

REPORT OF THE 382nd CELL EXCHANGE SEPTEMBER 25, 2014

B-cell Lines	505-506
Cells	1525-1528
Serum	1153-1156

B-cell Line Exchange #253

The results for B-cell Line Exchange #253 are summarized on Tables 1-2 and individual laboratory results reported for each sample are listed in Tables 3-6. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <http://bioinformatics.nmdp.org/>.

We wish to express our appreciation to the **Transplant Immunology Laboratory Baylor University Medical Center, Dallas, and to Helen Bass, Jane Rowlands, and Tracey Reese, Welsh Blood Service, Pontyclun**, for generously sharing the cells studied in our exchanges.

Ter-505. The consensus type for this Hispanic sample is DRB1*08:02-DRB1*14:54-DRB3*02:02-DQA1*01:04-DQA1*04:01-DQB1*04:02-DQB1*05:03-DPA1*01:03-DPA1*02:01-DPB1*04:02-DPB1*14:01-A*02:01-A*23:01-B*35:28-B*44:03-C*04:01-C*16:01. An offspring of this donor was typed in 2011 as extract 507 (same as ext 175) (1). From family studies and exchange data, the haplotypes in this sample are determined to be A*02:01-B*35:28-C*04:01-DRB1*08:02-DQA1*04:01-DQB1*04:02-DPB1*14:01 and A*23:01-B*44:03-C*16:01-DRB1*14:54-DRB3*02:02-DQA1*01:04-DQB1*05:03-DPB1*04:02.

This sample is Ter293, one of the reference cells for DRB1*14:54. It was previously typed for class II as cells Ter 375 (2006) and Ter 293 (2002), as correctly identified by Lopez-Cepero. It was also typed for class I as extract 441 (2009) and extract 173 (2001), as astutely noted by Dunn. In this present retyping, DRB1*14:54 was detected by 33%, with another 9 labs reporting DRB1*14:01/54. In the 2006 typing, DRB1*14:54 was assigned by only 1 lab (5%), while DRB1*14:01 was assigned by 44%. DRB1*14:54 differs from DRB1*14:01 by a single nucleotide substitution in exon 3 at codon 112 (TAC → CAC), resulting in an amino acid change from tyrosine to histidine (2). DRB1*08:02 (53%) was assigned as the second DRB1 type. A number of labs (n=8) reported DQA1*01:01/04/05/12, denoted as DQA1*01:01:01G. DQA1*01:04 was assigned by 79%.

B*35:28 was detected in this cell by 53%, a decrease from a detection level of 74% in 2009 for this rare allele. B*44:03 was reported as the second B-locus type by 45%.

References:

1. Lau M, Locke A, Cecka JM, and Reed EF. Report of the 355th Cell Exchange. March 9, 2011.
2. Horn PA, Albis-Camps M, Verboom M, et al. The nature and diversity of HLA-DRB1 exon 3. *Tissue Antigens* 2007;70:335-337.
3. Holdsworth R, Hurley CK, Marsh SGE, et al. The HLA dictionary 2008; a summary of HLA-A, -B, -C, -DRB1/3/4/5, and -DQB1 alleles and their association with serologically defined HLA-A, -B, -C, -DR, and -DQ antigens. *Tissue Antigens* 2009;73:95-170.

Ter-506. The consensus type for this Caucasian sample is DRB1*04:01-DRB1*08:06-DRB4*01:03-DQA1*01:02-DQA1*03:03-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPB1*03:01-DPB1*04:01-A*02:01-B*44:09-B*50:01-C*05:01. One likely haplotype in this sample is DRB1*04:01-DRB4*01:03-DQB1*03:01-DQA1*03:03, as observed in Ter 469 (same as Ter 382) and Ter 456. The other likely haplotype is DRB1*08:06-DQB1*05:01-DQA1*01:02, as observed in previous exchange cells Ter 409 (same as Ter 295) and Ter 410 (same as Ter 296, 230).

This sample was previously typed for class II as Ter 444 (2010) and Ter 356 (2005), as correctly identified by Lopez-Cepero, Rao, and Tiercy. It was also typed for class I as extract 426 (2008) and extract 270 (2003). In this present retyping, the rare allele DRB1*08:06 was assigned by 53%, a decrease from a detection level of 66% in 2010. DRB1*04:01 (48%) was assigned as the second DRB1 type. DQA1*01:02 and DQA1*03:03 were assigned by 73% and 70%, respectively. DQA1*01:02/08/09/11 and DQA1*03:01/02/03 were reported by a number of labs (n=9) and denoted as DQA1*01:01:01G and DQA1*03:01:01G, respectively.

The assignment of B*44:09 decreased from a detection level of 73% in 2008, to 47% in this present study. The serologic expression of B*44:09 is listed in the 2004 HLA Dictionary as B45 (3). Clark and Dunn commented on the association of B*44:09 with Bw6. B*50:01 (42%) was assigned as the second B-locus allele.

Table 1: Summary of the 253rd B-cell Line Exchange

Ter-505

DNA Typing - class II		60 LABS - DRB1		41 LABS - DRB3		33 LABS - DQA1		57 LABS - DQB1		14 LABS - DPA1		29 LABS - DPB1	
			%(n)				%(n)		%(n)		%(n)		%(n)
	DRB1*08:02:01		8 (5)	DRB3*02:02	34(14)	DQA1*01:04:01	3 (1)	DQB1*04:02:01	3 (2)	DPA1*01:03	79(11)	DPB1*04:02:01	3 (1)
	DRB1*08:02		45(27)	DRB3*02:02+	22(9)	DQA1*01:01:01G	27(9)	DQB1*04:02:01G	2 (1)	DPA1*01:05	7 (1)	DPB1*04:02:01G	3 (1)
	<i>DRB1*08:04</i>		2 (1)	DRB3*02	24(10)	DQA1*01:04	40(13)	DQB1*04:02	44(25)	DPA1*01:03+	14 (2)	DPB1*04:02P	3 (1)
	DRB1*08:02+		8 (5)	DRB3*+	20(8)	DQA1*01	30(10)	DQB1*04:02+	16(9)			DPB1*04:02	83(24)
	DRB1*08		37(22)					DQB1*04	35(20)			<i>DPB1*94:01</i>	3 (1)
												DPB1*04:02/*105:01	3 (1)
	DRB1*14:54:01		3 (2)			DQA1*04:01:01	3 (1)	DQB1*05:03:01	3 (2)	DPA1*02:01	79(11)	DPB1*14:01	97(29)
	DRB1*14:01:01G		3 (2)			DQA1*04:01	76(25)	DQB1*05:03:01G	2 (1)	DPA1*02:11	7 (1)	DPB1*14	3 (1)
	DRB1*14:54		30(18)			DQA1*04	21(7)	DQB1*05:03	39(22)	DPA1*02:01+	7 (1)		
	<i>DRB1*14:07</i>		2 (1)					<i>DQB1*05:09</i>	2 (1)	DPA1*02	7 (1)		
	DRB1*14:01+		23(14)					DQB1*05:03+	17(10)				
	DRB1*14		39(23)					DQB1*05	37(21)				
Serology - class II		5 LABS - DR		DR52		5 LABS - DQ							
			%(n)				%(n)						
	DR8		100(5)		100(5)			DQ4	100(5)				
	DR14		100(5)					DQ1	80(4)				
								DQ5	20(1)				
DNA Typing - class I		36 LABS - HLA-A		36 LABS - HLA-B		36 LABS - HLA-C							
			%(n)		%(n)		%(n)						
	A*02:01:01:01		3 (1)	B*35:28	53(19)	C*04:01:01	3 (1)						
	A*02:01:01		3 (1)	<i>B*35:226</i>	3 (1)	C*04:01:01G	3 (1)						
	A*02:01:01G		3 (1)	B*35:28+	5 (2)	C*04:01P	3 (1)						
	A*02:01		25(9)	B*35	39(14)	C*04:01	22(8)						
	A*02:01+		19(7)			C*04:01+	22(8)						
	A*02		47(17)			C*04	47(17)						
	A*23:01:01G		6 (2)	B*44:03:01	6 (2)	C*16:01:01	5 (2)						
	A*23:01P		3 (1)	B*44:03:01G	3 (1)	C*16:01:01G	3 (1)						
	A*23:01		14(5)	B*44:03	36(13)	C*16:01	28(10)						
	A*23:01+		30(11)	<i>B*44:154</i>	3 (1)	C*16:01+	17(6)						
	A*23		47(17)	B*44:03+	8 (3)	C*16/*12:18:02	5 (2)						
				B*44	44(16)	C*16	39(14)						
					44(16)	C*06	3 (1)						

Table 2: Summary of the 253rd B-cell Line Exchange

Ter-506

DNA Typing - class II		41 LABS - DRB4		33 LABS - DQA1		57 LABS - DQB1		14 LABS - DPA1		29 LABS - DPB1	
60 LABS - DRB1	%(n)	DRB4*01:03	44(18)	DQA1*01:02:01	3 (1)	DQB1*03:01:01	3 (2)	DPA1*01:03:01G	7 (1)	DPB1*03:01:01	3 (1)
DRB1*04:01:01	10(6)	DRB4*01:01+	15(6)	DQA1*01:02:01G	27(9)	DQB1*03:01:01G	2 (1)	DPA1*01:03	86(12)	DPB1*03:01:01G	7 (2)
DRB1*04:01	38(23)	DRB4*01	19(8)	DQA1*01:02	43(14)	DQB1*03:01	42(24)	DPA1*01	7 (1)	DPB1*03:01P	10(3)
DRB1*04:01+	14(8)	DRB4*+	22(9)	DQA1*01	27(9)	DQB1*03:01+	16(9)			DPB1*03:01	52(15)
DRB1*04	38(23)					DQB1*03(DQ7)	7 (4)			DPB1*03:01/*+	21(6)
						DQB1*03	30(17)			DPB1*03	7 (2)
DRB1*08:06	53(32)			DQA1*03:03:01	3 (1)	DQB1*05:01:01	3 (2)			DPB1*04:01:01	4 (1)
DRB1*08:43	2 (1)			DQA1*03:01:01G	27(9)	DQB1*05:01:01G	2 (1)			DPB1*04:01:01G	7 (2)
DRB1*08:06+	8 (5)			DQA1*03:03	40(13)	DQB1*05:01	40(23)			DPB1*04:01P	4 (1)
DRB1*08	37(22)			DQA1*03	30(10)	DQB1*05:01+	16(9)			DPB1*04:01	79(23)
						DQB1*05:07+	2 (1)			DPB1*04:01/*+	3 (1)
						DQB1*05	35(20)			DPB1*04	3 (1)
						DRB1*03	2 (1)				

Serology - class II		5 LABS - DR		5 LABS - DQ	
DR4	100(5)	DR53	100(5)	DQ1	80(4)
				DQ5	20(1)
DR8	100(5)				
				DQ7	100(5)

DNA Typing - class I		36 LABS - HLA-A		36 LABS - HLA-B		36 LABS - HLA-C	
A*02:01:01:01	3 (1)	B*44:09	47(17)	C*05:01:01	6 (2)		
A*02:01:01	3 (1)	B*44:09+	14(5)	C*05:01:01G	3 (1)		
A*02:01:01G	3 (1)	B*44	36(13)	C*05:01	33(12)		
A*02:01	30(11)	B*45	3 (1)	C*05:01+	11(4)		
A*02:01+	14(5)			C*05	47(17)		
A*02	47(17)						
		B*50:01:01	6 (2)				
		B*50:01:01G	3 (1)				
		B*50:01	33(12)				
		B*50:13	3 (1)				
		B*50:01+	8 (3)				
		B*50	47(17)				

