*01	*06	*05	*06	*01		*03 *04(DP401)	SSP SSO NGS	
774	Cecka , J. Michael	*01	*13	3*01			*01	*06	*05	*06			*03 *04(DP401)	SSP SSO	
9916	Charlton , Ronald	*01	*13	3*PRESENT				*06	*05	*06				SSP	
3224	Chen , Dong-Feng	*01	*13	3*01			*01	*06	*05	*06	*02		*11 *11	SSO	
3632	Colombe , Beth W	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04	SSP SSO	
5130	Costeas , Paul A.	*01	*13	3*01			*01	*06	*05	*06			*03 *04	SSP NGS	
779	Daniel , Claude	*01	*13	3*01			*01	*06	*05	*06	*01		*03 *04(DP401)		
5219	Daniel , Dolly	*01	*13				*01	*06	*05	*06				SSO	
87	Di Paola , Nichola	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	RT-PCR	
5214	Eckels/CPMC ,	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	SSO	
747	Ferrari-Lacraz , Sy	*01	*13	3*PRESENT			*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO NGS	
4079	Fort , Marylise	*01	*13					*06	*05	*06				SSP	
792	Gandhi , Manish	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO SBT	
8043	Gideoni , Osnat	*01	*13				*01	*06	*05	*06					
810	Hamdi , Nuha	*01	*13				*01	*06	*05	*06				SSO	
8087	Hernandez Rosale	*01	*13				*01	*06	*05	*06					
771	Israel , Shoshana	*01	*13				*01	*06	*05	*06				SSP SSO	
794	Jaatinen , Taina	*01	*13	3*01	NP		*01	*06	*05	*06	*01		*03 *04	SSP SSO SBT	
725	Lardy , N.M.	*01	*13	3*PRESENT			*01	*06	*05	*06				SSO	
278	Lee , Jar-How	*01	*13	3*01	NT		*01	*06	*05	*06	*01	*01	*03 *04	SSP SSO	
6649	Lim , Young Ae	*01	*13	3*PRESENT										SSP	
2400	Liu , Chang	*01	*13	3*01			*01	*06	*05	*06			*03 *04	SSP SSO SBT	
731	Loewenthal , Ron	*01	*13				*01	*06	*05	*06				SSP SSO SBT	
206	McAlack , Robert	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04	SSO	
735	Moussa , Omar	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03		
8042	Muncher , Liora	*01	*13	3*01	NP		NT	NT	*05	*06	NT	NT	NT	SSP SSO	
8001	Rao , Prakash	*01	*13	3*PRESENT			*01	*06	*05	*06				SSP SSO	
3519	Renac , Virginie	*01	*13					*06	*05	*06			*03 *04(DP401)	SSP NGS	
793	Rubocki , Ronald	*01	*13	3*01			*01	*06	*05	*06			*03 *04(DP401)	SSP	
4251	Schiller , Jennifer	*01	*13	3*01			*01	*06	*05	*06	*01	*01	*03 *04(DP401)	SSO NGS	
8068	Shanmugam , He	*01	*13	3*01	3*01			*06	*05	*06				SSO	
8029	Tarigopula , Anil	*01	*13				*01	*06	*05	*06				SSO	
5451	Tilanus , Marcel G	*01	*13	3*PRESENT				*06	*05	*06				SSP SBT	
5642	Varnavidou-Nicola	*01	*13	3*PRESENT				*06	*05	*06					
2847	Wakita , Atsushi	*01	*13											SSO	

Table 6b: Individual laboratory results for B-cell #542-Class II

Center	Investigator	High resolution										METHOD	Other Alleles		
		DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1				
5488	Adams, Sharon	*01:01:01	*13:01:01		*01:01		*05:01:01					*03:01	*04:01	SSP SSO SBT	DQB1*05:01:14 DQB1*05:73 DPB1*124:01 DPB1*350:01
5462	Arnold , Paula	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*03:01P	*04:01P	SSO RT-PCR	DPB1*615:01 DPB1*618:01 DPB1*104:01 DPB1*124:01 DPB1*350:01 DPB1*459:01 DPB1*464:01 DPB1*534:01
5133	Askar , Medhat	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01	*06:03:01	*01:03:01			*03:01:01	*04:01:01:01	NGS	DPB1*124:01 DPB1*350:01
4492	Caillat-Zucman ,	*01:01:01	*13:01:01	3*01:01	*01:01:01	*01:03:01:02	*05:01:01	*06:03:01	*01:03			*03:01:01	*04:01:01:01	SSP SSO NGS	DPA1*01:13 DPB1*124:01 DPB1*350:01
774	Cecka , J. Micha	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03				*03:01	*04:01	SSP SSO	DRB1*01:50 DRB1*01:62N DRB1*01:64 DRB1*01:67 DRB3*01:16 DRB*3*01:17 DQA1*01:12 DQB1*05:68 DQB1*05:74 DQB1*05:76 DRB1*13:166 DRB1*13:173 DRB1*13:186 DRB3*01:19 DQB1*05:48 DQB1*05:55 DQB1*05:61
8070	Chang , Uckjin	*01:01	*13:01											SBT	
8021	Clark , Brendan	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03	*01:03			*03:01	*04:01	SSO NGS	
3632	Colombe , Beth	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03	*01:03			*03:01	*04:01	SSP SSO	
5130	Costeas , Paul A	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03				*03:01	*04:01	SSP NGS	
779	Daniel , Claude				*01:01	*01:03			*01:03			*03:01	*04:01		
8086	Du , Keming	*01:01	*13:01		*01:01	*01:03	*05:01	*06:03	*01:03	*01:03		*03:01	*04:01	SSO SBT	
5214	Eckels/CPMC ,								*01:03			*03:01:01G	*04:01:01G	SSO	
3135	Enczmann , J	*01:01	*13:01	3*01:01			*05:01	*06:03				*03:01	*04:01		
747	Ferrari-Lacraz , S	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04		*03:01:01	*04:01:01:01	SSP SSO NGS	DPB1*124:01 DPB1*350:01
762	Fischer , Gottfrie	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01:02	*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04		*03:01:01	*04:01:01:01	NGS	DPB1*124:01
4079	Fort , Marylise											*03:01	*04:01	SSP	

Table 6b: Individual laboratory results for B-cell #542-Class II

Center	Investigator	High resolution										METHOD	Other Alleles		
		DRB1	DRB3/4/5	DQA1		DQB1		DPA1		DPB1					
792	Gandhi , Manish	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SSP SSO SBT	DPB1*124:01 DPB1*350:01
8043	Gideoni , Osnat	*01:01	*13:01		*01:01	*01:03		*05:01	*06:03						
810	Hamdi , Nuha													SSO	
2344	Hurley & Hartzm	*01:01:01	*13:01:01		*01:01:01	*01:03:01:02		*05:01:01:03	*06:03:01	*01:03:01:03	*01:03:01:04	*03:01:01	*04:01:01:01	NGS	DPB1*350:01 DPB1*124:01 DPB1*04:01:01:02
771	Israel , Shoshana	*01:01	*13:01					*05:01	*06:03					SSP SSO	
794	Jaatinen , Taina	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03	*01:03		*03:01	*04:01	SSP SSO SBT RT-PCR	DRB1*01:50 DRB1*01:67 DRB1*13:105 DRB1*13:117 DRB1*13:166 DRB3*01:16 DQA1*01:04 DQA1*01:05 DQA1*01:12 DQA1*01:10 DPB1*104:01 DPA1*01:13 DPB1*124:01 DPB1*350:01 DPB1*459:01 DPB1*464:01
4337	Kim , Tai-Gyu	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SBT	
278	Lee , Jar-How	*01:01	*13:01	3*01:01:01	*01:01	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01	SSP SSO	
2400	Liu , Chang	*01:01	*13:01		*01:01	*01:03		*05:01	*06:03			*03:01:01G	*04:01:01G	SSP SSO SBT	
731	Loewenthal , Ro	*01:01:01G	*13:01:01G					*05:01	*06:03					SSP SSO SBT	
735	Moussa , Omar	*01:01	*13:01	3*01:01	*01:01P	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01		DRB3*01:16 DRB3*01:04 DRB3*01:17 DQA1*01:10 DPA1*01:13 DPB1*124:01 DPB1*350:01 DPA1*01:13
8042	Muncher , Liora	*01:01	*13:01	3*01:01	NT	NT		*05:01	*06:03	NT	NT	NT	NT	SSP SSO	
3966	Permpikul , Vej	*01:01	*13:01	3*01:01				*05:01	*06:03					SSP	
8001	Rao , Prakash	*01:01:01G	*13:01	3*01:01:01G				*05:01	*06:03:01G			*03:01:01G	*04:01:01G	SSP SSO	
3753	Reed , Elaine F.	*01:01:01	*13:01:01	3*01:01:02	*01:01:01	*01:03:01		*05:01:01	*06:03:01	*01:03:01	*01:03:01	*03:01:01	*04:01:01	NGS	DPB1*124:01 DPB1*350:01
3519	Renac , Virginie	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03			*03:01P	*04:01P	SSP NGS	DPB1*350:01 DPB1*124:01
793	Rubocki , Ronald				*01:01	*01:03						*03:01	*04:01:01G	SSP	
4251	Schiller , Jennife	*01:01	*13:01	3*01:01	*01:01	*01:03		*05:01	*06:03	*01:03	*01:03	*03:01	*04:01	SSO NGS	
230	Thoni , Deborah	*01:01	*13:01					*05:01	*06:03			*03:01	*04:01	SSO SBT	

Table 6b: Individual laboratory results for B-cell #542-Class II

		High resolution												
Center	Investigator	DRB1		DRB3/4/5	DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
5451	Tilanus , Marcel	*01:01:01	*13:01:01										SSP SBT	
5642	Varnavidou-Nico	*01:01	*13:01				*05:01	*06:03						
3511	Zeevi , Adriana	*01:01	*13:01	3*01:01	*01:01	*01:03	*05:01	*06:03			*03:01	*04:01	SSP SSO	

Table 7: Individual laboratory results for B-cell #542-Class II

Serology										
CTR	DIRNAME	DRB1		DRB3/4/5			DQB1		Others	
910	Hahn,Amy B.	DR1	DR13	DR52			DQ1		DR14,DR103	DR17