Table 3: Individual laboratory results for B-cell #505-Class II

Center	Investigator	DRB1		DRB3	DQA1		DQB1		DPA1		DPB1		METHOD
4691	Ajlan,Abdula	*08:02	*14:01/54				*04	*05					SSO,SBT
8038	Cao,Kai	*08:02:01	*14:01/54	*02:02/28/29N	*01:01:01G	*04:01	*04:02:01	*05:03:01	*01:03	*02:01	*04:02	*14:01	SSO,SBT
774	Cecka,J.Mich	*08:02/44	*14:54	*02:02/26/28+	*01:04	*04:01	*04:02/13	*05:03/06+	*01:03	*02:01	*04:02	*14:01	SSP
8070	Chang,Uckjin	*08	*14										P-SSP
9916	Charlton,Ron	*08:02:01	*14:54:01	*02:02			*04:02	*05:03/24+					SSP,SBT
9916	Charlton_LR	*08	*14	*+			*04	*05					SSP
4492	Charron,D.	*08:02	*14:54/114+	*02:02	*01:01:01G	*04:01	*04:02/13	*05:03/08+	*01:03	*02:01	*04:02	*14:01	P-SSO,SSP
3224	Chen,Dongfen	*08:02	*14:01/54	*02:02/26/28+	*01:04	*04:01	*04:02	*05:03	*01:03	*02:01	*04:02	*14:01	SSO,SSP,SBT
8021	Clark,Brendan	*08:02	*14:54	*02			*04:02	*05:03			*04:02	*14:01	P-SSP,RVSSO
3632	Colombe,Beth	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03					SSOP,SSP
5130	Costeas,Paul	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03					SSO,SSP
779	Daniel,Claud	*08	*14	*02	*01:04	*04:01	*04	*05	*01:03	*02:01	*04:02	*14:01	P-SSP,SSO
5219	Daniel,Dolly	*08	*14				*04	*05					SSOP
5891	Du,Keming	*08:02	*14:01/54+				*04:02/04	*05:03/38					P-SBT
3766	Dunn,Paul	*08	*14	*02	*01	*04	*04	*05	*01:03	*02:01	*04:02	*14:01	RT-PCR,SSO,SSP
5214	Eckels/CPMC	*08	*14	*02	*01	*04:01	*04	*05	*01:03	*02:01	*04:02	*14:01	SSOP
3135	Enczmann,J	*08:02	*14:54	*02:02			*04:02	*05:03			*04:02	*14:01	SBT,P-SSP,P-SSO
762	Fischer,Got	*08:02	*14:54/01	*02:02/12/28+	*01:04	*04:01	*04:02/13	*05:03/10			*04:02	*14:01	SSO,SBT
4079	Fort,Maryliss	*08:02	*14:54		*01:01:01G	*04:01	*04:02/13	*05:03/08+			*04:02	*14:01	SSP,SSO
792	Gandhi,Manis	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03			*04:02	*14:01	SSO,SSP
8043	Gideoni,Osna	*08:02	*14:54		*01:04	*04:01	*04:02	*05:03	*01:03	*02:01	*04:02	*14:01	SSP
9002	Gideoni_LR	*08	*14				*04	*05					SSO
910	Hahn,Amy B.	*08	*14	*+	*01:04	*04:01	*04	*05					SSP
810	Hamdi,Nuha	*08:02/42+	*14:01/26+	*02:02/27/28+	*01:01:01G	*04:01	*04:02/13	*05:03/08+					SSO
2344	Hurley/Hartz	*08:02:01	*14:01:01G		*01:04:01:01+	*04:01:01	*04:02:01G	*05:03:01G	*01:03:01G+	*02:01:01+	*04:02:01G	*14:01	SBT,SSOP
771	Israel,Shosh	*08:02	*14:54				*04:02	*05:03					SSP
9003	Israel_LR	*08	*14				*04	*05					P-SSO
2847	Kihara,Masaaki	*08	*14										RVSSO
4337	Kim,Tai-Gyu	*08:02	*14:54				*04:02	*05:03			*04:02	*14:01	SBT,SSP
1694	Kissel&Hess	*08	*14	*+			*04:02	*05:03					SSP
168	Klein,Tirza	*08:02	*14:54				*04:02	*05:03					P-SSO,SSP
9000	Klein_LR	*08	*14				*04	*05					P-SSO,SSP
87	Land,Geoffre	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03			*04:02	*14:01	SBT,SSO,SSP
725	Lardy,N.M.	*08	*14	*+	*01	*04	*04	*05					SSO,SSP
278	Lee,Jar-How	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03	*01:03	*02:01	*04:02	*14:01	SSP,RVSSOP
6649	Lim,Young Ae	*08	*14	*+									SSP
274	Lo,Raymundo	*08:04	*14:07		*01	*04:01	*04:02	*05:09	*01:05	*01:11	*94:01	*14:01	SSO
731	Loewenthal,R	*08:02	*14:01/54				*04:02	*05:03					SBT,SSO
759	Lopez-Cepero	*08:02/42+	*14:01/26+	*02:02/27/28	*01:01:01G	*04:01	*04:02/13	*05:03/08+	*01:03	*02:01	*04:02P	*14:01	RVSSO
8029	Mani,Rama	*08	*14				*04	*05					SSO
8052	Marcos,Cintia Y	*08:02/42+	*14		*01:01:01G	*04:01	*04:02/13	*05					P-SSO
206	McAlack-Hana	*08	*14	*02	*01	*04	*04	*05					RVSSOP
8042	Muncher,Lior	*08	*14	*02			*04	*05					SSO,SSP
9001	Muncher_LR	*08:02	*14:54	*02:02			*04:02	*05:03					SSO,SSP
54	Pancoska,Ca	*08	*14	*02	*01	*04:01	*04	*05	*01:03	*02:01	*04:02	*14:01	RVSSO
3966	Permpikul&Ve	*08:02	*14:01/54	*02:02			*04:02	*05:03					P-SSP

Table 3: Individual laboratory results for B-cell #505-Class II													
Center	Investigator	DRB1		DRB3	DQA1		DQB1		DPA1		DPB1		METHOD
2400	Phelan, Donna	*08:02	*14:54	*02	*01:01:01G	*04:01	*04:02	*05:03			*04:02	*14:01	SSO, SBT, SSP
8001	Rao, Prakash	*08:02	*14:54	*02:02	*01	*04	*04:02	*05:03			*04:02	*14:01	RVSSO, SSP
3753	Reed, Elaine	*08:02	*14:01/54	*02:02/27/28+	*01:01:01G	*04:01	*04:02/04	*05:03/38					SBT, SSO
3519	Renac, Virginie	*08:02	*14:01/54	*02:02	*01:04	*04:01	*04:02	*05:03			*04:02/*105:01	*14:01	SBT, P-SSP
3519	Renac, Virginie_LR	*08	*14				*04	*05			*04:02	*14:01	P-SSP
793	Rubocki, Rona	*08	*14	*02	*01	*04	*04	*05			*04:02	*14	SSP
4251	Schiller, J	*08:02	*14:01:01G	*02:02/27/28+	*01	*04	*04:02	*05:03	*01	*02	*04:02	*14:01	P-RVSSO, SBT
8068	Shanmugam, He	*08	*14	+			*04	*05					P-SSP
1108	Sutherland, L	*08	*14	*02	*01	*04	*04	*05					SSOP
747	Tiercy, Jean-	*08:02:01	*14:54	*02:02	*01:01:01G	*04:01	*04:02:01	*05:03:01			*04:02:01	*14:01	SSO, SSP, SBT
5451	Tilanus, Marc	*08:02:01	*14:54:01	+			*04	*05					SBT, SSP
5462	Turner, E.V.	*08:02	*14:01P/114	*02:02/28/29N			*04:02	*05:03			*04:02	*14:01	SSP, SSO, SBT
5642	Varnavidou-N	*08:02/44	*14:01/54	+			*04:02	*05:03/50					P-SSP
3511	Zeevi, Adrian	*08:02	*14:54	*02:02	*01:04	*04:01	*04:02	*05:03			*04:02	*14:01	RVSSOP, SSP

CTR	DIRNAME	DR8	DR14	DR52			DQ4	DQ1	OTH1	OTH2
4492	Charron, D.	*	+	+			+	+		
910	Hahn, Amy B.	+	+	+			+	+		
4908	Kvam, Vonnett	+	+	+			+	+		
54	Pancoska, Car	+	+	+			+	+		
793	Rubocki, Rona	+	+	+			+	DQ5		

Table 4: Individual laboratory results for B-cell #505-Class I

Center	Investigator	HLA-A		HLA-B		HLA-C		METHOD
4691	Ajlan,Abdula	*02:01	*23:01/17	*35:28	*44:03	*04:01/09N/30/82	*16:01	SSO,SBT
8038	Cao,Kai	*02:01:01	*23:01/17	*35:28	*44:03:01	*04:01/30/82	*16:01:01	SSO,SSP,SBT
774	Cecka,J.Mich	*02	*23	*35	*44	*04	*16	SSP
9916	Charlton,Ron	*02:01:01:01	*23:01:01/17	*35:28	*44:03:01	*04:01:01	*16:01:01	SSP,SBT
9916	Charlton_LR	*02	*23	*35	*44	*04	*16/*12:18:02	SSP
4492	Charron,D.	*02:01/01L/97/266+	*23:01/54/56/58	*35:28	*44:03/174/175+	*04:01/117/136+	*16:01/58/59	P-SSO,SSP
3224	Chen,Dongfen	*02:01	*23:01/17	*35:28	*44:03	*04:01/30/82	*16:01	SSO,SSP,SBT
8021	Clark,Brendan	*02:01+	*23:01+	*35:28	*44:03+	*04:01+	*16:01+	P-SSP,RVSSO
3632	Colombe,Beth	*02	*23	*35	*44	*04	*16	SSOP,SSP
5130	Costeas,Paul	*02:01	*23:01	*35:28	*44:03	*04:01	*16:01/27/32	SSO,SSP
5219	Daniel,Dolly	*02	*23	*35	*44	*04	*16	SSO
5891	Du,Keming	*02:01/36/40/90/174	*23:01/17/04/57+	*35:28	*44:03	*04:01/07/09N/10+	*16:01/62/15/23/02+	P-SBT
3766	Dunn,Paul	*02	*23	*35:28/226	*44	*04	*16	RT-PCR,SSO,SSP
5214	Eckels/CPMC	*02	*23	*35	*44	*04	*16	SSO
3135	Enczmann,J	*02:01/01L	*23:01	*35:28	*44:03	*04:01	*16:01	SBT,P-SSP,P-SSO
792	Gandhi,Manis	*02:01	*23:01	*35:28	*44:03	*04:01	*16:01	SSO,SSP
810	Hamdi,Nuha	*02:01/01L/01Q/07+	*23:01/03/05/06+	*35:28	*44:03/174/175	*04:01/09N/28/30+	*16:01/52/53	SSO
2344	Hurley/Hartz	*02:01:01G	*23:01:01G	*35:28	*44:03:01G	*04:01:01G	*16:01:01G	SBT,SSOP
2847	Kihara,Masaaki	*02	*23	*35	*44	*04	*16	RVSSO
4337	Kim,Tai-Gyu	*02:01	*23:01	*35:28	*44:03	*04:01	*16:01	SBT,SSP
1694	Kissel&Hess	*02	*23	*35	*44	*04	*16	SSP
278	Lee,Jar-How	*02:01	*23:01	*35:28	*44:03	*04:01	*16:01	SSP,RVSSOP
274	Lo,Raymundo	*02	*23	*35:226	*44:154	*04	*16	SSO
8029	Mani,Rama	*02	*23	*35	*44	*04	*06	SSO
8052	Marcos,Cintia Y	*02	*23	*35:28/226	*44	*04	*16	P-SSO
206	McAlack-Hana	*02	*23	*35	*44	*04	*16	RVSSOP
54	Pancoska,Ca	*02	*23	*35	*44	*04	*16	RVSSO
3966	Permpikul&Ve	*02	*23	*35	*44	*04	*16	P-SSP
2400	Phelan,Donna	*02:01	*23:01/17	*35:28	*44:03	*04:01	*16:01	SSO,SBT,SSP
3753	Reed,Elaine	*02:01/36/40/90/174	*23:01/04/12/14+	*35:28	*44:03	*04:01/09N/10/15+	*16:01/02/15/23/25+	SBT,SSO
3519	Renac,Virginie	*02:01	*23:01/17	*35:28	*44:03	*04:01	*16:01	SBT,P-SSP
3519	Renac,Virginie_LR	*02	*23	*35	*44	*04	*16/*12:18:02	P-SSP
4251	Schiller,J	*02:01	*23:01:01G	*35:28	*44:03	*04:01P	*16:01	P-RVSSO,SBT
8068	Shanmugam,He	*02	*23	*35	*44	*04	*16	P-SSP
1108	Sutherland,L	*02	*23	*35	*44	*04	*16	SSO
5462	Turner,E.V.	*02:01/01L	*23:01P	*35:28	*44:03	*04:01	*16:01	SSP,SSO,SBT

Table 5: Individual laboratory results for B-cell #506-Class II

Center	Investigator	DRB1		DRB4	DQA1		DQB1		DPA1	DPB1		METHOD
4691	Ajlan,Abdula	*04:01	*08:06				*03	*05				SSO,SBT
8038	Cao,Kai	*04:01:01	*08:06	*01:01/03+	*01:02:01G	*03:01:01G	*03:01:01	*05:01:01	*01:03	*03:01/*104:01	*04:01	SSO,SBT
774	Cecka,J.Mich	*04:01/111+	*08:06/54	*01:03	*01:02	*03:03	*03:01/21+	*05:01/07+	*01:03	*03:01	*04:01	SSP
8070	Chang, Uckjin	*04	*08									P-SSP
9916	Charlton,Ron	*04:01:01	*08:06	*01:03			*03:01	*05:01/20+				SSP,SBT
9916	Charlton_LR	*04	*08	*+			*03	*05				SSP
4492	Charron,D.	*04:01/111+	*08:06	*01:03	*01:02:01G	*03:01:01G	*03:01/27+	*05:01/12+	*01:03	*03:01/*104:01	*04:01	P-SSO,SSP
3224	Chen,Dongfen	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01	*01:03	*03:01	*04:01	SSO,SSP,SBT
8021	Clark,Brendan	*04:01	*08:06	*01:01+			*03:01+	*05:01+		*03:01	*04:01	P-SSP,RVSSO
3632	Colombe,Beth	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01				SSOP,SSP
5130	Costeas,Paul	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01				SSO,SSP
779	Daniel,Claud	*04	*08	*01	*01:02	*03:03	*03:01	*05	*01:03	*03:01	*04:01	P-SSP,SSO
5219	Daniel,Dolly	*04	*08				*03	*05				P-SSOP
5891	Du,Keming	*04:01/158N	*08:06				*03:01/73	*05:01/11				P-SBT
3766	Dunn,Paul	*04	*08	*01	*01	*03	*03	*05	*01:03	*03:01	*04:01	RT-PCR,SSO,SSP
5214	Eckels/CPMC	*04	*08	*01	*01	*03	*03 (DQ7)	*05	*01:03	*03:01P	*04:01	SSOP
3135	Enczmann,J	*04:01	*08:06	*01:03			*03:01	*05:01		*03:01	*04:01	SBT,P-SSP,P-SSO
762	Fischer,Got	*04:01/64	*08:06	*01:03	*01:02	*03:03	*03:01/19+	*05:01		*03:01/*104:01	*04:01	SSO,SBT
4079	Fort,Marylis	*04:01/111+	*08:06		*01:02:01G	*03:01:01G	*03:01/27+	*05:01/12+		*03:01	*04:01	SSP,SSO
792	Gandhi,Manis	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01		*03:01	*04:01	SSO,SSP
8043	Gideoni,Osna	*04:01	*08:06		*01:02	*03:03	*03:01	*05:01	*01:03	*03:01	*04:01	SSP
9002	Gideoni_LR	*04	*08				*03	*05				SSO
910	Hahn,Amy B.	*04	*08	*+	*01:02	*03:03	*03	*05				SSP
810	Hamdi,Nuha	*04:01/04+	*08:01/06+	*01:01/03+	*01:02:01G	*03:01:01G	*03:01/27+	*05:07/29				SSO
2344	Hurley/Hartz	*04:01:01	*08:06		*01:02:01:01+	*03:03:01	*03:01:01G	*05:01:01G	*01:03:01G	*03:01:01G	*04:01:01G	SBT,SSOP
771	Israel,Shosh	*04:01	*08:06				*03:01	*05:01				SSP
9003	Israel_LR	*04	*08				*03	*05				SSO
2847	Kihara,Masaaki	*04	*08									rSSO
4337	Kim,Tai-Gyu	*04:01	*08:06				*03:01	*05:01		*03:01	*04:01	SBT,SSP
1694	Kissel&Hess	*04	*08	*+			*03:01	*05:01				SSP
168	Klein,Tirza	*04:01	*08:06				*03:01	*05:01				P-SSO,SSP
9000	Klein_LR	*04	*08				*03	*05				P-SSO,SSP
87	Land,Geoffre	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01		*03:01	*04:01	SBT,SSO,SSP
725	Lardy,N.M.	*04	*08	*+	*01	*03	*03	*05				SSO,SSP
278	Lee,Jar-How	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01	*01:03	*03:01	*04:01	SSP,RVSSOP
6649	Lim,Young Ae	*04	*08	*+								SSP
274	Lo,Raymundo	*04:01	*08:43		*01:02	*03	*03	*03	*01:03	*03:01	*04:01	SSO
731	Loewenthal,R	*04:01:01	*08:06				*03:01	*05:01				SBT,SSO
759	Lopez-Cepero	*04:01/13+	*08:06/01+	*01:01/03+	*01:02:01G	*03:01:01G	*03:01/27+	*05:01/12+	*01:03	*03:01P	*04:01P	RVSSO
8029	Mani,Rama	*04	*08				*03	*05				SSO
8052	Marcos,Cintia Y	*04	*08:01/06+		*01:02:01G	*03:01:01G	*03	*05:01/12+				P-SSO
206	McAlack-Hana	*04	*08	*01	*01	*03	*03 (DQ7)	*05				RVSSOP
8042	Muncher,Lior	*04	*08	*01			*03	*05				SSO,SSP
9001	Muncher_LR	*04:01	*08:06	*01:03			*03:01	*05:01				SSO,SSP
54	Pancoska,Ca	*04	*08	*01	*01	*03	*03 (DQ7)	*05	*01:03	*03	*04	RVSSO
3966	Permpikul&Ve	*04:01	*08:06	*01:03			*03:01	*05:01				P-SSP

Table 5: Individual laboratory results for B-cell #506-Class II

Center	Investigator	DRB1	DRB4	DQA1	DQB1	DPA1	DPB1	METHOD				
2400	Phelan, Donna	*04:01	*08:06	*01	*01:02:01G	*03:01:01G	*03:01	*05:01	*03:01/*104:01	*04:01	SSO, SBT, SSP	
8001	Rao, Prakash	*04:01	*08:06	*01:03	*01	*03	*03:01	*05:01	*03:01/*104:01	*04:01	RVSSO, SSP	
3753	Reed, Elaine	*04:01	*08:06	*01:01/03+	*01:02:01G	*03:01:01G	*03:01	*05:01			SBT, SSO	
3519	Renac, Virginie	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01	*03:01/*104:01+	*04:01/*126:01	SBT, P-SSP	
3519	Renac, Virginie_LR	*04	*08				*03	*05	*03:01	*04:01	SSP	
793	Rubocki, Rona	*04	*08	*+	*01	*03	*03 (DQ7)	*05	*03	*04:01	SSP	
4251	Schiller, J	*04:01	*08:06	*01:01/03+	*01	*03	*03:01	*05:01	*01	*03:01:01G	*04:01:01G	P-RVSSO, SBT
8068	Shanmugam, He	*04	*08	*+			*03	*05			P-SSP	
1108	Sutherland, L	*04	*08	*01	*01	*03	*03	*05			SSOP	
747	Tiercy, Jean-	*04:01:01	*08:06	*01:03	*01:02:01G	*03:01:01G	*03:01:01	*05:01:01		*03:01:01	*04:01:01	SSO, SSP, SBT
5451	Tilanus, Marc	*04:01:01	*08:06	*+			*03	*05				SBT, SSP
5462	Turner, E.V.	*04:01	*08:06	*01:03			*03:01	*05:01		*03:01P	*04:01	SSP, SSO, SBT
5642	Varnavidou-N	*04:01/111+	*08:06/54	*+			*03:01/114+	*05:01/61+				P-SSP
3511	Zeevi, Adrian	*04:01	*08:06	*01:03	*01:02	*03:03	*03:01	*05:01		*03:01	*04:01	RVSSOP, SSP

CTR	DIRNAME	DR4	DR8	DR53		DQ7	DQ1	OTH1	OTH2
4492	Charron, D.	+	+	+		+	+	DR6	
910	Hahn, Amy B.	+	+	+		+	+		
4908	Kvam, Vonnett	+	+	+		+	+		
54	Pancoska, Car	+	+	+		+	+		
793	Rubocki, Rona	+	+	+		+	DQ5		

Table 6: Individual laboratory results for B-cell #506-Class I

Center	Investigator	HLA-A		HLA-B		HLA-C		METHOD
4691	Ajlan,Abdula	*02:01	*02:01	*44:09	*50:01	*05:01	*05:01	SSO,SBT
8038	Cao,Kai	*02:01:01		*44:09	*50:01:01	*05:01:01		SSO,SBT
774	Cecka,J.Mich	*02		*44:09/127/131	*50	*05		SSP
9916	Charlton,Ron	*02:01:01:01		*44:09	*50:01:01	*05:01:01		SSP,SBT
9916	Charlton_LR	*02		*44	*50	*05		SSP
4492	Charron,D.	*02:01/01L/97/153+		*44:09	*50:01/35/37	*05:01/88/90/94/99N		P-SSO,SSP
3224	Chen,Dongfen	*02:01		*44:09	*50:01	*05:01		SSO,SSP,SBT
8021	Clark,Brendan	*02:01+		*44:09	*50:01+	*05:01+		P-SSP,RVSSO
3632	Colombe,Beth	*02		*44	*50	*05		SSOP,SSP
5130	Costeas,Paul	*02:01	*02:01	*44:02/09	*50:01/13	*05:01	*05:01	SSO,SSP
5219	Daniel,Dolly	*02	*02	*44	*50	*05	*05	P-SSOP
5891	Du,Keming	*02:01	*02:01	*44:09	*50:01	*05:01/99N	*05:01/99N	P-SBT
3766	Dunn,Paul	*02		*44:02:19/09/127/152	*50	*05		RT-PCR,SSO
5214	Eckels/CPMC	*02		*44	*50	*05		SSOP
3135	Enczmann,J	*02:01/01L		*44:09	*50:01	*05:01		SBT,P-SSP,P-SSO
792	Gandhi,Manis	*02:01		*44:09	*50:01	*05:01		SSO,SSP
810	Hamdi,Nuha	*02:01/01L/01Q/04+	*02:01/01L/01Q/04+	*44:02/09	*50:13	*05:01/03/07N+	*05:01/03/07N+	SSO
2344	Hurley/Hartz	*02:01:01G	*02:01:01G	*44:09	*50:01:01G	*05:01:01G	*05:01:01G	SBT,SSOP
2847	Kihara,Masaaki	*02		*44	*50	*05		RVSSO
4337	Kim,Tai-Gyu	*02:01	*02:01	*44:09	*50:01	*05:01	*05:01	SBT,SSP
1694	Kissel&Hess	*02		*45	*50	*05		SSP
278	Lee,Jar-How	*02:01		*44:09	*50:01	*05:01		SSP,RVSSOP
274	Lo,Raymundo	*02	*02	*44	*50	*05	*05	SSO
8029	Mani,Rama	*02	*02	*44	*50	*05	*05	SSO
8052	Marcos,Cintia Y	*02	*02	*44:02/09/127/131+	*50	*05	*05	P-SSO
206	McAlack-Hana	*02		*44	*50	*05		RVSSOP
54	Pancoska,Ca	*02		*44	*50	*05		RVSSO
3966	Permpikul&Ve	*02	*02	*44	*50	*05	*05	P-SSP
2400	Phelan,Donna	*02:01		*44:09	*50:01	*05:01		SSO,SBT,SSP
3753	Reed,Elaine	*02:01	*02:01	*44:09	*50:01	*05:01	*05:01	SBT,SSO
3519	Renac,Virginie	*02:01		*44:09	*50:01	*05:01		SBT,P-SSP
3519	Renac,Virginie_LR	*02		*44	*50	*05		P-SSP
4251	Schiller,J	*02:01	*02:01	*44:09	*50:01	*05:01	*05:01	P-RVSSO,SBT
8068	Shanmugam,He	*02		*44	*50	*05		P-SSP
1108	Sutherland,L	*02	*02	*44	*50	*05	*05	SSOP
5462	Turner,E.V.	*02:01/01L		*44:09	*50:01	*05:01		SSP,SSO,SBT