Table 8: Individual laboratory results for B-cell #542-Class I

Center	Investigator	Low resolution						High/Intermediate						METHOD	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5488	Adams, Sharon				*38	*04		*02:30:01	*03:01:01	*35:01:01			*12:03:01	SSP SSO SBT	B*35:68:01 B*35:93 B*35:124 B*35:197 B*35:259 C*12:194 C*12:167 C*12:03:25 C*12:04:02 C*12:24
5462	Arnold , Paula	*02	*03	*35	*38	*04	*12	NT	NT	NT	NT	NT	NT	SSO RT-PCR	
5133	Askar , Medhat							*02:30	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01:01	*12:03:01	NGS	
4492	Caillat-Zucman , S	*02	*03	*35	*38	*04	*12	*02:30:01	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01	*12:03:01:01	SSP SSO NGS	
774	Cecka , J. Michael	*02	*03	*35	*38	*04	*12							SSP SSO	
8021	Clark , Brendan							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO NGS	
9916	Charlton , Ronald	*02	*03	*35	*38	*04	*12							SSP	
3224	Chen , Dong-Feng	*02	*03	*35	*38	*04	*12							SSO	
5130	Costeas , Paul A.	*02	*03	*35	*38	*04	*12	*02:01/30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP NGS	
779	Daniel , Claude	*02	*03	*35	*38	*04	*12								
5219	Daniel , Dolly	*02	*03	*35	*38	*04	*12							SSO	
87	Di Paola , Nichola	*02	*03	*35	*38	*04	*12							RT-PCR	
8086	Du , Keming							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO SBT	
5214	Eckels/CPMC ,	*02	*03	*35	*38	*04	*12							SSO	
3135	Enczmann , J							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03		C*04:09N
747	Ferrari-Lacruz , S	*02	*03	*35	*38	*04	*12	*02:30:01	*03:01:01:01	*35:01:01	*38:01:01	*04:01:01:01	*12:03:01:01	SSP SSO NGS	
792	Gandhi , Manish	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT	
810	Hamdi , Nuha	*02	*03	*35	*38	*04	*12							SSO	
8087	Hernandez Rosal	*02	*03	*35	*38	*04	*12								
2344	Hurley & Hartzma							*02:30:01	*03:01:01:01	*35:01:01:01	*38:01:01	*04:01:01:01	*12:03:01:01	NGS	B*35:01:01:02
794	Jaatinen , Taina	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT RT-PCR	B*35:42 C*04:30 C*04:82 C*12:143
4337	Kim , Tai-Gyu							*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SBT	
278	Lee , Jar-How	*02	*03	*35	*38	*04	*12	*02:01	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO	
2400	Liu , Chang	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO SBT	A*03:01:01:02N
206	McAlack , Robert	*02	*03	*35	*38	*04	*12							SSO	
735	Moussa , Omar	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01P	*38:01	*04:01P	*12:03P		
8042	Muncher , Liora	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP SSO	
3966	Permpikul , Vejba	*02	*03	*35	*38	*04	*12							SSP	
3753	Reed , Elaine F.							*02:30:01	*03:01:01	*35:01:01	*38:01:01	*04:01:01	*12:03:01	NGS	
3519	Renac , Virginie	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSP NGS	
793	Rubocki , Ronald	*02	*03	*35	*38	*04	*12							SSP	
4251	Schiller , Jennifer	*02	*03	*35	*38	*04	*12	*02:30	*03:01	*35:01	*38:01	*04:01	*12:03	SSO NGS	
8068	Shanmugam , He	*02	*03	*35	*38	*04	*12							SSO	
8029	Tarigopula , Anil	*02	*03	*35	*38	*04	*12							SSO	
230	Thoni , Deborah							*02:01	*03:01	*35:01	*38:01	*04:01	*12:03	SSO SBT	
2847	Wakita , Atsushi	*02	*03	*35	*38	*04	*12							SSO	

CELL EXCHANGE #400

The results for Cell Exchange #400 are summarized in Table 9 and Table 10. Molecular typing results for individual laboratories are listed in Tables 11

-14 for each sample and individual serology results for each sample are listed in Table 15.

Cell 1597. The consensus type for this cell from an African American donor is A*03:01(A3)-A*30:01(A30)-B*41:02(B41)-B*42:02(B42)-C*17:01. This cell is the offspring of cell 1397, typed back in 2010. Parent and child share an A*30:01-B*42:02-C*17:01 haplotype. The other haplotype present in this cell, A*03:01-B*41:02-C*17:01, is observed in African Americans, with HF = 0.00123.

This cell was previously typed as cells 1468 (2012) and 1440 (2011). In this present retyping, A*03:01 (A*03:01:01), A*30:01 (A*30:01:01), B*41:02 (B*41:02:01), B*42:02, and C*17:01 (C*17:01:01) were all assigned in complete consensus by labs reporting at high resolution. By serology, A3 (100%), A30 (100%), B41 (100%), and B42 (93%) were well detected. Cw17 was assigned by 2 labs.

Cell 1598. The consensus type for this cell from a Hispanic donor is A*02:02(A2)-A*24:02(A24)-B*27:05(B27)-B*39:06(B39)-C*02:02(Cw2)-C*07:02(Cw7). Likely associations present in this cell are B*27:05-C*0202 and B*39:06-C*07:02, observed commonly in Hispanics, with respective MFI = 0.00702 and 0.01982.

This cell was previously typed as cell 1540 (2015), cell 1325 (2008), and extract 500 (2010). In this present retyping, A*02:02, A*24:02, B*27:05, B*39:06, C*02:02, and C*07:02 were all reported in complete consensus, with 5 labs assigning A*02:02:01, A*24:02:01, B*27:05:02, and C*07:02:01. B*39:06:02 and C*02:02:02 were each assigned by 6 labs. By serology, A2, A24, B27, and B39 were each reported in complete consensus, while Cw2 and Cw7 were each reported by 47%.

Cell 1599. The consensus type for this cell from a Hispanic donor is A*02:06(A2)-A*23:01(A23)-B*39:08(B39)-B*53:01(B53)-C*06:02(Cw6)-C*07:02(Cw7). Likely associations present in this cell are B*53:01-C*06:02 and B*39:08-C*07:02, with respective frequencies of 0.00175 and 0.00176, in Hispanics.

A*02:06 and A*23:01 were each reported in complete consensus, with 5 labs assigning A*02:06:01 and 4 labs assigning A*23:01:01. A2 (100%) and A23 (100%) were assigned by serology. The B-locus types were reported as B*39:08 (100%) and B*53:01 (100%). B*53:01:01 was assigned by 5 labs. The antigens encoded by B*39:08 and B*53:01, were reported as B39 (69%) B53 (77%), respectively. Interestingly, the detection of B39 was lower in this cell compared to cell 1598. C*06:02 (100%) and C*07:02 (100%) were the reported C-locus types, with serology reporting Cw6 (46%) and Cw7 (39%).

Cell 1600. The consensus type for this cell from a donor of Korean descent is A*31:01(A31)-B*40:03(B61)-B*51:01(B51)-C*03:04(Cw3)-C*14:02. One likely association present is A*31:01-B*51:01-C*14:02, observed in Asian populations, with HF = 0.00567. The other likely association present is A*31:01-B*40:03-C*03:04, observed in a previous exchange cell, cell 1369, also from a Korean donor.

A*31:01 (100%) was reported as the sole A-locus type, with 4 labs assigning A*31:01:02. B*40:03, B*51:01, C*03:04, and C*14:02 were each assigned by 100% of labs reporting at high resolution. Serological results were reported as A31 (100%), B51 (92%), B61 (58%), and Cw3 (50%).

Table 10. Summary of the 400th Cell Exchange (Cell #1597 - 1600)

Serological typing

(Black) Cell 1597 (15 Samples Typed)	
A3	100.0%
	[100.0%]
A30	100.0%
	[100.0%]
B41	100.0%
B42	93.3%
Cw17	13.3%
Bw6	60.0%
Others Found	
Cw7	13.3%
B7	6.7%
Cw2	6.7%
B35	6.7%
A31	6.7%

(Hispanic) Cell 1598 (15 Samples Typed)	
A2	100.0%
	[100.0%]
A24	100.0%
	[100.0%]
B27	100.0%
	[100.0%]
B39	100.0%
	[100.0%]
Cw2	46.7%
Cw7	46.7%
Bw4	53.3%
Bw6	60.0%
Others Found	
Cw5	6.7%

(Hispanic) Cell 1599 (13 Samples Typed)	
A2	100.0%
	[100.0%]
A23	100.0%
	[100.0%]
B39	69.2%
B16	7.7%
	[76.9%]
B53	76.9%
Cw6	46.2%
	[46.2%]
Cw7	38.5%
Bw4	61.5%
Bw6	61.5%
Others Found	
B73	15.4%
B44	7.7%
B45	7.7%
Cw5	7.7%
B35	7.7%
B38	7.7%
B12	7.7%
Cw4	7.7%
B51	7.7%

(Korean) Cell 1600 (12 Samples Typed)	
A31	100.0%
	[100.0%]
B61	58.3%
B40	50.0%
	[100.0%]
B5	16.7%
B51	91.7%
	[100.0%]
Cw3	50.0%
	[50.0%]
Bw4	58.3%
Bw6	58.3%
Others Found	
B48	8.3%

Table 11. Individual laboratory results for Cell #1597

Center	Investigator	Low Resolution						High Resolution						Method	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold , Paula	*03	*30	*41	*42	*17		*03:01	*30:01	*41:02	*42:02	*17:01		SSO NGS	
5133	Askar , Medhat							*03:01:01:05	*30:01:01	*41:02:01	*42:02:01:02	*17:01:01		NGS	
4492	Caillat-Zucman , S	*03	*30	*41	*42	*17	*17							SSP	
774	Cecka , J. Michael	*03	*30	*41	*42	*17				*41:02	*42:02			SSP SSO	B*41:10 B*41:13 B*41:16
8070	Chang , Uckjin							*03:01	*30:01	*41:02	*42:02	*17:01		SBT	
3632	Colombe , Beth W	*03	*30	*41	*42	*17		*03:01	*30:01	*41:02	*42:02	*17:01		SSP SSO	
779	Daniel , Claude	*03	*30	*41	*42	*17								SSO	
3766	Dunckley , Heather	*03	*30	*41	*42	*17								SSO	
5214	Eckels/CPMC ,	*03	*30	*41	*42	*17								SSO	
747	Ferrari-Lacraz , Sy	*03	*30	*41	*42	*17	*17	*03:01:01:05	*30:01:01	*41:02:01	*42:02	*17:01:01:02	*17:01:01:02	SSP SSO NGS	
762	Fischer , Gottfried							*03:01:01	*30:01:01	*41:02:01	*42:02	*17:01:01:02		NGS	
4079	Fort , Marylise	*03	*30	*41	*42	*17		*03:01	*30:01	*41:02	*42:02	NT		SSP SSO	A*03:26 A*03:154 B*41:10 B*41:13 B*41:16
8043	Gideoni , Osnat	*03	*30	*41	*42	*17	*17	*03:01	*30:01	*41:02	*42:02	*17:01	*17:01		
3545	Goldstein , Steven	*03	*30	*41	*42	*17		*03:01	*30:01	*41:02	*42:02	*17:01		SSP SSO SBT	C*17:02 C*17:03
810	Hamdi , Nuha	*03	*30	*40	*42	*17	*17							SSO	
3808	Hogan , Patrick	*03	*30	*41	*42	*17								SSP	
771	Israel , Shoshana	*03	*30	*41	*42	*17		*03:01	*30:01	*41:02	*42:02	*17:01		SSO SBT	
725	Lardy , N.M.	*03	*30	*41	*42	*17								SSO	
745	Latham , Katy							*03:01:01	*30:01:01	*41:02:01	*42:02	*17:01:01:02		SSP SBT NGS	
278	Lee , Jar-How	*03	*30	*41	*42	*17	*17	*03:01	*30:01	*41:02	*42:02	*17:01	*17:01		
6649	Lim , Young Ae	*03	*30	*41	*42									SSP	
731	Loewenthal , Ron	*03	*30	*41	*42	*17		*03:01:01	*30:01:01	*41:02:01	*42:02:01:02	*17:01:01G		SSP SSO SBT	
8001	Rao , Prakash	*03	*30	*41	*42	*17								SSP SSO	
3625	Rees , Tracey	*03	*30	*41	*42	*17	*17	*03:01	*30:01	*41:02	*42:02	NT	NT		
4251	Schiller , Jennifer	*03	*30	*41	*42	*17	*17	*03:01	*30:01	*41:02	*42:02	*17:01:01G	*17:01:01G	SSO SBT	
3186	Watson , Narelle	*03	*30	*41	*42	*17	*17								
16	Zhang , Aiwen	*03	*30	*41	*42	*17		*03:01:01	*30:01:01	*41:02:01	*42:02	*17:01:01		NGS	

Table 12. Individual laboratory results for Cell #1598

Center	Investigator	Low Resolution						High Resolution						Method	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold , Paula	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02	SSO NGS	
5133	Askar , Medhat							*02:02:01:01	*24:02:01	*27:05:02	*39:06:02:02	*02:02:02	*07:02:01:01	NGS	
4492	Caillat-Zucman , S	*02	*24	*27	*39	*02	*07							SSP	
774	Cecka , J. Michael	*02	*24	*27	*39	*02	*07	*02:02		*27:05	*39:06			SSP SSO	A*02:155 A*02:115 A*02:186 A*02:209 A*02:492 A*02:517 A*02:531 B*27:13 B*27:123
8070	Chang , Uckjin							*02:02	*24:02	*27:05	*39:06		*07:02	SBT	
3632	Colombe , Beth W	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02	SSP SSO	
779	Daniel , Claude	*02	*24	*27	*39	*02	*07								
3766	Dunkley , Heather	*02	*24	*27	*39	*02	*07							SSO	
5214	Eckels/CPMC ,	*02	*24	*27	*39	*02	*07							SSO	
747	Ferrari-Lacraz , Sy	*02	*24	*27	*39	*02	*07	*02:02:01	*24:02:01	*27:05:02	*39:06:02	*02:02:02	*07:02:01	SSP SSO NGS	
762	Fischer , Gottfried							*02:02:01	*24:02:01:01	*27:05:02	*39:06:02	*02:02:02:01	*07:02:01:01	NGS	
4079	Fort , Marylise	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02	SSP SSO	
8043	Gideoni , Osnat	*02	*24	*27	*39	*02	*07								
3545	Goldstein , Steven	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02	SSP SSO SBT	B*27:13 C*07:50 C*07:349
810	Hamdi , Nuha	*02	*24	*27	*39	*02	*07							SSO	
3808	Hogan , Patrick	*02	*24	*27	*39	*02	*07						*07:02:01G	SSP	
771	Israel , Shoshana	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02	SSO SBT	
725	Lardy , N.M.	*02	*24	*27	*39	*02	*07							SSO	
745	Latham , Katy							*02:02:01	*24:02:01:01	*27:05:02	*39:06:02	*02:02:02:01	*07:02:01	SSP SBT NGS	
278	Lee , Jar-How	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05	*39:06	*02:02	*07:02		
6649	Lim , Young Ae	*02	*24	*27	*39									SSP	
731	Loewenthal , Ron	*02	*24	*27	*39	*02	*07	*02:02:01	*24:02:01G	*27:05	*39:06:02	*02:02:02	*07:02:01G	SSP SSO SBT	
8001	Rao , Prakash	*02	*24	*27	*39	*02	*07							SSP SSO	
3625	Rees , Tracey	*02	*24	*27	*39	*02	*07	*02:02	NT	*27:05	*39:06	*02:02	*07:02		B*27:13
4251	Schiller , Jennifer	*02	*24	*27	*39	*02	*07	*02:02	*24:02	*27:05:02G	*39:06	*02:02	*07:02:01G	SSO SBT	
3186	Watson , Narelle	*02	*24	*27	*39	*02	*07								
16	Zhang , Aiwen	*02	*24	*27	*39	*02	*07	*02:02:01	*24:02:01	*27:05:02	*39:06:02	*02:02:02	*07:02:01	NGS	

Table 13. Individual laboratory results for Cell #1599

Center	Investigator	Low Resolution						High Resolution						Method	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold , Paula	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02	SSO NGS	
5133	Askar , Medhat							*02:06:01:01	*23:01:01	*39:08	*53:01:01	*06:02:01:01	*07:02:01:01	NGS	
4492	Caillat-Zucman , S	*02	*23	*39	*53	*06	*07							SSP	
774	Cecka , J. Michael	*02	*23	*39	*53	*06	*07	*02:06		*39:08	*53:01			SSP SSO	A*02:278 A*02:290 A*02:328 A*02:330 A*02:333 A*02:404 A*02:405 A*02:428 A*02:471 A*02:472 A*02:476N A*02:493 A*02:506N B*53:32 B*53:37
8070	Chang , Uckjin							*02:06	*23:01	*39:08	*53:01	*06:02	*07:02	SBT	
3632	Colombe , Beth W	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02	SSP SSO	
779	Daniel , Claude	*02	*23	*39	*53	*06	*07			*39:08					
3766	Dunckley , Heather													SSO	
5214	Eckels/CPMC ,	*02	*23		*53	*06	*07			*39:08				SSO	
747	Ferrari-Lacraz , Sy	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO NGS	
762	Fischer , Gottfried							*02:06:01:01	*23:01:01	*39:08	*53:01:01	*06:02:01:01	*07:02:01:01	NGS	
4079	Fort , Marylise	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
8043	Gideoni , Osnat	*02	*23	*39	*53	*06	*07								
3545	Goldstein , Stever	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02	SSP SSO SBT	*07*07:349
810	Hamdi , Nuha	*02	*23		*53	*06	*07			*39:08				SSO	
3808	Hogan , Patrick	*02	*23	*39	*53	*06	*07						*07:02:01G	SSP	
771	Israel , Shoshana	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02	SSO SBT	
725	Lardy , N.M.	*02	*23	*39	*53	*06	*07							SSO	
745	Latham , Katy							*02:06:01:01	*23:01:01	*39:08	*53:01:01	*06:02:01:01	*07:02:01	SSP SBT NGS	
278	Lee , Jar-How	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02		
6649	Lim , Young Ae	*02	*23	*35	*38									SSP	
731	Loewenthal , Ron	*02	*23	*39	*53	*06	*07	*02:06:01	*23:01:01G	*39:08	*53:01:01	*06:02:01G	*07:02:01G	SSP SSO SBT	
8001	Rao , Prakash	*02	*23	*39	*53	*06	*07							SSP SSO	
3625	Rees , Tracey	*02	*23	*39	*53	*06	*07	*02:06	*23:01	*39:08	*53:01	*06:02	*07:02		A*23:17 C*06:83
4251	Schiller , Jennifer	*02	*23	*39	*53	*06	*07	*02:06	*23:01:01G	*39:08	*53:01	*06:02:01G	*07:02:01G	SSO SBT	
3186	Watson , Narelle	*02	*23	*39	*53	*06	*07								
16	Zhang , Aiwen	*02	*23	*39	*53	*06	*07	*02:06:01	*23:01:01	*39:08	*53:01:01	*06:02:01	*07:02:01	NGS	

Table 14. Individual laboratory results for Cell #1600

Center	Investigator	Low Resolution						High Resolution						Method	Other Alleles
		HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
5462	Arnold , Paula	*31		*40	*51	*03	*14	*31:01		*40:03	*51:01	*03:04	*14:02	SSO NGS	
5133	Askar , Medhat							*31:01:02:01		*40:03	*51:01:01	*03:04:01	*14:02:01:01	NGS	
4492	Caillat-Zucman ,	*31	*31	*40	*51	*03	*14							SSP	
774	Cecka , J. Micha	*31		*40	*51	*03	*14			*40:03				SSP SSO	B*40:267
8070	Chang , Uckjin							*31:01		*40:03	*51:01	*03:04	*14:02	SBT	
3632	Colombe , Beth V	*31		*40	*51	*03	*14	*31:01		*40:03	*51:01	*03:04	*14:02	SSP SSO	
779	Daniel , Claude	*31		*40	*51	*03	*14			*40:03		*03:04			
3766	Dunckley , Heath	*31		*40	*51	*03	*14							SSO	
5214	Eckels/CPMC ,	*31		*40 (B61)	*51 (Cw10)	*03 (Cw10)	*14							SSO	
747	Ferrari-Lacraz , S	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO NGS	
762	Fischer , Gottfrie							*31:01:02		*40:03	*51:01:01	*03:04:01:02	*14:02:01	NGS	
4079	Fort , Marylise	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
8043	Gideoni , Osnat	*31	*31	*40	*51	*03	*14	*31:01	*31:01	*40:03	*51:01	*03:04	*14:02		
3545	Goldstein , Steve	*31		*40	*51	*03	*14	*31:01		*40:03	*51:01	*03:04	*14:02	SSP SSO SBT	
810	Hamdi , Nuha	*31		*40	*51	*03	*14	*31:04						SSO	
3808	Hogan , Patrick	*31		*40	*51	*03	*14			*40:03:01G		*03:04:01G		SSP	
771	Israel , Shoshana	*31		*40	*51	*03	*14	*31:01		*40:03	*51:01	*03:04	*14:02	SSO SBT	
725	Lardy , N.M.	*31		*40	*51	*03	*14							SSO	
745	Latham , Katy							*31:01:02		*40:03	*51:01:01	*03:04:01:02	*14:02:01	SSP SBT NGS	
278	Lee , Jar-How	*31	*31	*40	*51	*03	*14	*31:01	*31:01	*40:03	*51:01	*03:04	*14:02		
6649	Lim , Young Ae	*31		*40	*51									SSP	
731	Loewenthal , Ro	*31		*40	*51	*03	*14	*31:01:02G		*40:03	*51:01:01G	*03:04:01	*14:02:01	SSP SSO SBT	
8001	Rao , Prakash	*31		*40 (B61)	*51 (Cw10)	*03 (Cw10)	*14							SSP SSO	
3625	Rees , Tracey	*31	*31	*40	*51	*03	*14	*31:01	*31:01	*40:03	*51:01	*03:04	*14:02		B*51:193
4251	Schiller , Jennife	*31	*31	*40	*51	*03	*14	*31:01	*31:01	*40:03	*51:01P	*03:04	*14:02	SSO SBT	
3186	Watson , Narelle	*31	*31	*40	*51	*03	*14								
16	Zhang , Aiwen	*31		*40	*51	*03	*14	*31:01:02		*40:03	*51:01	*03:04:01	*14:02:01	NGS	