Cell Exchange #382

The results for Cell Exchange #382 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 serology results for each sample are listed in Table 13.

Cell 1525. The consensus type for this Black sample is A*01:01(A1)-A*34:02(A34)-B*08:01(B8)-B*81:01(B81)-C*07:01(Cw7)-C*18:01. This cell is the parent of cell 1527, also examined in this study. From family data, the haplotypes in this cell are determined to be A*01:01-B*08:01-C*07:01 and A*34:02-B*81:01-C*18:01. The B*81:01-C*18:01 and B*08:01-C*07:01 associations in this cell are observed commonly in African American populations, with respective frequencies of HF=0.01101 and 0.02792.

This cell was previously typed as cell 1481 (2013), as correctly identified by Claas, Dunn, and Lopez-Cepero. In this present study, B81 was detected by 93% and confirmed as B*81:01 (33%). B7 was misassigned by 7% (n=2), a decrease from its misassignment by 16% in 2013. A34 (89%) was reported as the A10 split. A*34:02 was reported by 44%, with 5 labs assigning A*34:02:01.

Cell 1526. The consensus type for this cell of mixed Black and Puerto Rican heritage is A*66:02(A66)-A*68:01(A68)-B*15:16(B63)-B*53:01(B53)-C*06:02(Cw6)-C*07(Cw7). One likely association in this cell is B*53:01-C*06:02, with a respective frequency of HF=0.01089, in African Americans. The other probable association may then be B*15:16-C*07,

A66 was detected by 82%, with 19% of labs assigning A6602. A*66:02 (61%) was assigned by DNA. A28 was assigned in complete consensus, with 82% assigning A68. A*68:01 was reported by 36%, with 4 labs reporting A*68:01:01. C*06:02 (28%) and C*07 (63%) were the reported C-locus types. C*07:06 was assigned by 8 labs.

Cell 1527. The consensus type for this Black sample is A*23:01(A23)-A*34:02(A34)-B*53:01(B53)-B*81:01(B81)-C*04:01(Cw4)-C*18:01. As the offspring of cell 1525, the likely haplotypes in this cell are A*34:02-B*81:01-C*18:01 and A*23:01-B*53:01-C*04:01. The B*53:01-C*04:01 association in this cell is the most common haplotype observed in African Americans, with HF=0.09218.

B81 was well detected by 92%, with DNA assigning B*81:01 (32%). As in cell 1525, B7 was misassigned by 2 labs. A34 was detected by 96% and confirmed as A*34:02 (44%). A*34:02:01 was assigned by 4 labs. A23 was reported in completed consensus as the second A-locus type and confirmed as A*23:01 (25%). A*23:01/17 was reported by 4 labs.

Cell 1524. The consensus type for this Vietnamese sample is A*11:01(A11)-A*33:03(A33)-B*07:05(B7)-B*58:01(B58)-C*03:02(Cw3)-C*15:05. One likely haplotype in this cell is A*33:03-B*58:01-C*03:02. This haplotype is the most frequently observed haplotype in Asian populations, with HF=0.04458. By contrast, the other probable haplotype in this cell, A*11:01-B*07:05-C*15:05, is uncommon, observed with a frequency of only HF=0.00029, in Asians.

This cell was previously typed as cell 1307 in 2007, as astutely noted by Askar, Claas, and Lopez-Cepero. In this present typing, B7 was detected by 96%. B*07:05 was assigned by 29%, compared to a detection level of 36% for B*07:05 in 2007. B17 was reported in complete consensus, with 88% of labs reporting B58 as the B17 split. B*58:01 was assigned by 39%, with 3 labs assigning B*58:01:01.

Table 7. Summary of the 382nd Cell Exchange (Cell #1525-1528)

DNA typing

Cell 1525		Cell 1526		Cell 1527		Cell 1528	
34 labs	% (n)	33 labs	% (n)	32 labs	% (n)	32 labs	% (n)
A*01:01:01:01	9 (3)	A*66:02	61(20)	A*23:01:01	3 (1)	A*11:01:01	13(4)
A*01:01:01	6 (2)	A*66:02+	3 (1)	A*23:01:01G	3 (1)	A*11:01	28(9)
A*01:01	23(8)	A*66	36(12)	A*23:01P	3 (1)	A*11:01+	6 (2)
A*01:01+	9 (3)			A*23:01	16(5)	A*11	53(17)
A*01	50(17)			A*23:01+	22(7)		
A*36	3 (1)			A*23	53(17)		
A*34:02:01	15(5)	A*68:01:01	12(4)	A*34:02:01	12(4)	A*33:03:01	13(4)
A*34:02	29(10)	A*68:01	24(8)	A*34:02	32(10)	A*33:03	28(9)
A*34:02+	6 (2)	A*68:01+	9 (3)	A*34:02+	12(4)	A*33:03+	6 (2)
A*34	47(16)	A*68	55(18)	A*34	44(14)	A*33	53(17)
A*66	3 (1)						
33 labs	% (n)	32 labs	% (n)	32 labs	% (n)	32 labs	% (n)
B*08:01:01	6 (2)	B*15:16:01	6 (2)	B*53:01:01	10(3)	B*07:05:01	7 (2)
B*08:01	33(11)	B*15:16	38(12)	B*53:01	32(10)	B*07:05:01G	3 (1)
B*08:01+	6 (2)	B*15:16+	19(6)	B*53:01+	3 (1)	B*07:05P	3 (1)
B*08	55(18)	B*15(B63)	9 (4)	B*53	55(17)	B*07:05	16(5)
		B*15	25(8)			B*07:05+	19(6)
		<i>Blank</i>	3 (1)			B*07	52(16)
B*81:01:01G	3 (1)	B*53:01:01	6 (2)	B*81:01:01G	3 (1)	B*58:01:01	10(3)
B*81:01P	3 (1)	B*53:01	31(10)	B*81:01P	3 (1)	B*58:01	29(9)
B*81:01	27(9)	B*53:01+	6 (2)	B*81:01	26(8)	B*58:01+	6 (2)
B*81:01+	18(6)	B*53	56(18)	B*81:01+	16(5)	B*58	55(17)
B*81	49(16)			B*81	52(16)		
33 labs	% (n)	32 labs	% (n)	31 labs	% (n)	31 labs	% (n)
C*07:01:01	9 (3)	C*06:02:01	6 (2)	C*04:01:01	13(4)	C*03:02:02	7 (2)
C*07:01:01G	3 (1)	C*06:02:01G	3 (1)	C*04:01P	3(1)	C*03:02	42(13)
C*07:01	27(9)	C*06:02P	3 (1)	C*04:01	16(5)	C*03:02+	13(4)
C*07:01+	12(4)	C*06:02	16(5)	C*04:01+	13(4)	C*03(Cw10)	10(3)
C*07	49(16)	C*06:02+	19(6)	C*04	55(17)	C*03	29(9)
		C*06	53(17)				
C*18:01:01G	6 (2)	C*07:01:01G	3 (1)	C*18:01:01G	3 (1)	C*15:05:01G	3 (1)
C*18:01	30(10)	C*07:01P	3 (1)	C*18:01	33(10)	C*15:05	29(9)
C*18:01+	15(5)	C*07:06	25(8)	C*18:01+	16(5)	C*15:05+	16(5)
C*18	46(15)	C*07:01	6 (2)	C*18	45(14)	C*15	52(16)
C*06	3 (1)	C*07:01+	13(4)	C*06	3 (1)		
		C*07	50(16)				

Table 8: Summary of the 382nd Cell Exchange (Cell #1525-1528)

Serological typing							
(Black) Cell 1525 (27 Samples Typed)		(Mixed) Cell 1526 (27 Samples Typed)		(Black) Cell 1527 (25 Samples Typed)		(Asian) Cell 1528 (25 Samples Typed)	
A1	100.0%	A66	63.0%	A23	100.0%	A11	96.0%
		A10	11.1%		[100.0%]	A11.1	4.0%
A34	88.9%	A6602	18.5%				[100.0%]
A10	11.1%		[92.6%]	A34	96.0%		
	[100.0%]	A68	81.5%	A10	4.0%	A33	100.0%
B8	100.0%	A28	18.5%		[100.0%]		[100.0%]
			[100.0%]	B53	92.0%	B7	96.0%
B81	92.6%	B63	81.5%				[96.0%]
	[92.6%]	B15	14.8%	B81	92.0%		
Cw7	51.9%		[96.3%]		[92.0%]	B58	88.0%
		B53	96.3%	Cw4	60.0%	B17	12.0%
Bw6	81.5%				[60.0%]		[100.0%]
		Cw6	40.7%	Bw4	76.0%		
			[40.7%]			Cw3	52.0%
		Cw7	44.4%	Bw6	76.0%	Cw10	4.0%
							[56.0%]
		Bw4	77.8%			Bw4	80.0%
						Bw6	80.0%
Others Found		Others Found		Others Found		Others Found	
Cw4	11.1%	Bw6	11.1%	B7	8.0%	B81	4.0%
Cw18	7.4%	B52	7.4%	B52	4.0%	Cw15	4.0%
B7	7.4%	A34	7.4%	Cw8	4.0%		
A29	7.4%	B21	3.7%	B48	4.0%		
Cw6	3.7%			A33	4.0%		
Cw8	3.7%			Cw7	4.0%		
A33	3.7%			Cw18	4.0%		
A3402	3.7%			Cw6	4.0%		
				A3402	4.0%		