Table 15. Individual laboratory results for Cell #1597-1600 by serology

Investigator	Days Old	Cell No 1597 (Black)									Cell No 1598 (Hispanic)									Cell No 1599 (Hispanic)									Cell No 1600 (Korean)								
		Viab %	A3	A30	B41	B42	Cw17	Bw6	OTHERS	Viab %	A2	A24	B27	B39	Cw2	Cw7	Bw4	Bw6	OTHERS	Viab %	A2	A23	B39	B53	Cw6	Cw7	Bw4	Bw6	OTHERS	Viab %	A31	B61	B51	Cw3	Bw4	Bw6	OTHERS
Cecka, J. Mic	3	>95	+	+	+	+		+		>95	+	+	+	+			+	+		>95	+	+	+	+			+	+		>95	+	+	+		+	+	
Dunckley, Hea		90	+	+	+	+				90	+	+	+	+						85	+	+	+	+					85	+	+	+					
Enczmann, J		98	+	+	+	+				98	+	+	+	+						98	+	+	+	+					98	+	+	+					
Ferrari-Lacra		95	+	+	+	+	+		+	98	+	+	+	+	+	+	+	+																			
Fort, Marylis	3	98	+	+	+	+				98	+	+	+	+						NT									NT								
Hahn, Amy B.		99	+	+	+	+		+		99	+	+	+	+			+	+		99	+	+	+	+			+	+	99	+	+	+		+	+	B61	
Hogan, Patric	14	0								0										0								0									
Latham, Katy	3	95	+	+	+	+		+		93	+	+	+	+			+	+		99	+	+	+	+			+	+	95	+	+	+		+	+		
Loewenthal ,		80	+	+	+	+		+		85	+	+	+	+	+	+		+		85	+	+	+	+	+	+	+	80	+	B40	+	+	+	+	+		
Permpikul, Ve	7	90	+	+	+	+		+		90	+	+	+	+			+	+		90	+	+				+	+	50									
Pule, Ziningi		85	+	+	+	+			Cw7	90	+	+	+	+	+	+				80	+	+	B12	B51	+	Cw4		80	+	B40	+	+			B51		
Rees, Tracey	6	85	+	+	+	+				82	+	+	+	+	+	+				85	+	+	+	+	+	+		85	+	+	+	+					
Renac, Virgin	3	99	+	+	+	+		+		99	+	+	+	+		+	+			99	+	+	+	+		+	+	99	+	B40	+	+	+	+	+		
Shai, Isaac	10	88	+	+	+	B7	Cw2	+	B35,Cw7	84	+	+	+	+	+	+	+	Cw5		86	+	+	B16	+	+	+	+	88	+	B40	B5	+	+	+	B48		
Vidan-Jeras,	6	100	+	+	+	+		+		100	+	+	+	+	+	+	+			100	+	+	+	+	+	+	+	100	+	+	+	+	+	+	+		
Zhang, Aiwen	2	95	+	+	+	+	+			95	+	+	+	+	+	+				90	+	+			+	+		85	+	B40	+	+					

SERUM EXCHANGE #558

The results for **Serum Exchange 558 (sera 1225 - 1228)**, are summarized in Tables 16 -23 and individual laboratory results by method are listed in

Tables 24-34. Sera strongly positive to B44, B45, and 5C specificities were examined in this study.

1225		method	#labs	B35	B53	B49	B44	B45	B62	B51	B50	B72	B75	B78	B60	B61	B13	A24	2403	B63	B41	B47	B52	B46	B42	B39	B3901	B56	B18	B37	B38	B48	B54	B55		
class I	NIH-Std	2	100	100	50	50	50	50	50	50																										
	NIH-Ext	2	50	50	100	50	50	100	50	100	100	50	50		50																					
	AHG	5	80	80	80	80	100	80	60	80	60	60	60	60	40	60	80	40		40	40	40	40	40	40	40		40	20	20	20	20	20	20		
	Luminex	29	100	100	100	100	100	97	93	100	97	97	93	97	93	97	83	28	97	97	93	93	86	48	76	28	100	97	93	93	79	86	93			
	ELISA	1	no consensus																																	
	Flow	1	no specificities assigned																																	
	C1q	2	100	100	100		50	100	100	100	100		50		100	50																				
	Other	3	33	33	33	33	33	33	33	33	33	33	33	33									33					33								

1225		method	#labs	A2	A203	A23	A29	A25	A34	A43	A66	A6601	A68	A69	B71	B70	A26	B57	B58	B76	B77	B59	B67	B64	B65	B8	Cw4	Cw9	Cw10	Cw15	Cw5	Cw14	Cw1		
class I	NIH-Ext	2													50	50											50								
	AHG	5	20		20	20	20	20	20	20	20		20	20			20																		
	Luminex	29	55	21	69	31	38	31	34	24	21	45	55	97			97	97	97	97	93	83	79	55	66	52	66	66	45	31	24	21			
	C1q	2												100																					
	Other	3	33												33																				

Serum 1225 was reported as strongly positive to B35, B49, and B53 by all methods. Anti-B44, -B45, -B51, and -B62 reactivity was also reported by a number of methods. In addition, reactivity to A9 (A23, A24), B16 (B38, B39), 7C, and 10C specificities was also reported by Luminex and antiglobulin. Arnold noted “serum #1225(Green) appears to bind all Bw4 beads except A25, A32, and B*27:05. Interestingly, while most Bw4 epitopes have an asparagine at position 77, these three antigens have either a serine or aspartic acid at position 77, which may not be recognized by this particular Bw4 antibody.” Allele specific A*34:01 reactivity was detected by several Luminex labs. Class II reactivity was also detected in this cell, with Luminex and 1 antiglobulin lab reporting

1225		method	#labs	DR17	DR18	DR13	DR52	DR14	DQ2	DR11	DR12	DPw6	DQA1*05	DR1404	DQ4	NEG
class II	NIH-Ext	1	no antigens assigned													
	AHG	1	100	100	100	100	100	100	100							
	Luminex	27	93	93	72	72	59	37	26	19	11	11	11	11	7	
	Flow	1	no specificities assigned													
	C1q	2	NT													
	Other	2	50	50												

reactivity to DR17 and DR18. Additional reactivity to DR13, DR52, and DR14 was also reported by Luminex.

1226	method	#labs	B44	B45	B49	B50	B13	B41	B47	B60	B61	B76	A23	B39	A34	A1	A24	B62	B71	B72	B46	B82	B35	B73	B75	B78	B18	B64	B48	Cw16	Cw1	Cw10	Cw12	Cw8	Cw9	Cw14	Cw7	B27	B37	B40	B51	B65					
class I	NIH-Std	2	100	100			50																																								
	NIH-Ext	2	100	50	100	100		50																																							
	AHG	5	100	80	80	60	60	40	40	40	40	20	40	40	40	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	Luminex	29	100	100	100	100	100	100	97	97	93	97	55	79	41	72	31	97	97	90	90	90	86	86	79	69	69	76	76	83	79	79	79	76	72	59	41	21	17	10				24			
	ELISA	1	no consensus																																												
	Flow	1	no specificities assigned																																												
	C1q	2	100	100	100	100	100	100	100	100	100	100																																			
	Other	2	50	50	50	50	50	50	50	50	50																																				

1226	method	#labs	DR7	DR9	NEG				
class II	NIH-Ext	1	no antigens assigned						
	AHG	1	100	100					
	Luminex	27	93	93	7				
	Flow	1	no specificities assigned						
	C1q	2	NT						
	Other	2	50	50					

For Serum 1226, strong anti-B44 and –B45 reactivity was reported. Reactivity to B49, B50, and a number of 7C specificities was also reported by various methods. In addition, Luminex and antiglobulin reported reactivity to A1, A23, A24, A34, B39, B64, and reactivity to a number of 5C ad C-locus specificities. For class II, strong DR7 and DR9 reactivity was reported by Luminex and antiglobulin. Interestingly, 2 labs noted this sample as negative for class II.

1227	method	#labs	B51	B35	B50	B71	B72	B62	B18	B75	B78	B53	B52	B63	B49	B37	B45	B77	B46	B56	B38	B8	B39	Cw4	Cw10	Cw9	B76	B54	B48	B73	A33	A66	A68	A69	A26
class I	NIH-Std	2	100	100					51	50	50																								
	NIH-Ext	2	100	50	100	100	100	100	50	50		50	50											50											
	AHG	5	100	80	60		40	80	80	40	80	80	60	60	40	40	40		40	40	40	40	40							40	40	20	20	20	
	Luminex	29	100	100	100	97	97	97	100	97	90	100	97	97	100	100	100	97	100	100	97	97	86	90	90	90	97	97	90	83	90	83	100	76	66
	ELISA	1	no consensus																																
	Flow	1	no specificities assigned																																
	C1q	2	100	100	100	100	100	100	100	100	100	100	100	100	100	100		100	50	100	50	50	100	100	50	50	100	100	50						
	Other	2	50	50	50	50	50	50	50	50	50	50	50	50	50		50	50											50						
1227	method	#labs	B42	B57	B7	B41	B64	B60	B61	A25	A34	B55	B67	Cw18	Cw6	Cw1	Cw15	Cw14	B58	B65	B59	B3901	B81	A6601	A6602	B82	B27	B2708	B13	Bw6	A31	A36	B47		
class I	AHG	5	60	40	40	40	60	60	40	20	20																				20	20			
	Luminex	29	100	100	100	97	93	93	93	97	93	100	100	66	62	45	34	24	97	97	93	24	86	31	28	83	76	41	52	24			3		

1227	method	#labs	DQ4	DR8	DR12	DR11	DR13	DR14	DR17	DR18	DQ8	DQ9	DQ7	DQ2	DQA1*05	DQA1*06	DQA1*04	DR1404	DQA1*03	DQ3	DR1403	DR3	DR52
class II	NIH-Ext	1	no antigens assigned																				
	AHG	1	100	100	100	100	100	100	100	100	100	100	100	100									
	Luminex	27	100	100	100	100	100	100	90	90	90	90	50	10	50	40	40	20	20	10	10	10	10
	Flow	1	no specificities assigned																				
	C1q	2	100	100	50																		
	Other	2	50	50	50	50	50	50	50	50	50	50											

Serum 1227 was found to be strongly positive to B51. Additional strong reactivity to many other 5C specificities was also reported by various methods. In addition, Luminex and antiglobulin reported reactivity to B42, B41, as well as reactivity to 10C specificities. Additional C-locus reactivity (Cw1, Cw6, w14, Cw15, Cw18) was also reported by Luminex. Class II re-

activity to DR8, DR12, and DQ4 was reported by Luminex, antiglobulin, and C1q. Additional reactivity to other DR antigens (DR11, DR13, DR14, DR17, DR18) and DQ antigens (DQ7, DQ8, DQ9) was reported by Luminex and antiglobulin.

1228	method	#labs	B49	B57	B62	B75	B46	B63	A1	B13	B35	B45	B44	B50	B52	B53	B71	B72	A23	A29	A36	A80	A11	A1101	A1102	A25	A26	A34	A43	A66	A6601	B58	B56	B41	B37	B27	B2708	B78		
class I	NIH-Std	2	50	50	50	50																																		
	NIH-Ext	3		100	100	67	67	100	33	33	33								33	33	33	33	33		33	33	33	33	33		67				33					
	AHG	5	80	80	80	60	60	60	40	40	40	40	40	40	40	40	40	40	20	20	20	20	20		20	20	20	20	20				40	20	40	20		40		
	Luminex	29	100	96	96	96	100	96	100	100	100	100	100	100	96	100	96	96	100	100	100	100	86	32	32	93	82	71	100	71	39	100	100	96	96	79	39	89		
	ELISA	1	no consensus																																					
	Flow	1	no specificities assigned																																					
	C1q	2	100	100	100	100	100	100	100	100	100	50	100	100	100	100	100	100	50													100	100	50	50			100		
	Other	2	50		50	50		50			50	50	50	50	50	50	50	50																						

1228	method	#labs	B51	B76	B77	B15	B22	B38	B39	B3901	B42	B47	B55	A24	A68	Cw10	Cw5	Cw9	Cw6	Cw18	Cw2	Cw4	Cw17	Cw15	Cw1	Cw14	B67	B59	B82	B61	B60	B48	B54	A33	A31				
class I	NIH-Std	2				50	50																																
	NIH-Ext	3		67											33																								
	AHG	5	40			20	20	20	20		20	20	40																										
	Luminex	29	96	96	96			96	86	25	86	43	100	93	79	89	89	89	96	89	86	86	82	79	64	64	100	86	86	61	46	39	25	46	29				
	C1q	2	100	100	100									50		100		100																					
	Other	2				50																																	

1228	method	#labs	DR52	DR17	DR18	DR13	DR14	DR11	DQA1*05
class II	NIH-Ext	2	50	50	50				
	AHG	1	NT						
	Luminex	26	85	92	92	35	31	27	19
	Flow	1	no specificities assigned						
	C1q	2	NT						
	Other	2	50						

For **Serum 1228**, reactivity to B62, B57, and B75 was detected. Additional reactivity to other 5C specificities, as well as to A11, B44, B45, 1C, 7C, and 10C specificities was reported by various labs. Reactivity to a number of C-locus antigens was also reported by Luminex. Allele level A*24:02 reactivity was reported by a number (n = 4) of labs. For class II, anti-DR52, -DR17, and -DR18 reactivity was reported by Luminex and 1 lab reporting by NIH-extended.



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Table 16. Summary of the 558th Serum Exchange (Serum #1225-1228) by NIH-Standard and NIH-Extended - class I

Method: NIH-Standard											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B53	100%	100%	B44	100%	100%	B35	100%	100%	B15	50%	100%
B35	100%	58%	B45	100%	100%	B51	100%	100%	B22	50%	100%
B44	50%	100%	B13	50%	100%	B18	50%	100%	B49	50%	100%
B45	50%	100%				B75	50%	100%	B57	50%	100%
B49	50%	100%				B78	50%	100%	B62	50%	100%
B51	50%	100%							B75	50%	100%
B62	50%	40%									

Method: NIH-Extended											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
2 typing Labs			2 typing Labs			2 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B49	100%	100%	B44	100%	100%	B50	100%	100%	B57	100%	100%
B50	100%	100%	B50	100%	100%	B51	100%	100%	B62	100%	100%
B62	100%	100%	B49	100%	67%	B62	100%	100%	B63	100%	100%
B35	50%	100%	B41	50%	100%	B71	100%	100%	B46	67%	100%
B44	50%	100%	B45	50%	100%	B72	100%	100%	B75	67%	100%
B45	50%	100%				B18	50%	100%	B76	67%	100%
B51	50%	100%				B35	50%	100%	B58	67%	67%
B53	50%	100%				B52	50%	100%	A1	33%	100%
B60	50%	100%				B53	50%	100%	A11	33%	100%
B70	50%	100%				B75	50%	100%	A23	33%	100%
B71	50%	100%				Cw4	50%	100%	A25	33%	100%
B72	50%	100%							A26	33%	100%
B75	50%	100%							A29	33%	100%
Cw4	50%	100%							A34	33%	100%
									A36	33%	100%
									A43	33%	100%
									A66	33%	100%
									A68	33%	100%
									A80	33%	100%
									B13	33%	100%
									B27	33%	100%
									B35	33%	100%

Table 17. Summary of the 558th Serum Exchange (Serum #1225-1228) by Antiglobulin - class I

Method: Antiglobulin											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
5 typing Labs			5 typing Labs			5 typing Labs			5 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B44	100%	100%	B44	100%	100%	B51	100%	100%	B49	80%	100%
B13	80%	100%	B45	80%	100%	B18	80%	100%	B57	80%	100%
B35	80%	100%	B49	80%	100%	B35	80%	100%	B62	80%	100%
B45	80%	100%	B13	60%	100%	B53	80%	100%	B46	60%	100%
B49	80%	100%	B50	60%	100%	B62	80%	100%	B63	60%	100%
B53	80%	100%	A23	40%	100%	B78	80%	100%	B75	60%	100%
B51	80%	82%	B41	40%	100%	B42	60%	100%	A1	40%	100%
B50	60%	100%	B47	40%	100%	B50	60%	100%	B13	40%	100%
B61	60%	100%	B60	40%	100%	B52	60%	100%	B35	40%	100%
B62	60%	100%	B61	40%	100%	B60	60%	100%	B37	40%	100%
B72	60%	100%	B39	40%	75%	B63	60%	100%	B45	40%	100%
B75	60%	100%	A34	40%	50%	B64	60%	100%	B50	40%	100%
B78	60%	100%	A1	20%	100%	B64	60%	100%	B52	40%	100%
A24	40%	100%	B18	20%	100%	A33	40%	100%	B55	40%	100%
B41	40%	100%	B35	20%	100%	A66	40%	100%	B56	40%	100%
B42	40%	100%	B37	20%	100%	B37	40%	100%	B71	40%	100%
B46	40%	100%	B40	20%	100%	B38	40%	100%	B72	40%	100%
B47	40%	100%	B46	20%	100%	B39	40%	100%	B78	40%	100%
B52	40%	100%	B48	20%	100%	B41	40%	100%	B44	40%	89%
B60	40%	100%	B51	20%	100%	B45	40%	100%	B51	40%	89%
B63	40%	100%	B62	20%	100%	B46	40%	100%	B53	40%	83%
B39	40%	75%	B64	20%	100%	B49	40%	100%	A11	20%	100%
B56	40%	60%	B71	20%	100%	B56	40%	100%	A23	20%	100%
A2	20%	100%	B72	20%	100%	B57	40%	100%	A25	20%	100%
A23	20%	100%	B73	20%	100%	B61	40%	100%	A26	20%	100%
A25	20%	100%	B75	20%	100%	B7	40%	100%	A29	20%	100%
A26	20%	100%	B76	20%	100%	B72	40%	100%	A34	20%	100%
A29	20%	100%	B78	20%	100%	B75	40%	100%	A36	20%	100%
A34	20%	100%	B82	20%	100%	B8	40%	100%	A43	20%	100%
A43	20%	100%	Cw1	20%	100%	A25	20%	100%	A66	20%	100%
A66	20%	100%	Cw10	20%	100%	A26	20%	100%	A80	20%	100%
A68	20%	100%	Cw12	20%	100%	A31	20%	100%	B15	20%	100%
A69	20%	100%	Cw14	20%	100%	A34	20%	100%	B22	20%	100%
B18	20%	100%	Cw16	20%	100%	A36	20%	100%	B27	20%	100%
B37	20%	100%	Cw7	20%	100%	A68	20%	100%	B38	20%	100%
						A69	20%	100%			

Table 18. Summary of the 558th Serum Exchange (Serum #1225-1228) by Other and Flow Cytometry - class I

Method: Other											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
3 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A2	33%	100%	B13	50%	100%	B18	50%	100%	B35	50%	100%
B18	33%	100%	B41	50%	100%	B35	50%	100%	B44	50%	100%
B35	33%	100%	B44	50%	100%	B45	50%	100%	B45	50%	100%
B44	33%	100%	B45	50%	100%	B49	50%	100%	B49	50%	100%
B45	33%	100%	B47	50%	100%	B50	50%	100%	B50	50%	100%
B49	33%	100%	B49	50%	100%	B51	50%	100%	B52	50%	100%
B50	33%	100%	B50	50%	100%	B52	50%	100%	B53	50%	100%
B51	33%	100%	B60	50%	100%	B53	50%	100%	B62	50%	100%
B52	33%	100%	B61	50%	100%	B62	50%	100%	B63	50%	100%
B53	33%	100%				B63	50%	100%	B71	50%	100%
B62	33%	100%				B71	50%	100%	B72	50%	100%
B71	33%	100%				B72	50%	100%	B75	50%	100%
B72	33%	100%				B73	50%	100%	B77	50%	100%
B75	33%	100%				B75	50%	100%			
B77	33%	100%				B77	50%	100%			
B78	33%	100%				B78	50%	100%			

Method: Flow Cytometry											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
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 specificities assigned			no specificities assigned			no specificities assigned			no specificities assigned		

Table 19. Summary of the 558th Serum Exchange (Serum #1225-1228) by Luminex - class I

Method: Luminex											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
29 typing Labs			29 typing Labs			29 typing Labs			28 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B35	100%	100%	B13	100%	100%	A68	100%	100%	A1	100%	100%
B44	100%	100%	B41	100%	100%	B18	100%	100%	A23	100%	100%
B45	100%	100%	B44	100%	100%	B35	100%	100%	A43	100%	100%
B49	100%	100%	B45	100%	100%	B37	100%	100%	A80	100%	100%
B50	100%	100%	B49	100%	100%	B42	100%	100%	B13	100%	100%
B53	100%	100%	B50	100%	100%	B45	100%	100%	B35	100%	100%
B56	100%	100%	B47	97%	100%	B46	100%	100%	B45	100%	100%
B13	97%	100%	B60	97%	100%	B49	100%	100%	B46	100%	100%
B18	97%	100%	B76	97%	100%	B50	100%	100%	B49	100%	100%
B41	97%	100%	B71	97%	80%	B51	100%	100%	B50	100%	100%
B57	97%	100%	B62	97%	67%	B53	100%	100%	B53	100%	100%
B58	97%	100%	B61	93%	100%	B55	100%	100%	B55	100%	100%
B60	97%	100%	B82	90%	100%	B56	100%	100%	B56	100%	100%
B62	97%	100%	B72	90%	83%	B67	100%	100%	B58	100%	100%
B63	97%	100%	B46	90%	80%	B57	100%	90%	B67	100%	100%
B71	97%	100%	B73	86%	75%	B7	100%	71%	B44	100%	90%
B72	97%	100%	B35	86%	71%	B38	97%	100%	A29	100%	85%
B75	97%	100%	Cw16	83%	67%	B41	97%	100%	A36	100%	83%
B76	97%	100%	Cw10	79%	100%	B52	97%	100%	B37	96%	100%
B77	97%	100%	B75	79%	88%	B54	97%	100%	B38	96%	100%
B37	93%	100%	B39	79%	80%	B58	97%	100%	B41	96%	100%
B38	93%	100%	Cw12	79%	50%	B62	97%	100%	B51	96%	100%
B47	93%	100%	Cw1	79%	46%	B63	97%	100%	B52	96%	100%
B51	93%	100%	Cw8	76%	100%	B65	97%	100%	B57	96%	100%
B52	93%	100%	B48	76%	80%	B71	97%	100%	B62	96%	100%
B55	93%	100%	B64	76%	50%	B72	97%	100%	B63	96%	100%
B59	93%	100%	Cw9	72%	100%	B75	97%	100%	B71	96%	100%
B61	93%	100%	A1	72%	67%	B76	97%	100%	B72	96%	100%
B78	93%	100%	B78	69%	75%	B77	97%	100%	B75	96%	100%
B46	86%	100%	B18	69%	50%	B8	97%	100%	B76	96%	100%
B54	86%	100%	Cw14	59%	100%	A25	97%	83%	B77	96%	100%
A24	83%	100%	A23	55%	100%	B59	93%	100%	Cw6	96%	100%
B67	83%	100%	Cw7	41%	100%	B60	93%	100%	A25	93%	83%
B48	79%	100%	A34	41%	50%	B64	93%	100%	A24	93%	69%
B64	79%	100%	A24	31%	50%	B61	93%	89%	B78	89%	100%