Table 9. Individual laboratory results for Cell #1525

Center	Investigator	HLA-A		HLA-B		HLA-C		Method
16	Askar,Medhat	*01:01:01	*34:02:01	*08:01	*81:01/02	*07:01:01	*18:01	RSSO,SBT/SSP
774	Cecka,J.Michael	*01	*34	*08	*81:01	*07	*18	SSP
8070	Chang,Uckjin	*36	*66	*08	*81	*07	*06	SSP
4492	Charron,D.	*01	*34	*08	*81	*07	*18	
798	Claas,F.H.J.	*01:01:01:01	*34:02:01	*08:01:01	*81:01	*07:01:01	*18:01	SBT
3632	Colombe,Beth	*01:01	*34:02	*08:01	*81:01	*07:01	*18:01	SSO,SSP
779	Daniel,Claud	*01	*34	*08	*81	*07	*18	PCR-SSP,SSO
3766	Dunn,Paul	*01	*34:02/04/08/09/10N	*08	*81:01-03/04N/05	*07	*18:01/02/04/06	SSO
5214	Eckels/CPMC	*01	*34	*08	*81	*07	*18	SSO
762	Fischer,Gottfried	*01	*34	*08	*81	*07	*18	SSO,SSP
4079	Fort,Marylise	*01:01	*34:02	*08:01	*81:01/02/05	*07:01	*18:01/02	SSO HD/SSP HD
8043	Gideoni,Osnat	*01:01	*34:02	*08:01	*81:01	*07:01	*18:01	SSP
9002	Gideoni_LR	*01	*34	*08	*81	*07	*18	SSO
3808	Hogan,Patrick	*01	*34	*08	*81	*07:01+	*18	
771	Israel,Shoshana	*01:01	*34:02	*08:01	*81:01	*07:01	*18:01	SBT
9003	Israel_LR	*01	*34	*08	*81	*07	*18	PCR-SSOP
168	Klein,Tirza	*01:01	*34:02	*08:01	*81:01	*07:01	*18:01	
9000	Klein_LR	*01	*34	*08	*81	*07	*18	PCR-SSP,SSO
725	Lardy,N.M.	*01	*34	*08	*81	*07	*18	SSO,SSP
745	Latham, Katy	*01:01:01:01	*34:02:01	*08:01	*81:01	*07:01:01	*18:01	SSO,SSP,SBT
278	Lee,Jar-How	*01:01/01L/109/110+	*34:02	*08:01/104/109+	*81:01	*07:01/103/153+	*18:01	SSP,RSSO
6649	Lim,Young Ae	*01	*34	*08	*81			SSP
731	Loewenthal,R	*01:01:01	*34:02:01			*07:01	*18:01	SBT,SSO
759	Lopez-Cepero	*01:01/04N/06/09+	*34:02/04/08/09/10N	*08:01/08N/10/15+	*81:01/02/03/04N/05	*07:01/06/18/20+	*18:01/02/04	RSSO
54	Pancoska,Carol	*01	*34	*08	*81	*07	*18	RSSOP
8001	Rao,Prakash	*01	*34	*08	*81	*07	*18	RSSO,SSP
3625	Rees,Tracey	*01:01	*34:02	*08:01	*81:01/02	*07:01	*18:01/02	PCR-SSP,SBT
1160	Rosen-Bronson	*01	*34	*08	*81	*07	*18	RSSO
793	Rubocki,Ronald	*01	*34	*08	*81	*07	*18	SSP
4251	Schiller,Jennifer	*01:01	*34:02	*08:01	*81:01:01G	*07:01:01G	*18:01:01G	PCR-RSSO,SBT
3545	Scornik,Juan C	*01:01/01N	*34:02	*08:01	*81:01/02	*07:01/06/18/343	*18:01/02	SSOP,SBT
747	Tiercy,Jean-Marie	*01:01:01:01	*34:02:01	*08:01:01	*81:01	*07:01	*18:01:01G	SSO,SSP,SBT
5462	Turner,E.V.	*01:01	*34:02	*08:01	*81:01P	*07:01	*18:01	SBT,SSO
3186	Watson,Narelle	*01	*34	*08	*81	*07	*18	SSO

Table 10. Individual laboratory results for Cell #1526

Center	Investigator	HLA-A		HLA-B		HLA-C		Method
16	Askar,Medhat	*66:02	*68:01:01	*15:16	*53:01	*06:02	*07:06	RSSO,SBT,SSP
774	Cecka,J.Michael	*66:02/03/16	*68	*15:16/67/95/254	*53	*06	*07	SSP
8070	Chang,Uckjin	*66	*68		*53	*06	*07	SSP
4492	Charron,D.	*66	*68	*15	*53	*06	*07	
798	Claas,F.H.J.	*66:02	*68:01:01	*15:16:01	*53:01:01	*06:02/83	*07:06	SBT
3632	Colombe,Beth	*66:02	*68:01	*15:16	*53:01	*06:02/48	*07:06	SSO,SSP
779	Daniel,Claud	*66:02	*68	*15:16	*53	*06	*07	PCR-SSP,SSO
3766	Dunn,Paul	*66:02	*68	*15:16/67/95/254	*53	*06	*07	SSO
5214	Eckels/CPMC	*66:02	*68	*15 (B63)	*53	*06	*07	SSO
762	Fischer,Gottfried	*66	*68	*15	*53	*06	*07	SSO,SSP
4079	Fort,Marylise	*66:02	*68:01/100	*15:16	*53:01	*06:02	*07:06	SSO HD/SSP HD
8043	Gideoni,Osnat	NT						SSP
9002	Gideoni_LR	*66	*68	*15	*53	*06	*07	SSO
3808	Hogan,Patrick	*66	*68	*15:16/67	*53	*06	*07:01+	
771	Israel,Shoshana	*66:02	*68:01	*15:16	*53:01	*06:02	*07:01	SBT
9003	Israel_LR	*66	*68	*15	*53	*06	*07	PCR-SSOP
168	Klein,Tirza	*66:02	*68:01	*15:16	*53:01	*06:02	*07:06	PCR-SSP,SSO
9000	Klein_LR	*66	*68	*15	*53	*06	*07	PCR-SSP,SSO
725	Lardy,N.M.	*66	*68	*15	*53	*06	*07	SSO,SSP
745	Latham, Katy	*66:02	*68:01:01	*15:16	*53:01	*06:02:01	*07:06	SSO,SSP,SBT
278	Lee,Jar-How	*66:02	*68:01/106	*15:16/254	*53:01/20/25/26+	*06:02/46N/55/73+	*07:01/153/166/301+	SSP,RSSO
6649	Lim,Young Ae	*66	*68	*15 (B63)	*53			SSP
731	Loewenthal,R	*66:02	*68:01			*06:02	*07:01	SBT,SSO
759	Lopez-Cepero	*66:02	*68:01/08/13/21/22+	*15:16/67/95/254	*53:01/05/10/18/20+	*06:02/07/10/11/12+	*07:01/06/09/18/20+	RSSO
54	Pancoska,Carol	*66:02	*68	*15 (B63)	*53	*06	*07	RSSOP
8001	Rao,Prakash	*66	*68	*15:16	*53	*06	*07	RSSO,SSP
3625	Rees,Tracey	*66:02	*68:01	*15:16	*53:01	*06:02/83	*07:06	PCR-SSP,SBT
1160	Rosen-Bronson	*66:02	*68	*15:16/67/95/254	*53	*06	*07	RSSO
793	Rubocki,Ronald	*66	*68	*15	*53	*06	*07	SSP
4251	Schiller,Jennifer	*66:02	*68:01	*15:16	*53:01	*06:02:01G	*07:01:01G	PCR-RSSO,SBT
3545	Scornik,Juan C	*66:02	*68:01	*15:16	*53:01	*06:02/83/116N	*07:01/06/18/343	SSOP,SBT
747	Tiercy,Jean-Marie	*66:02	*68:01:01	*15:16:01	*53:01:01	*06:02:01	*07:06	SSO,SSP,SBT
5462	Turner,E.V.	*66:02	*68:01	*15:16	*53:01	*06:02P	*07:01P	SBT,SSO
3186	Watson,Narelle	*66	*68	*15	*53	*06	*07	SSO

Table 11. Individual laboratory results for Cell #1527

Center	Investigator	HLA-A		HLA-B		HLA-C		Method
16	Askar,Medhat	*23:01:01/17	*34:02:01	*53:01:01	*81:01/02	*04:01:01	*18:01	RSSO,SBT,SSP
774	Cecka,J.Michael	*23	*34:02/07/10N	*53	*81:01	*04	*18	SSP
8070	Chang,Uckjin	*23	*34	*53	*81	*04	*06	SSP
4492	Charron,D.	*23	*34	*53	*81	*04	*18	
798	Claas,F.H.J.	*23:01/17	*34:02:01	*53:01:01	*81:01	*04:01:01	*18:01	SBT
3632	Colombe,Beth	*23:01	*34:02	*53:01	*81:01/03	*04:01	*18:01	SSO,SSP
779	Daniel,Claud	*23	*34	*53	*81	*04	*18	PCR-SSP,SSO
3766	Dunn,Paul	*23	*34:02/04/10N	*53	*81	*04	*18:01/02/04/06+	SSO
5214	Eckels/CPMC	*23	*34	*53	*81	*04	*18	SSO
762	Fischer,Gottfried	*23:01/17	*34:02	*53:01	*81:01	*04:01/09N/30/82	*18:01/02	SSO,SBT
4079	Fort,Marylise	NT						SSO,SSP
8043	Gideoni,Osnat	*23:01	*34:02	*53:01	*81:01	*04:01	*18:01	SSP
9002	Gideoni_LR	*23	*34	*53	*81	*04	*18	SSO
3808	Hogan,Patrick	*23	*34:02-04/08	*53	*81	*04	*18	SSP
771	Israel,Shoshana	*23:01	*34:02	*53:01	*81:01	*04:01	*18:01	SBT
9003	Israel_LR	*23	*34	*53	*81	*04	*18	PCR-SSOP
168	Klein,Tirza	*23:01	*34:02	*53:01	*81:01	*04:01	*18:01	PCR-SSP,SSO
9000	Klein_LR	*23	*34	*53	*81	*04	*18	PCR-SSP,SSO
725	Lardy,N.M.	*23	*34	*53	*81	*04	*18	SSO,SSP
745	Latham, Katy	*23:01:01	*34:02:01	*53:01:01	*81:01	*04:01:01	*18:01	SSO,SSP,SBT
278	Lee,Jar-How	*23:01/56/58	*34:02	*53:01	*81:01	*04:01/82/144/161/165	*18:01	SSP,RSSO
6649	Lim,Young Ae	*23	*34	*53	*81			SSP
731	Loewenthal,R	*23:01	*34:02:01			*04:01:01	*18:01	SBT,SSO
759	Lopez-Cepero	*23:01/03/05/06/07N+	*34:02/04/10N	*53:01/10/14/18/20+	*81:01/02/03/04N/05	*04:01/05/07/09N/12+	*18:01/02/04	RSSO
54	Pancoska,Carol	*23	*34	*53	*81	*04	*18	RSSOP
8001	Rao,Prakash	*23	*34	*53	*81	*04	*18	RSSO,SSP
3625	Rees,Tracey	*23:01/17	*34:02	*53:01	*81:01/02	*04	*18:01/02	PCR-SSP,SBT
1160	Rosen-Bronson	*23	*34	*53	*81	*04	*18	RSSO
793	Rubocki,Ronald	*23	*34	*53	*81	*04	*18	SSP
4251	Schiller,Jennifer	*23:01:01G	*34:02	*53:01	*81:01:01G	*04:01P	*18:01:01G	PCR-RSSO,SBT
3545	Scornik,Juan C	*23:01/07N/17	*34:02	*53:01	*81:01/02	*04:01/09N/30/82	*18:01/02	SSOP,SBT
747	Tiercy,Jean-Marie	NT						SSO,SSP,SBT
5462	Turner,E.V.	*23:01P	*34:02	*53:01	*81:01P	*04:01	*18:01	SBT,SSO
3186	Watson,Narelle	*23	*34	*53	*81	*04	*18	SSO