Table 19. Summary of the 558th Serum Exchange (Serum #1225-1228) by Luminex - class I

Method: Luminex - cont.											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
29 typing Labs			29 typing Labs			29 typing Labs			29 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B39	76%	100%	B65	24%	100%	A34	93%	75%	Cw10	89%	100%
A23	69%	100%	B27	21%	50%	B48	90%	100%	Cw18	89%	100%
B8	66%	100%				B78	90%	100%	Cw5	89%	100%
Cw10	66%	100%				Cw10	90%	100%	Cw9	89%	100%
Cw9	66%	100%				Cw4	90%	100%	A11	86%	100%
A2	55%	100%				Cw9	90%	100%	B39	86%	100%
A69	55%	100%				A33	90%	90%	B42	86%	100%
B65	55%	100%				B39	86%	100%	B59	86%	100%
Cw4	52%	100%				B81	86%	80%	B82	86%	100%
B42	48%	100%				A66	83%	100%	Cw2	86%	100%
A68	45%	100%				B73	83%	100%	Cw4	86%	100%
Cw15	45%	100%				B82	83%	100%	Cw17	82%	100%
A25	38%	100%				A69	76%	100%	A26	82%	80%
A43	34%	100%				B27	76%	67%	A68	79%	100%
Cw5	31%	100%				Cw18	66%	100%	B27	79%	100%
A29	31%	50%				A26	66%	75%	Cw15	79%	100%
A34	31%	50%				Cw6	62%	100%	A34	71%	100%
A2403	28%	100%				B13	52%	100%	A66	71%	70%
B3901	28%	100%				Cw1	45%	100%	Cw1	64%	100%
A66	24%	100%				B2708	41%	100%	Cw14	64%	100%
Cw14	24%	100%				Cw15	34%	100%	B61	61%	75%
A203	21%	100%				A6601	31%	100%	B60	46%	100%
A6601	21%	100%				A6602	28%	100%	A33	46%	67%
Cw1	21%	100%				B3901	24%	100%	B47	43%	100%
						Bw6	24%	100%	A6601	39%	100%
						Cw14	24%	100%	B2708	39%	100%
									B48	39%	100%
									A1101	32%	100%
									A1102	32%	100%
									A31	29%	100%
									B3901	25%	100%
									B54	25%	100%

Table 20. Summary of the 558th Serum Exchange (Serum #1225-1228) by ELISA and C1q- class I

Method: ELISA											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
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: C1q											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B35	100%	100%	B13	100%	100%	B18	100%	100%	A1	100%	100%
B49	100%	100%	B41	100%	100%	B35	100%	100%	B13	100%	100%
B50	100%	100%	B44	100%	100%	B37	100%	100%	B35	100%	100%
B51	100%	100%	B45	100%	100%	B39	100%	100%	B45	100%	100%
B53	100%	100%	B47	100%	100%	B49	100%	100%	B46	100%	100%
B62	100%	100%	B49	100%	100%	B50	100%	100%	B49	100%	100%
B71	100%	100%	B50	100%	100%	B51	100%	100%	B50	100%	100%
B72	100%	100%	B60	100%	100%	B52	100%	100%	B51	100%	100%
B13	50%	100%	B61	100%	100%	B53	100%	100%	B52	100%	100%
B45	50%	100%	B76	100%	100%	B54	100%	100%	B53	100%	100%
B78	50%	100%				B56	100%	100%	B56	100%	100%
						B62	100%	100%	B57	100%	100%
						B63	100%	100%	B58	100%	100%
						B71	100%	100%	B62	100%	100%
						B72	100%	100%	B63	100%	100%
						B75	100%	100%	B71	100%	100%
						B76	100%	100%	B72	100%	100%
						B77	100%	100%	B75	100%	100%
						B78	100%	100%	B76	100%	100%
						Cw4	100%	100%	B77	100%	100%
						B38	50%	100%	B78	100%	100%
						B46	50%	100%	Cw10	100%	100%
						B48	50%	100%	Cw9	100%	100%
						B8	50%	100%	A23	50%	100%
						Cw10	50%	100%	A24	50%	100%
						Cw9	50%	100%	B37	50%	100%
									B41	50%	100%
									B44	50%	100%

Table 21. Summary of the 558th Serum Exchange (Serum #1225-1228) by NIH-Extended, Antiglobulin, and Other - class II

Method: NIH-Extended											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
1 typing Lab			1 typing Lab			1 typing Lab			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no antigens assigned			no antigens assigned			no antigens assigned			DR17	50%	100%
									DR18	50%	100%
									DR52	50%	33%

Method: Antiglobulin											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
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: Other											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR17	50%	100%	DR7	50%	100%	DQ4	50%	100%	DR52	50%	100%
DR18	50%	100%	DR9	50%	100%	DQ8	50%	100%			
						DQ9	50%	100%			
						DR11	50%	100%			
						DR12	50%	100%			
						DR13	50%	100%			
						DR14	50%	100%			
						DR17	50%	100%			
						DR18	50%	100%			
						DR8	50%	100%			

Table 22. Summary of the 558th Serum Exchange (Serum #1225-1228) by Flow Cytometry and C1q - class II

Method: Flow Cytometry											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
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 antigens assigned			no antigens assigned			no antigens assigned			no antigens assigned		

Method: C1q											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
NT			NT			DQ4	100%	100%	NT		
						DR8	100%	100%			
						DR12	50%	100%			

Table 23. Summary of the 558th Serum Exchange (Serum #1225-1228) by Luminex - class II

Method: Luminex											
*** Serum 1225 ***			*** Serum 1226 ***			*** Serum 1227 ***			*** Serum 1228 ***		
27 typing Labs			27 typing Labs			27 typing Labs			26 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DR17	93%	100%	DR7	93%	100%	DQ4	100%	100%	DR17	92%	100%
DR18	93%	100%	DR9	93%	100%	DR12	100%	100%	DR18	92%	100%
DR13	72%	100%	NEG	7%	100%	DR8	100%	100%	DR52	85%	44%
DR52	72%	83%				DR11	96%	100%	DR13	35%	50%
DR14	59%	100%				DR13	96%	92%	DR14	31%	100%
DQ2	37%	40%				DR14	96%	85%	DR11	27%	100%
DR11	26%	100%				DQ8	93%	100%	DQA1*05	19%	100%
DR12	19%	100%				DR18	93%	100%			
DPw6	11%	100%				DQ9	93%	87%			
DQA1*05	11%	100%				DR17	93%	62%			
DR1404	11%	100%				DQ7	52%	52%			
DQ4	11%	50%				DQA1*05	48%	100%			
NEG	7%	100%				DQA1*06	41%	100%			
						DQA1*04	40%	100%			
						DR1404	19%	100%			
						DQA1*03	15%	100%			
						DQ3	11%	100%			
						DR1403	11%	100%			
						DR3	11%	100%			
						DR52	11%	100%			
						DQ2	11%	20%			

Table 24. Individual laboratory results for Serum #1225-1228 by NIH-Standard and NIH-Extended - class I

Investigator	**** Serum 1225 ****							**** Serum 1226 ****					**** Serum 1227 ****					**** Serum 1228 ****							Method			
	% POS	B53	B35	B49	B44	B51	Other	% POS	B44	B45				Other	% POS	B35	B51										Other	
Fort, Marylise	NT							NT							NT													STD
Vasilescu, Rodica	42	+	+	+	+	+	B45	25	+	+			B13	58	+	+										B49,B57	STD	
Watson, Narelle	25	+	+				B62	33	+	+				30	+	+										B62,B75	STD	

STD = NIH-Standard

Investigator	**** Serum 1225 ****							**** Serum 1226 ****						**** Serum 1227 ****						**** Serum 1228 ****								Method			
	% POS	B49	B50	B62	B35	B44	Other	% POS	B44	B50	B49	B41	B45	Other	% POS	B50	B51	B62	B71	B72	Other	% POS	B57	B62	B63	B46	B75		B76	B58	Other
Hamdi, Nuha	NT							NT							NT							93	+	+	+	+	+	+	+	Cw4,Cw6,A24>	EXT
Lardy, N.M.	71	+	+	+	+	+	B60,B51,B53>	29	+	+	+		+		48	+	+	+	+	+	B35,B53,B75	21	+	+	+				+		EXT
Reed, Elaine F. PhD	58	+	+	+			Cw4,B70	31	+	+	+	+			55	+	+	+	+	+	B18,B52,Cw4	25	+	+	+	+	+	+			EXT

EXT = NIH-Extended

Table 25. Individual laboratory results for Serum #1225-1228 by Antiglobulin - class I

**** Serum 1225 ****																										
Investigator	% POS	B44	B13	B35	B45	B49	B53	B51	B50	B61	B62	B72	B75	B78	A24	B41	B42	B46	B47	B52	B60	B63	B39	B56	Other	Method
Cecka, J. Michael P	87	+	+	+	+	+	+	+	+	+	+	+	+	+		+			+	+	+	+	+		B57	Antiglobulin
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+			+	+							B18	Antiglobulin
Hamdi, Nuha	98	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw4,A2,B48,A66>	Antiglobulin
McCluskey, James	58	+		+											+											Antiglobulin
Vasilescu, Rodica	50	+	+	+	+	+	+	+						+											B70	Antiglobulin

**** Serum 1226 ****																											
Investigator	% POS	B44	B45	B49	B13	B50	A23	B41	B47	B60	B61	B39	A34												Other	Method	
Cecka, J. Michael P	52	+	+	+	+	+		+	+	+	+	+														B51	Antiglobulin
Hahn, Amy B. PhD		+	+	+		+	+						+													A24,B48,B78,B62 >	Antiglobulin
Hamdi, Nuha	53	+	+	+	+	+	+	+	+	+	+	+	+														Antiglobulin
McCluskey, James	30	+																								Antiglobulin	
Vasilescu, Rodica	29	+	+	+	+																				B40	Antiglobulin	

**** Serum 1227 ****																															
Investigator	% POS	B51	B18	B35	B53	B62	B78	B42	B50	B52	B60	B63	B64	A33	A66	B37	B38	B39	B41	B45	B46	B49	B56	B57	B61	B7	B72	B75	B8	Other	Method
Cecka, J. Michael P	93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Antiglobulin	
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+						+										A31,A36,A80	Antiglobulin
Hamdi, Nuha	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		Cw4,Cw6,B48,B13 >	Antiglobulin
McCluskey, James	43	+		+		+																								Antiglobulin	
Vasilescu, Rodica	42	+	+	+	+		+																						B15,B70	Antiglobulin	

**** Serum 1228 ****																												
Investigator	% POS	B49	B57	B62	B46	B63	B75	A1	B13	B35	B37	B45	B50	B52	B55	B56	B71	B72	B78	B44	B51	B53					Other	Method
Cecka, J. Michael P	80	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+						Antiglobulin
Hahn, Amy B. PhD		+	+	+		+	+						+														B70,B81	Antiglobulin
Hamdi, Nuha	93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					Cw4,Cw6,A11,B60 >	Antiglobulin
McCluskey, James	29			+	+		+																					Antiglobulin
Vasilescu, Rodica	25	+	+																+								B15,B22	Antiglobulin

Table 26. Individual laboratory results for Serum #1225-1228 by Other and Flow Cytometry - class I

Investigator	**** Serum 1225 ****															**** Serum 1226 ****											Method			
	% POS	A2	B18	B35	B44	B45	B49	B50	B51	B52	B53	B62	B71	B72	B75	B77	B78	Other	% POS	B13	B41	B44	B45	B47	B49	B50		B60	B61	Other
Liu, Chang MD, PhD	98																	75												Other-LMX Phenotype
Mayne, Elizabeth		+																NT											Other	
Reed, Elaine F. PhD	92		+	+	+	+	+	+	+	+	+	+	+	+	+	+		58	+	+	+	+	+	+	+	+	+		Other-LMX PRA	
Eckels/CPMC,	95																	96											Flow cytometry	

Investigator	**** Serum 1227 ****															**** Serum 1228 ****											Method					
	% POS	B18	B35	B45	B49	B50	B51	B52	B53	B62	B63	B71	B72	B73	B75	B77	B78	Other	% POS	B35	B44	B45	B49	B50	B52	B53		B62	B63	B71	B72	B75
Liu, Chang MD, PhD	100																	100													Other-LMX Phenotype	
Mayne, Elizabeth																		NT												Other		
Reed, Elaine F. PhD	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		96	+	+	+	+	+	+	+	+	+	+	+	+	Other-LMX PRA	
Eckels/CPMC,	99																	68												Flow cytometry		

Table 27. Individual laboratory results for Serum #1225 by Luminex - class I

		*** Serum 1225 ***																																						
Investigator	% POS	B35	B44	B45	B49	B50	B53	B56	B13	B18	B41	B57	B58	B60	B62	B63	B71	B72	B75	B76	B77	B37	B38	B47	B51	B52	B55	B59	B61	B78	B46	B54	A24	B67	B48	B64	B39	Other	Method	
Al-Attas, Rabab A. I		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A23,A69 >	LMX
Arnold, Paula PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A23,Cw10,Cw9,A2403 >	LMX
Bengochea, Carrett	52	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B82,B8,A2403,B3901	LMX	
Cecka, J. Michael F	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
Chen, Dong-Feng F		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A203,A2,A25 >	LMX	
Colombe, Beth W. I	93	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Bw4	LMX		
Daniel, Dolly	34	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A2,B40,B15 >	LMX		
Du, Keming	47	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw10,Cw9	LMX		
Dunckley, Heather	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A203,A2,A66 >	LMX		
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A23,A68,A69 >	LMX		
Fort, Marylise		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A25,A23 >	LMX		
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A2,A23,A69,B65 >	LMX		
Hamdi, Nuha	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25 >	LMX		
Hogan, Patrick	36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B82	LMX		
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25,A*29:02,A*34:01>	LMX		
Lardy, N.M.		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX	
Liu, Chang MD, PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A23,B65,B8,Cw10 >	LMX	
Mayne, Elizabeth	46	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A2,B40,B15 >	LMX		
McCluskey, James		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25,A*29:02,A34:01>	LMX		
Pancoska, Carol PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A34,A23 >	LMX	
Permpikul, Vejbaes	51	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A23,Cw10,Cw9 >	LMX		
Pule, Ziningi	14	+	+	+	+	+	+	+																													B15,B16,Bw4,Bw6	LMX		
Reed, Elaine F. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A29,A*34:01 >	LMX	
Sacchi, Nicoletta		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4	LMX	
V.Brouard, M.Tonye	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A203,A25,A34 >	LMX		
Vasilescu, Rodica		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A203,A2,A25 >	LMX	
Vather/JHB,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,A2,A66,A25 >	LMX	
Vather/Pinetown,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Cw4,Cw6,A2,A66 >	LMX	
Xu, Ri		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8,B12C,B5C,B8C >	LMX	

Table 29. Individual laboratory results for Serum #1227 by Luminex - class I

		**** Serum 1227 ****																																																												
Investigator	% POS	A68	B18	B35	B37	B42	B45	B46	B49	B50	B51	B53	B55	B56	B67	B57	B7	B38	B41	B52	B54	B58	B62	B63	B65	B71	B72	B75	B76	B77	B8	A25	B59	B60	B64	B61	A34	B48	B78	Cw10	Cw4	Cw9	A33	B39	B81	A66	B73	B82														
Al-Attas, Rabab A. M		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+								
Arnold, Paula PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Bengochea, Carrette	52	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Cecka, J. Michael P	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Chen, Dong-Feng P		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Colombe, Beth W. F	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Daniel, Dolly	48	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					
Du, Keming	61	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
Dunckley, Heather	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Fort, Marylise		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hamdi, Nuha	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Hogan, Patrick	49	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
Lardy, N.M.		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liu, Chang MD, PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mayne, Elizabeth	54	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
McCluskey, James		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pancoska, Carol Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Permpikul, Vejbaesy	61	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pule, Ziningi	54	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Reed, Elaine F. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sacchi, Nicoletta		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
V.Brouard, M.Tonye	65	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Vasilescu, Rodica		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Vather/JHB,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Vather/Pinetown,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Xu, Ri		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	

Table 29. Individual laboratory results for Serum #1227 by Luminex - class I (cont.)

**** Serum 1227 ****																Method
Investigator	A69	B27	Cw18	A26	Cw6	B13	Cw1	B2708	Cw15	A6601	A6602	B3901	Bw6	Cw14	Other	
Al-Attas, Rabab A. M	+	+	+	+	+	+	+								Cw6,B13,A26,Cw1 >	LMX
Arnold, Paula PhD	+	+	+					+		+	+	+			B8101,Cw18,B2708,B7801 >	LMX
Bengochea, Carretto & Cecka, J. Michael P	+	+		+				+				+			B703,B2708,B3901	LMX
Chen, Dong-Feng P	+	+	+	+	+	+	+	+	+	+	+				Cw6,B13,A26,B8101 >	LMX
Colombe, Beth W. F	+	+	+	+	+								+		Cw6,A26,Bw6,Cw18	LMX
Daniel, Dolly		+						+		+	+	+			B40,B15,B70,B21 >	LMX
Du, Keming	+	+	+		+										Cw6,Cw18	LMX
Dunckley, Heather	+		+	+	+	+	+	+	+	+	+			+	Cw6,B13,A26,A32 >	LMX
Eckels/CPMC,	+			+				+		+	+				A26,B2708,A6601,A6602	LMX
Fort, Marylise	+	+	+	+	+	+	+		+					+	Cw6,B13,A26,Cw1 >	LMX
Hahn, Amy B. PhD	+	+	+	+	+	+	+		+				+	+	Cw6,B13,A26,Bw6 >	LMX
Hamdi, Nuha	+	+	+	+	+	+	+		+						Cw6,B13,A26,Cw1 >	LMX
Hogan, Patrick		+											+		Bw6	LMX
Holdsworth, Rhonda	+	+	+	+	+	+	+		+						Cw6,B13,A26,Cw1 >	LMX
Lardy, N.M.								+							Cw3,B2708	LMX
Liu, Chang MD, PhD	+		+	+	+	+	+	+							Cw6,B13,A26,Cw1 >	LMX
Mayne, Elizabeth		+						+		+	+	+	+		B40,B15,B703,B14 >	LMX
McCluskey, James	+	+	+	+	+	+	+		+					+	Cw6,B13,A26,Cw1 >	LMX
Pancoska, Carol Ph	+	+	+	+	+	+	+								Cw6,B13,A26,Cw1 >	LMX
Permpikul, Vejbaesy	+	+	+		+										Cw6,Cw18	LMX
Pule, Ziningi	+	+		+									+		A24,B40,B15,A26 >	LMX
Reed, Elaine F. PhD	+	+	+	+	+	+									Cw6,B13,A26,Cw18	LMX
Sacchi, Nicoletta		+														LMX
V.Brouard, M.Tonye	+		+	+	+	+		+		+	+	+			Cw6,B13,A26,B8101 >	LMX
Vasilescu, Rodica	+	+	+	+	+	+	+	+	+	+	+	+		+	Cw6,A11,B13,A26 >	LMX
Vather/JHB,	+	+	+	+	+	+	+		+				+	+	Cw6,A11,B13,A26 >	LMX
Vather/Pinetown,	+	+	+	+	+	+	+		+				+	+	Cw6,A11,B13,B47 >	LMX
Xu, Ri								+		+		+			B12C,B5C,B8C,B7C >	LMX

Table 30. Individual laboratory results for Serum #1228 by Luminex - class I (cont.)