Table 12. Individual laboratory results for Cell #1528

Center	Investigator	HLA-A		HLA-B		HLA-C		Method
16	Askar,Medhat	*11:01:01	*33:03:01	*07:05:01	*58:01:01	*03:02:02	*15:05	RSSO,SBT,SSP
774	Cecka,J.Michael	*11	*33	*07	*58	*03	*15	SSP
8070	Chang,Uckjin	*11	*33	*07	*58	*03	*15	SSP
4492	Charron,D.	*11	*33	*07	*58	*03:02	*15	
798	Claas,F.H.J.	*11:01:01	*33:03:01	*07:05:01	*58:01:01	*03:02:02	*15:05	SBT
3632	Colombe,Beth	*11:01	*33:03	*07:05	*58:01	*03:02	*15:05	SSO,SSP
779	Daniel,Claud	*11	*33	*07	*58	*03:02	*15	PCR-SSP,SSO
3766	Dunn,Paul	*11	*33	*07:05/06+	*58	*03	*15	SSO
5214	Eckels/CPMC	*11	*33	*07	*58	*03 (Cw10)	*15	SSO
762	Fischer,Gottfried	*11:01	*33:03	*07:05/06	*58:01	*03:02	*15:05/29	SSO,SBT
4079	Fort,Marylise	NT						SSO,SSP
8043	Gideoni,Osnat	*11:01	*33:03	*07:05	*58:01	*03:02	*15:05	SSP
9002	Gideoni_LR	*11	*33	*07	*58	*03	*15	SSO
3808	Hogan,Patrick	*11	*33	*07	*58	*03:02+	*15	
771	Israel,Shoshana	*11:01	*33:03	*07:05	*58:01	*03:02	*15:05	SBT
9003	Israel_LR	*11	*33	*07	*58	*03	*15	PCR-SSOP
168	Klein,Tirza	*11:01	*33:03	*07:05	*58:01	*03:02	*15:05	PCR-SSP,SSO
9000	Klein_LR	*11	*33	*07	*58	*03	*15	PCR-SSP,SSO
725	Lardy,N.M.	*11	*33	*07	*58	*03	*15	SSO,SSP
745	Latham, Katy	*11:01:01	*33:03:01	*07:05	*58:01:01	*03:02	*15:05	SSO,SSP,SBT
278	Lee,Jar-How	*11:01/69N/91/100+	*33:03/03Q/25/31+	*07:05/90/105/112+	*58:01/21/23/24/31N+	*03:02/60/84/95/108+	*15:05/22/29/54/59+	SSP,RSSO
6649	Lim,Young Ae	*11	*33	*07	*58			SSP
731	Loewenthal,R	*11:01:01	*33:03:01			*03:02	*15:05	SBT,SSO
759	Lopez-Cepero	*11:01/02/03/05/07+	*33:01/03/04/05/06+	*07:05/06/80/90/97+	*58:01/10N/11/13/18+	*03:02/04/05/06/09+	*15:04/05/06/09/18+	RSSO
54	Pancoska,Carol	*11	*33	*07	*58	*03 (Cw10)	*15	RSSOP
8001	Rao,Prakash	*11	*33	*07	*58	*03:02/04/05/06/09+	*15	RSSO,SSP
3625	Rees,Tracey	*11:01	*33:03	*07:05/06	*58:01	*03:02	*15:05/29	PCR-SSP,SBT
1160	Rosen-Bronson	*11	*33	*07	*58	*03	*15	RSSO
793	Rubocki,Ronald	*11	*33	*07	*58	*03 (Cw10)	*15	SSP
4251	Schiller,Jennifer	*11:01	*33:03	*07:05:01G	*58:01	*03:02	*15:05:01G	PCR-RSSO,SBT
3545	Scornik,Juan C	*11:01	*33:03	*07:05/06	*58:01	*03:02	*15:05/29	SSOP,SBT
747	Tiercy,Jean-Marie	NT						SSO,SSP,SBT
5462	Turner,E.V.	*11:01	*33:03	*07:05P	*58:01	*03:02	*15:05	SBT,SSO
3186	Watson,Narelle	*11	*33	*07	*58	*03	*15	SSO

Table 13. Individual laboratory results for Cell #1525-1528 by Serology

Investigator	Days Old	Cell No 1525 (Black)									Cell No 1526 (Mixed)								Cell No 1527 (Black)								Cell No 1528 (Asian)									
		Viab %	A1	A34	B8	B81	Cw7	Bw6	OTHERS	OTHERS	Viab %	A66	A68	B63	B53	Cw6	Cw7	Bw4	OTHERS	Viab %	A23	A34	B53	B81	Cw4	Bw4	Bw6	OTHERS	Viab %	A11	A33	B7	B58	Cw3	Bw4	Bw6
Alonso, Anton	???		+	+	+	+	+		Cw4	90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+	
Alvarez, Carr	???	90	+	+	+	+	+	+		95	6602	+	+	+		+	+		95	+	+	+	+	+	+	+		95	+	+	+	+	+	+	+	
Askar, Medhat	2	95	+	+	+	+	+	+		95	6602	+	+	+		+	+		95	+	+	+	+	+	+	+		95	+	+	+	+	+	+	+	
Cecka, J. Mic	???	95	+	+	+	+		+		95	+	+	+	+			+		95	+	+	+	+		+	+		95	+	+	+	+		+	+	
Charron, Domi	4	98	+	+	+	+				95	+	+	+	+					95	+	+	+	+					98	+	+	+	+				
Claas, F.H.J.	6	90	+	+	+	+		+		75	+	+	+	+			+		75	+	+	+	+	+	+	+		70	+	+	+	+	+	+	+	
Dunn, Paul	???	85	+	+	+	+		+		90	+	+	+	+			+		85	+	+	+	+		+	+		95	+	+	+	+		+	+	
Enczmann, J	???	95	+	+	+	+				95	+	+	+	+					90	+	+	+	+					95	+	+	+	+				
Esteves Kondo	2	98	+	+	+	+	+	+	Cw4	98	+	+	+	+	+	+	+		98	+	+	+	+	+	+		98	+	+	+	+	+	+	+	+	
Fort, Marylis	3	97	+	+	+	+	+	+		97	+	+	+	+			+		97	+	+	+	+	+	+		98	+	+	+	+	+	+	+	+	
Hahn, Amy B.	???	100	+	+	+	+	+	+	Cw8>	100	6602	+	+	+			+		100	+	+	+	+	+	+	+	Cw8>	100	+	+	+	+		+	+	
Hesse, Kissel	7	95	+	+	+	+	+	+		95	+	+	+	+	+	+	+	Bw6	95	+	+	+	+	+	+	+		95	+	+	+	+	+	+	+	
Hogan, Patric	???	60	+	+	+	+	+	+		50	+	+	+	+	+	+	+		60	+	+	+	+	+	+	+		60	+	+	+	+	+	+	+	
Kvam, Vonnett	3	97	+	+	+	+	+	+	Cw18	95	6602	A28	+	+	+		+		93	+	+	+	+	+	+	+	Cw7	97	+	+	+	+	+	+	+	
Latham, Katy	???	75	+	+	+	+				75	+	+	+	+					75	+	+	+	+				80	+	+	+	+					
Mah, Helen	2	98	+	+	+	+	+	+	Cw18	98	+	+	+	+	+	+	+		98	+	+	+	+	+	+	+	Cw18	98	+	+	+	+	+	+	+	Cw15
Meyer, Pieter	???	80	+	A10	+	B7	+		Cw6>	80		A28	B15	+	+	+		75	+	+	+	B7	+			Cw6	80	+	+	+	B17	+				
Norin, Allen	???	99	+	+	+	+	+	+		99	+	+	+	+		+	Bw6		99	+	+	+	+	+	+		99	+	+	+	B17					
Pancoska, Car	3	98	+	+	+	+	+	+		98	6602	+	+	+		+			97	+	+	+	+	+	+	+		97	+	+	+	+	w10	+	+	
Permpikul, Ve	8	90	+	+	+	+		+		90	A34	+	B52	+			+		90	+	+	+	+		+	+	90	11.1	+	+	+		+	+		
Rees, Tracey	3	90	+	+	+	+	+	+		90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+	
Renac, Virgin	3	99	+	A10	+	+		+		99	A10	A28	B15	+		+		99	+	A10	+	+		+	+		99	+	+	+	+		+	+		
Rubocki, Rona	???	98	+	+	+	+	+	+		98	+	+	B15	+	+	+	+		98	+	+	+	+	+	+	+		98	+	+	+	+	+	+	+	
Shai, Isaac	8	86	+	+	+	B7	+	+	Cw4>	82	A10	A28	B15	+	+	+	+	B21>	90	+	+	B52	B7	+	+	+	B48>	88	+	+	+	B17	+	+	+	
Tiercy, Jean-	6	90	+	A10	+	+		+		90	+	A28	+	+			Bw6		96	+	+	+	+	+	+		100	+	+	+	+	+	+	+		
Vidan-Jeras,	6	100	+	+	+	+	+	+		100	+	+	+	+	+	+			90	+	+	+	+	+	+	+		85	+	+	+	+		+	+	
Watson, Narel	6	90	+	+	+	+		+		90	A10	+	+	+			+		90	+	+	+	+	+	+	+		85	+	+	+	+		+	+	

Serum Exchange #540

The results for Serum Exchange #540 (sera 1153 -1156), are summarized in Tables 14-18 and individual laboratory results by method are listed in Tables

19-26. Sera strongly positive to B40 (B60, B61) were examined in this study.

1153	method	#labs	B60	B61	B48	B41	B81	B7	B27	B47	B13	B42	A31	A33	A74	A32	B73	Cw7	A2	A30	A29	B45	B50
	NIH-Std	7	86	71	14	29																	
	NIH-Ext	3	100	100	33	67	33									33							
	AHG	4	100	100	50	50	25	50	50	50	25	25	25	25	25		25		25				
	Luminex	28	93	93	89	100	82	96	96	93	86	100	100	100	93	100	100	89	89	100	93	96	96
	ELISA	2	100	100	50	100	50	100	100	100	100	50	50	50	50	100		50		100	50	100	100
	C1q	1	100	100	100		100											100					
	Other	2	100	100	50	50	25	50	50	50	25	25	25	25	25		25		25				

Sample 1153 was found to be strongly positive to B60 and B61 by all methods. Reactivity to a number of 7C specificities was also reported by various methods. Additional reactivity to A30, A31, and 10C specificities was reported by AHG, Luminex, and ELISA. Luminex also reported reactivity to a number of C-locus antigens. Anti-DQ2 reactivity was detected by Luminex.

1153	method	#labs	DQ2		
	Luminex	10	100		
	Other	1	no antigens assigned		

For **Sample 1154**, strong reactivity to B60 and B61 was reported by all methods. Reactivity to other 7C specificities (B7, B13, B27, B41, B42, B47, B48, B81) was reported by various methods. Luminex and Elisa also detected strong reactivity to B44, B45, B49, and B50. Additional reactivity to 5C specificities was reported by Luminex. Anti-DR4 reactivity was reported by Luminex and 1 lab using PRA beads.