	**** Serum 1228 ****																						
Investigator	A26	A68	B27	Cw15	A34	A66	Cw1	Cw14	B61	B60	A33	B47	A6601	B2708	B48	A1101	A1102	A31	B3901	B54	Other	Method	
Al-Attas, Rabab A. M	+	+	+	+	+	+	+	+	+	+	+	+			+						+	B60,B61,B48,B47 >	LMX
Arnold, Paula PhD			+	+		+	+							+	+	+	+			+		Cw1,B2708,B7801,A1101,A*24:02 >	LMX
Bengochea, Carrette															+						+	B2708,B3901	LMX
Cecka, J. Michael P	+	+	+		+	+																	LMX
Chen, Dong-Feng P	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+		B60,B61,B48,B47 >	LMX
Colombe, Beth W. F	+	+	+	+	+	+	+	+	+													B61,Bw4,Cw1,Cw14	LMX
Daniel, Dolly	+	+	+	+		+		+						+	+		+	+			+	A9,B15,B70,A10 >	LMX
Du, Keming	+	+	+	+	+	+	+	+	+		+											B61,A33,Cw1,Cw14	LMX
Dunckley, Heather	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B48,B47 >	LMX
Eckels/CPMC,	+	+		+	+									+	+							B2708,A6601	LMX
Fort, Marylise																							LMX
Hahn, Amy B. PhD	+	+	+	+	+	+	+	+	+	+	+	+								+		B60,B61,B47,A31 >	LMX
Hamdi, Nuha	+	+	+	+	+	+	+	+	+	+	+	+			+							B60,B61,B48,B47 >	LMX
Hogan, Patrick						+								+		+	+					A1101,A1102,A6601	LMX
Holdsworth, Rhonda	+	+	+	+	+	+	+	+	+	+	+	+			+					+	+	B60,B61,B48,B47,A*24:02,A*33:03 >	LMX
Lardy, N.M.						+								+								Cw3,B2708	LMX
Liu, Chang MD, PhD	+	+	+	+	+		+	+	+					+								B61,Cw1,Cw14,A6601	LMX
Mayne, Elizabeth	+	+	+	+		+								+		+	+			+		B15,Cw3,B2708,A1101 >	LMX
McCluskey, James	+	+	+	+	+	+	+	+	+	+	+	+			+						+	B60,B61,B48,B47,A*24:02,A*33:03 >	LMX
Pancoska, Carol Ph	+	+	+	+	+	+	+	+	+	+	+	+										B60,B61,A33,Cw1 >	LMX
Permpikul, Vejbaesy	+	+	+	+	+	+	+	+	+	+	+	+			+						+	B60,B61,B48,B47 >	LMX
Pule, Ziningi	+	+	+		+	+					+								+			B15,A31,A33,Bw4 >	LMX
Reed, Elaine F. PhD	+	+	+	+	+	+	+	+	+	+				+								B60,B61,B48,Cw1,A*24:02 >	LMX
Sacchi, Nicoletta				+	+																		LMX
V.Brouard, M.Tonye	+	+	+	+	+		+	+	+			+	+	+		+	+			+		B61,B47,Cw1,Cw14 >	LMX
Vasilescu, Rodica	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B60,B61,B48,B47 >	LMX
Vather/JHB,	+	+	+	+	+		+	+	+	+	+	+	+		+							B60,B61,B48,B47 >	LMX
Vather/Pinetown,	+	+	+	+	+	+	+	+	+	+	+	+			+					+	+	B60,B61,B48,B47 >	LMX
Xu, Ri	+												+	+		+	+					Cw403,B12C,B5C,B8C >	LMX

Table 32. Individual laboratory results for Serum #1225 - #1228 by various methods - class II

	**** Serum 1225 ****					**** Serum 1226 ****				**** Serum 1227 ****										**** Serum 1228 ****										
Investigator	% POS				Other	% POS			Other	% POS														% POS	DR17	DR18	DR52		Other	Method
Hamdi, Nuha	NT					NT				NT														26	+	+	+			EXT
Reed, Elaine F. PhD	U					U				U														58						EXT

EXT = NIH-Extended

	**** Serum 1225 ****						**** Serum 1226 ****				**** Serum 1227 ****										**** Serum 1228 ****								
Investigator	% POS	DR17	DR18	DR13	DR14	Other	% POS	DR7	DR9	Other	% POS	DR17	DR18	DQ4	DQ8	DQ9	DR11	DR12	DR13	DR14	DR8	Other	% POS					Other	Method
Hamdi, Nuha	31%	+	+	+	+	DR52,DQ2	31	+	+		66	+	+	+	+	+	+	+	+	+	+	+	DQ7,DQ2	NT					Antiglobulin

	**** Serum 1225 ****					**** Serum 1226 ****				**** Serum 1227 ****										**** Serum 1228 ****								
Investigator	% POS	DR17	DR18		Other	% POS	DR7	DR9	Other	% POS	DR17	DR18	DQ4	DQ8	DQ9	DR11	DR12	DR13	DR14	DR8	Other	% POS	DR52				Other	Method
Liu, Chang MD, PhD	40					29				77													31					LMX Phenotype
Reed, Elaine F. PhD	27	+	+			20	+	+		80	+	+	+	+	+	+	+	+	+	+		87	+				LMX PRA	

	**** Serum 1225 ****					**** Serum 1226 ****				**** Serum 1227 ****										**** Serum 1228 ****									
Investigator	% POS				Other	% POS			Other	% POS	DQ4	DR8	DR12									Other	% POS					Other	Method
Eckels/CPMC,	66					27				78													68					FC	

FC = Flow cytometry

	**** Serum 1225 ****					**** Serum 1226 ****				**** Serum 1227 ****										**** Serum 1228 ****									
Investigator	% POS				Other	% POS			Other	% POS	DQ4	DR8	DR12									Other	% POS					Other	Method
Colombe, Beth W. F	NT					NT				7	+	+	+										NT					C1q	
Liu, Chang MD, PhD	NT					NT					+	+											NT					C1q	

U = undetermined

NT = not typed

Table 33. Individual laboratory results for Serum #1225 - #1226 by Luminex - class II

Investigator	**** Serum 1225 ****										**** Serum 1226 ****				Method
	% POS	DR17	DR18	DR13	DR52	DR14	DQ2	DR11	DR12	Other	% POS	DR7	DR9	Other	
Al-Attas, Rabab A. M		+	+	+	+	+				Other DPw6		+	+		LMX
Arnold, Paula PhD		+	+	+	+							+	+		LMX
Bengochea, Carrette	0										0				LMX
Cecka, J. Michael P	31	+	+								0				LMX
Chen, Dong-Feng P		+	+	+	+	+		+	+			+	+		LMX
Colombe, Beth w. P	18	+	+							DQ4	25	+	+		LMX
Daniel, Dolly	4	+	+	+	+	+	+	+		DR3,DR6,DR1403,DR1404 >	2	+	+		LMX
Du, Keming	16	+	+	+	+	+	+			DQ4,DP13	4	+	+	DP14	LMX
Dunckley, Heather	47	+	+	+	+	+				DPw6	25	+	+		LMX
Eckels/CPMC,		+	+	+	+							+	+		LMX
Fort, Marylise		+	+	+	+	+	+					+	+	DR10,DR17,DR18,DPw6	LMX
Hahn, Amy B. PhD		+	+									+	+		LMX
Hamdi, Nuha	31	+	+	+	+	+	+				31	+	+		LMX
Hogan, Patrick	3	+	+								2	+	+		LMX
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	DQ5,DPw6,DP11,DP13 >		+	+		LMX
Liu, Chang MD, PhD		+	+									+	+		LMX
Mayne, Elizabeth	7	+	+	+	+	+	+	+		DR3,DR5,DR6,DR1404	2	+	+		LMX
McCluskey, James		+	+	+	+	+	+	+	+			+	+		LMX
Pancoska, Carol Ph		+	+	+	+	+				DQ4		+	+		LMX
Permpikul, Vejbaesy	9	+	+	+	+	+					4	+	+		LMX
Pule, Ziningi	0										2	+	+		LMX
Reed, Elaine F. PhD		+	+	+	+	+	+	+	+	DQB1*06:02		+	+		LMX
Sacchi, Nicoletta		+	+									+	+		LMX
V.Brouard, M.Tonye	12	+	+								31	+	+		LMX
Vather/JHB,		+	+	+	+	+	+			DQA1*05		+	+		LMX
Vather/Pinetown,		+	+	+	+	+	+	+	+	DQ5,DQ6,DQA1*05		+	+	DQ5	LMX
Xu, Ri		+	+	+	+	+				DR1403,DR1404		+	+		LMX

Table 34. Individual laboratory results for Serum #1227 - #1228 by Luminex - class II

Investigator	**** Serum 1227 ****														**** Serum 1228 ****							Method			
	% POS	DQ4	DR12	DR8	DR11	DR13	DR14	DQ8	DR18	DQ9	DR17	DQ7	DQA1*05	DQA1*06	DQA1*04	Other	% POS	DR17	DR18	DR52	DR13		DR14	DR11	Other
Al-Attas, Rabab A. M		+	+	+	+	+	+	+	+	+	+	+						+	+	+					LMX
Arnold, Paula PhD		+	+	+	+	+	+	+	+	+	+	+	+					+	+	+					LMX
Bengochea, Carrette	29	+	+	+	+	+	+	+	+	+	+	+				DR1404	0								LMX
Cecka, J. Michael P	60	+	+	+	+	+	+	+	+	+	+	+					26	+	+						LMX
Chen, Dong-Feng P		+	+	+	+	+	+	+	+	+	+	+	+					+	+	+	+	+	+		LMX
Colombe, Beth w. P	73	+	+	+	+	+	+	+	+	+	+	+					18	+	+						LMX
Daniel, Dolly	29	+	+	+	+	+	+	+	+	+	+	+				DR3,DR5,DR6,DR1403 >	4	+	+	+	+	+	+	DR3,DR6,DR1403	LMX
Du, Keming	24	+	+	+	+	+	+	+	+	+	+	+					7	+	+	+	+			DPw1,DPw5	LMX
Dunckley, Heather	81	+	+	+	+	+	+	+	+	+	+	+	+	+			22	+	+	+					LMX
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+					LMX
Fort, Marylise		+	+	+	+	+	+	+	+	+	+	+				DQ2	NT								LMX
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+					+	+	+					LMX
Hamdi, Nuha	66	+	+	+	+	+	+	+	+	+	+	+				DQ2	26	+	+	+					LMX
Hogan, Patrick	29	+	+	+	+	+	+	+	+	+	+	+				DR1403,DR1404	4	+	+	+					LMX
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	DR52,DP15		+	+	+	+	+	+	DR7,DPw1,DPw5	LMX
Liu, Chang MD, PhD		+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+					LMX
Mayne, Elizabeth	30	+	+	+	+	+	+	+	+	+	+	+				DR3,DR5,DR6,DR1404 >	29							DR53,DQ2,DQ3,DQ4 >	LMX
McCluskey, James		+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+	+	+	DQA1*05	LMX
Pancoska, Carol Ph		+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+	+	+		LMX
Permpikul, Vejbaesy	27	+	+	+	+	+	+	+	+	+	+	+	+	+		DQA1*03	14	+	+	+				DQA1*05	LMX
Pule, Ziningi	35	+	+	+	+	+	+									DR3,DQ3,DQ6	5							DR3	LMX
Reed, Elaine F. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+	+			LMX
Sacchi, Nicoletta		+	+	+	+	+	+	+	+	+	+	+						+	+	+					LMX
V.Brouard, M.Tonye	14	+	+	+													31	+	+	+					LMX
Vather/JHB,		+	+	+	+	+	+	+	+	+	+	+	+	+		DR4,DR52,DQ2,DQA1*02 >		+	+	+	+	+	+	DQA1*05	LMX
Vather/Pinetown,		+	+	+	+	+	+	+	+	+	+	+	+	+		DR52,DQA1*03		+	+	+	+	+	+	DR7,DQA1*05	LMX
Xu, Ri		+	+	+	+	+	+	+	+	+	+	+				DR1403,DR1404		+	+	+					LMX