1154	method	#labs	DR4
	Luminex	11	82
	Other	1	100

1154	method	#labs	B60	B61	B7	B13	B27	B48	B41	B81	B47	B42	B73	A31	A66	A2	A74	B45	B44	B49	B50	B55	B67	B51	B53
	NIH-Std	7	100	100	29	86	14	14							14										
	NIH-Ext	3	100	100	33	100	33	33	33	33	100														
	AHG	4	100	100	50	25	50	50	50	25	50	25	25	25		25	25								
	Luminex	28	89	93	100	100	100	86	100	82	100	89	100		39			100	96	89	96	75	75	71	64
	ELISA	2	100	100	100	100	100	50	100	50	50	50		50				100	100	100	50	50	50	100	50
	C1q	1	100	100	100	100	100	100	100	100	100		100												
	Other	2	100	100	100	100	100		100	100		100		50	50	50	50								

1154	method	#labs	A6602	A30	A33	A29	A32	Cw2	B72	B35	B62	B76	B82	B59	B78	B38	B71	Cw17	B18	B2708	B37	B56	B77	B39	A69	A80
	NIH-Std	7																								
	NIH-Ext	3																								
	AHG	4			25																					
	Luminex	28	64					86	79	75	71	71	68	61	61	57	57	54	46	32	32	25	24	21		
	ELISA	2		50																					50	50
	C1q	1	100																							
	Other	2		50	50	50	50																			

Sample 1155 was reported to be strongly positive to B61 by all methods. Reactivity to B45, B49, B50, and B60 was also reported by all methods, except ELISA. Additional reactivity to 2C and 12C specificities was reported by various methods. Strong reactivity to B71 and B75, as well as to 7C specificities and C-locus antigens (Cw2, Cw5, Cw15, Cw17, Cw18) was reported by Luminex. No class II reactivity was reported for this sample.

1155	method	#labs	B61	B60	B50	B49	B41	B45	B44	B35	B13	B47	B48	B39	A2	A24	A23	A69	A68	B42	B18	B62	B65	B56	B72	
	NIH-Std	7	57	71	57	29	43	29	14					14												
	NIH-Ext	3	33	100	100	67	100	100	67		67	33	33	33							33	100	33		67	
	AHG	4	75	100	100	75	75	75	25	25			25		25	25					25		50			
	Luminex	28	93	93	100	89	96	100	96	100	89	96	79	82	100	100	100	100	96	96	96	96	96	75	100	96
	ELISA	2	100				50			50	100	100		50	100	100	50	50	50	50				100		
	C1q	1	100	100	100	100	100	100	100	100	100	100	100			100	100				100	100				
	Other	2	100	100	100	50		50		50	50	50	50		50	50	50	50	50	50						
1155	method	#labs	B18	B54	B8	B37	B81	B38	B55	B7	B75	B71	B76	B82	Cw18	Cw5	Cw17	Cw2	Cw15	B67	B78	A26	A29	A30	A31	
	NIH-Std	7				14																				
	NIH-Ext	3																								
	AHG	4			25																					
	Luminex	28		100	93				100	93	93	89	82	79	86	86	86	79	79	75	75					
	ELISA	2	50			50	100	100														50	50	50	50	
	C1q	1	100																							
	Other	2		50																						

1156	method	#labs	B60	B61	B13	B7	A23	A24	B47	B27	B48	B81	A68	A69	B44	B45	B49	B50	B73	B41	B52	A2	A6602	A66	Cw2	B76	A1	B2708	A2403	B18	Cw5	Cw15
	NIH-Std	7	86	86	29	14																		14								
	NIH-Ext	3	100	100	100		33	67	67	33	33																					
	AHG	4	100	100	50	75	25	25	50	75	25	25	25																			
	Luminex	28	93	93	96	96	96	96	100	100	79	86	93	86	100	100	89	96	96	100	68	89	64	39	75	68	68	36	29			
	ELISA	2	100	100	100	100	50	100	100	100	50	100	50	50	50	100	100	50	50	100	100								50	50	50	
	C1q	1	100	100	100	100	100	100	100	100	100	100								100			100		100							
	Other	2	100	100	100	100	50	50	50	100	50		50	50	50	50	50	50				50										

1156	method	#labs	DP14	DPw6
	Luminex	3	67	67
	Other	1	no antigens assigned	

For **Sample 1156**, strong reactivity to B13, B60, and B61 was reported by all methods. Reactivity to a number of 5C and 7C specificities, along with reactivity to A2, A23, A24, A68, A69, B44, and B45 was detected by various methods. Weak reactivity to DPw6 and DP14 was reported by Luminex.

Table 14. Summary of the 540th Serum Exchange (Serum #1153-1156) by NIH-Standard and NIH-Extended - class I

Method: NIH-Standard

*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
7 typing Labs			7 typing Labs			6 typing Labs			6 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B60	86%	100%	B60	100%	100%	B60	83%	80%	B61	100%	100%
B61	71%	60%	B61	100%	86%	B61	67%	100%	B60	100%	91%
B41	29%	50%	B13	86%	100%	B50	67%	75%	B13	33%	50%
A66	14%	100%	B7	29%	11%	B41	50%	67%	A66	17%	100%
B48	14%	100%	A66	14%	100%	B45	33%	100%	B7	17%	5%
			B48	14%	100%	B49	33%	100%			
			B27	14%	12%	A66	17%	100%			
						B37	17%	100%			
						B39	17%	100%			
						B44	17%	14%			

Method: NIH-Extended

*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
3 typing Labs			3 typing Labs			3 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B60	100%	100%	B13	100%	100%	B41	100%	100%	B60	100%	100%
B61	100%	100%	B47	100%	100%	B45	100%	100%	B61	100%	100%
B41	67%	67%	B61	100%	100%	B50	100%	100%	B13	100%	93%
B48	33%	100%	B60	100%	93%	B60	100%	100%	A24	67%	100%
B81	33%	100%	B48	33%	100%	B62	100%	89%	B47	67%	100%
A32	33%	50%	B81	33%	100%	B49	67%	100%	A23	33%	100%
			B7	33%	86%	B72	67%	100%	B27	33%	100%
			B41	33%	67%	B44	67%	75%	B48	33%	100%
			B27	33%	33%	B13	67%	56%			
						B39	33%	100%			
						B47	33%	100%			
						B18	33%	75%			
						B48	33%	75%			
						B61	33%	50%			
						B65	33%	43%			

Table 15. Summary of the 540th Serum Exchange (Serum #1153-1156) by Antiglobulin and Other - class I

Method: Antiglobulin											
*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
4 typing Labs			4 typing Labs			4 typing Labs			4 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B60	100%	100%	B13	100%	100%	B50	100%	86%	B60	100%	100%
B61	100%	100%	B60	100%	100%	B60	100%	78%	B61	100%	100%
B41	50%	100%	B61	100%	100%	B41	75%	100%	B27	75%	82%
B48	50%	100%	B27	75%	100%	B61	75%	100%	B7	75%	77%
B7	50%	100%	B7	75%	85%	B49	75%	83%	B13	50%	100%
B27	50%	83%	B41	50%	100%	B45	50%	100%	B47	50%	100%
B47	50%	75%	B47	50%	100%	B65	50%	83%	A23	25%	100%
A2	25%	100%	B48	50%	100%	B64	50%	75%	A24	25%	100%
A31	25%	100%	B81	50%	100%	A24	25%	100%	B48	25%	100%
A74	25%	100%	A66	50%	80%	B18	25%	100%	B81	25%	100%
B13	25%	100%	B44	50%	67%	B44	25%	100%	A68	25%	50%
B42	25%	100%	B45	50%	60%	B48	25%	100%			
B73	25%	100%	B73	25%	100%	B8	25%	100%			
B81	25%	100%	B49	25%	67%	A2	25%	94%			
A33	25%	80%	B50	25%	50%	B35	25%	83%			

Method: Other											
*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
B13	100%	100%	B13	100%	100%	B50	100%	100%	B13	100%	100%
B27	100%	100%	B27	100%	100%	B60	100%	100%	B27	100%	100%
B41	100%	100%	B41	100%	100%	B61	100%	100%	B60	100%	100%
B42	100%	100%	B48	100%	100%	A2	50%	100%	B61	100%	100%
B60	100%	100%	B60	100%	100%	A23	50%	100%	B7	100%	100%
B61	100%	100%	B61	100%	100%	A24	50%	100%	A2	50%	100%
B7	100%	100%	B7	100%	100%	A68	50%	100%	A23	50%	100%
B81	100%	100%	B81	100%	100%	A69	50%	100%	A24	50%	100%
A2	50%	100%	B35	50%	100%	B13	50%	100%	A68	50%	100%
A29	50%	100%	B44	50%	100%	B35	50%	100%	A69	50%	100%
A30	50%	100%	B45	50%	100%	B42	50%	100%	B44	50%	100%
A31	50%	100%	B47	50%	100%	B45	50%	100%	B45	50%	100%
A32	50%	100%	B49	50%	100%	B47	50%	100%	B47	50%	100%
A33	50%	100%	B50	50%	100%	B48	50%	100%	B48	50%	100%
A66	50%	100%	B51	50%	100%	B49	50%	100%	B49	50%	100%
A74	50%	100%	B55	50%	100%	B54	50%	100%	B50	50%	100%

Table 16. Summary of the 540th Serum Exchange (Serum #1153-1156) by Luminex - class I

*** Serum 1153 ***		
28 typing Labs		
Antigen	Consensus	Inclusion
A31	100%	100%
A32	100%	100%
A33	100%	100%
B41	100%	100%
B42	100%	100%
B73	100%	100%
A30	100%	69%
B27	96%	100%
B45	96%	100%
B50	96%	100%
B7	96%	100%
A29	93%	100%
A74	93%	100%
B47	93%	100%
B60	93%	100%
B61	93%	100%
A2	89%	100%
B48	89%	100%
CW7	89%	95%
B13	86%	100%
B49	82%	100%
B81	82%	100%
CW17	79%	100%
CW10	75%	100%
CW9	75%	100%
B46	75%	83%
CW16	71%	100%
CW8	71%	100%
B55	68%	100%
B8	68%	100%
A6602	64%	75%
B67	54%	100%
CW2	54%	100%
CW12	46%	100%
A66	43%	83%
B2708	32%	100%
CW1	29%	100%
CW14	25%	100%

*** Serum 1154 ***		
28 typing Labs		
Antigen	Consensus	Inclusion
B13	100%	100%
B27	100%	100%
B41	100%	100%
B45	100%	100%
B47	100%	100%
B7	100%	100%
B73	100%	100%
B44	96%	100%
B50	96%	100%
B61	93%	100%
B49	89%	100%
B60	89%	100%
B42	89%	61%
B48	86%	100%
CW2	86%	78%
B81	82%	100%
B72	79%	86%
B35	75%	88%
B55	75%	83%
B67	75%	83%
B51	71%	92%
B62	71%	86%
B76	71%	80%
B82	68%	71%
A6602	64%	75%
B53	64%	71%
B59	61%	100%
B78	61%	64%
B38	57%	100%
B71	57%	100%
CW17	54%	100%
B18	46%	100%
A66	39%	80%
B2708	32%	100%
B37	32%	100%
B56	25%	100%
B77	25%	100%
B39	21%	100%

*** Serum 1155 ***		
28 typing Labs		
Antigen	Consensus	Inclusion
A2	100%	100%
A23	100%	100%
A24	100%	100%
A69	100%	100%
B35	100%	100%
B45	100%	100%
B50	100%	100%
B54	100%	100%
B55	100%	100%
B56	100%	100%
A68	96%	100%
B18	96%	100%
B41	96%	100%
B44	96%	100%
B47	96%	100%
B62	96%	100%
B72	96%	100%
B42	96%	86%
B60	93%	100%
B61	93%	100%
B7	93%	100%
B75	93%	100%
B8	93%	100%
B13	89%	100%
B49	89%	100%
B71	89%	100%
CW18	86%	100%
CW5	86%	100%
CW17	86%	88%
B39	82%	100%
B76	82%	100%
B48	79%	100%
B82	79%	100%
CW2	79%	100%
CW15	79%	88%
B65	75%	100%
B67	75%	100%
B78	75%	100%

*** Serum 1156 ***		
28 typing Labs		
Antigen	Consensus	Inclusion
B27	100%	100%
B41	100%	100%
B44	100%	100%
B45	100%	100%
B47	100%	100%
A23	96%	100%
A24	96%	100%
B13	96%	100%
B50	96%	100%
B7	96%	100%
B73	96%	100%
B60	93%	100%
B61	93%	100%
A68	93%	93%
B49	89%	100%
A2	89%	78%
B81	86%	100%
A69	86%	83%
B48	79%	100%
CW2	75%	89%
B76	68%	100%
B52	68%	86%
A1	68%	82%
A6602	64%	75%
A66	39%	71%
B2708	36%	100%
A2403	29%	100%

Table 17. Summary of the 540th Serum Exchange (Serum #1153-1156) by ELISA and C1q - class I

Method: ELISA											
*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
2 typing Labs			2 typing Labs			2 typing Labs			2 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
A32	100%	100%	B13	100%	100%	A24	100%	100%	B13	100%	100%
B13	100%	100%	B27	100%	100%	B13	100%	100%	B27	100%	100%
B27	100%	100%	B41	100%	100%	B47	100%	100%	B45	100%	100%
B41	100%	100%	B44	100%	100%	B56	100%	100%	B47	100%	100%
B45	100%	100%	B45	100%	100%	B61	100%	100%	B49	100%	100%
B47	100%	100%	B49	100%	100%	B64	100%	100%	B60	100%	100%
B61	100%	100%	B60	100%	100%	B81	100%	100%	B61	100%	100%
B7	100%	100%	B61	100%	100%	A2	100%	91%	B7	100%	100%
A30	100%	75%	B7	100%	100%	B38	100%	67%	B81	100%	100%
B60	100%	75%	B51	100%	60%	A23	50%	100%	A24	100%	90%
B46	100%	67%	A31	50%	100%	A26	50%	100%	B52	100%	75%
B50	100%	67%	A69	50%	100%	A29	50%	100%	B41	100%	60%
A29	50%	100%	A80	50%	100%	A30	50%	100%	A23	50%	100%
A31	50%	100%	B42	50%	100%	A31	50%	100%	A68	50%	100%
A74	50%	100%	B47	50%	100%	A68	50%	100%	A69	50%	100%
B42	50%	100%	B48	50%	100%	A69	50%	100%	B18	50%	100%
B48	50%	100%	B50	50%	100%	B18	50%	100%	B44	50%	100%
B81	50%	100%	B53	50%	100%	B35	50%	100%	B48	50%	100%
A33	50%	50%	B55	50%	100%	B37	50%	100%	B50	50%	100%
A80	50%	50%	B67	50%	100%	B39	50%	100%	B73	50%	100%
B18	50%	50%	B81	50%	100%	B41	50%	100%	CW15	50%	100%
CW7	50%	30%	A30	50%	60%	B42	50%	100%	CW5	50%	100%

Method: C1q											
*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***		
1 typing Labs			1 typing Labs			1 typing Labs			1 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
no consensus			no consensus			no consensus			no consensus		

Table 18 . Summary of the 540th Serum Exchange (Serum #1153-1156) by Luminex and Other- class II

Method: Luminex											
*** Serum 1153 ***			*** Serum 1154 ***			*** Serum 1155***			*** Serum 1156 ***		
10 typing Labs			11 typing Labs			13 typing Labs			3 typing Labs		
Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion	Antigen	Consensus	Inclusion
DQ2	100%	100%	DR4	82%	100%	no antigens reported			DP14	67%	100%
DR14	10%	100%	DQ2	9%	100%				DPW6	67%	100%
DR17	10%	100%							DP10	33%	100%
DR7	10%	100%							DP11	33%	100%
									DP13	33%	100%
									DP15	33%	100%
									DP17	33%	100%
									DP18	33%	100%
									DP9	33%	100%
									DPW2	33%	100%
									DPW3	33%	100%
									DPW5	33%	100%
									DR51	33%	100%

Method: Other											
*** Serum 1154 ***			*** Serum 1155 ***			*** Serum 1156 ***			*** Serum 1157 ***		
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 consensus			no antigens assigned			no antigens assigned		

Table 19. Individual laboratory results for Serum #1153-1156 by NIH-Standard and NIH-Extended

	**** Serum 1153 ****					**** Serum 1154 ****						**** Serum 1155 ****										**** Serum 1156 ****											
Investigator	% POS	B60	B61	B41	Other	% POS	B60	B61	B13	B7	Other	% POS	B60	B61	B50	B41	B45	B49								% POS	B61	B60	B13			Other	Method
Claas, F.H.J.	16	+	+			20	+	+	+			40	+	+													12	+	+				STD
Fort, Marylise	16	+				19	+	+																									STD
Hogan, Patrick		+	+				+	+	+	+	B27		+																				STD
McCluskey, James	13				A66	17	+	+	+		A66	17		+	+	+	+								A66	10	+	+			A66	STD	
Reed, Elaine F. PhD	28	+	+	+	B48	23	+	+	+		B48	36	+	+	+	+		+								16	+	+				STD	
Suciu-Foca, Nicole I	10	+	+			18	+	+	+			22	+	+	+			+								15	+	+	+			STD	
Watson, Narelle	7	+	+	+		11	+	+	+	+		14	+		+	+	+							B44	9	+	+	+		B7	STD		

	**** Serum 1153 ****					**** Serum 1154 ****					**** Serum 1155 ****										**** Serum 1156 ****												
Investigator	% POS	B60	B61	B41	Other	% POS	B13	B47	B61	B60	Other	% POS	B41	B45	B50	B60	B62	B49	B72	B44	B13	Other	% POS	B60	B61	B13	A24	B47	Other	Method			
Askar, Medhat Z. M	17	+	+	+	B81	31	+	+	+	+	B27,B41,B81	34	+	+	+	+	+	+									29	+	+	+	+	+	EXT
Dunn, Paul	27	+	+	+	B48,A32	34	+	+	+	+	B48,B7	53	+	+	+	+	+		+	+	+	B48,B65,B39>	50	+	+	+	+		B48,B27,A23	EXT			
Lardy, N.M.	15	+	+			26	+	+	+	+		63	+	+	+	+	+	+	+	+	+	B61,B47	30	+	+	+	+				EXT		

Table 20. Individual laboratory results for Serum #1153-1156 by Antiglobulin and Other

**** Serum 1153 ****											**** Serum 1154 ****															
Investigator	% POS	B60	B61	B41	B48	B7	B27			Other	% POS	B13	B60	B61	B27	B7	B41	B47	B48	B81	A66	B44	B45	Other	Method	
Cecka, J. Michael P	73	+	+	+	+	+	+			A2,B13,B47	45	+	+	+	+	+	+	+	+	+	+	+	+	+		Antiglobulin
Hahn, Amy B. PhD		+	+	+		+	+			B47,B81		+	+	+	+	+	+	+		+		+	+	B49	Antiglobulin	
Mah, Helen		+	+		+					B73		+	+	+	+	+			+		+			B50,B73	Antiglobulin	
Suciu-Foca, Nicole I	15	+	+								20	+	+	+											Antiglobulin	

**** Serum 1155 ****											**** Serum 1156 ****														
Investigator	% POS	B50	B60	B41	B61	B49	B45			Other	% POS	B60	B61	B27	B7	B13	B47							Other	Method
Cecka, J. Michael P	33	+	+	+	+	+	+			B48,B39	20	+	+	+	+	+	+							B48	Antiglobulin
Hahn, Amy B. PhD		+	+	+	+	+				A2,B62,B13		+	+	+	+	+	+							A24,A23,B81	Antiglobulin
Mah, Helen		+	+	+						B64,B65		+	+	+	+									A68	Antiglobulin
Suciu-Foca, Nicole I	38	+	+		+	+	+			A24,B44	18	+	+			+									Antiglobulin

**** Serum 1153 ****											**** Serum 1154 ****														
Investigator	% POS	B13	B27	B41	B42	B60	B61	B7	B81	Other	% POS	B13	B27	B41	B48	B60	B61	B7	B81					Other	Method
Phelan, Donna		+	+	+	+	+	+	+	+	A2,B48,A66		+	+	+	+	+	+	+	+					B62,B49,B50 >	Other
Reed, Elaine F. PhD	84	+	+	+	+	+	+	+	+		80	+	+	+	+	+	+	+	+						Other

**** Serum 1155 ****											**** Serum 1156 ****														
Investigator	% POS	B50	B60	B61	A2	A23	A24	A68	A69	Other	% POS	B13	B27	B60	B61	B7	A2	A23	A24					Other	Method
Phelan, Donna		+	+	+	+	+	+	+	+	B48,B62,B13		+	+	+	+	+	+	+	+					B48,B49,B50 >	Other
Reed, Elaine F. PhD	98	+	+	+						B49,B45	80	+	+	+	+	+								B81	Other

Table 21. Individual laboratory results for Serum #1153 by Luminex

		**** Serum 1153 ****																																											
Investigator	% POS	A31	A32	A33	B41	B42	B73	A30	B27	B45	B50	B7	A29	A74	B47	B60	B61	A2	B48	CW7	B13	B49	B81	CW17	CW10	CW9	B46	CW16	CW8	B55	B8	A6602	B67	CW2	CW12	A66	Other	Method							
Alvarez, Carretto &	34	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+											+											B8101,CW3	LMX		
Askar, Medhat Z. M	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B8101,CW1 >	LMX		
Askar/WV,	91	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW1,B2708	LMX		
Brouard, Tabary/Ph	85	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,B62,B56,B72 >	LMX		
Cecka, J. Michael P	87	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A68,A69 >	LMX		
Chen, Dong-Feng		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A203,A68,A69 >	LMX		
Dunn, Paul	99	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,B72 >	LMX		
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A68,A69,B2708	LMX		
Esteves Kondo, Det	40	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,B72 >	LMX		
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A68,A69,B2708	LMX		
Hardy, Steven PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	BW4,BW6	LMX	
Hogan, Patrick		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	BW4,BW6	LMX	
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX	
Klein, Tirza	24	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX		
Lardy, N.M.		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B14,CW3	LMX	
Loewenthal MD, Ro		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B14,CW3	LMX	
Mah, Helen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B56,A1,A26 >	LMX
Mani, Rama	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B56,A1,A26 >	LMX	
Martinho, Paiva &		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B56,A1,A26 >	LMX	
Meyer, Pieter Wa	33	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A24,B56,A1,A26 >	LMX	
Pancoska, Carol Ph	46	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX	
Permpikul, Vejbaesy	65	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,A24,B78,B62 >	LMX	
Phelan, Donna		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,A24,B78,B62 >	LMX	
Ramon, Daniel PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX
Reed, Elaine F. Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX	
Rosen-Bronson, Sa		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX	
Suciu-Foca, Nicole I	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,A24,B78,B62 >	LMX	
Turner, E.V. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B62,B56,A1,A68 >	LMX

Table 22. Individual laboratory results for Serum #1154 by Luminex

		**** Serum 1154 ****																																		
Investigator	% POS	B13	B27	B41	B45	B47	B7	B73	B44	B50	B61	B49	B60	B42	B48	CW2	B81	B72	B35	B55	B67	B51	B62	B76	B82	A6602	B63	B59	B78	B38	B71	CW17	B18	A66	Other	Method
Alvarez, Carretto &	20	+	+	+	+	+	+	+	+	+	+	+	+												+	+									B8101	LMX
Askar, Medhat Z. M	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+		+	+	+	+	+	+	B8101,B2708,B7801,B8201	LMX
Askar/WV,	94	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	B2708,B8201	LMX
Brouard, Tabary/Ph	53	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	B37,B8101,B2708,B7801 >	LMX
Cecka, J. Michael P	58	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+		+						+		LMX
Chen, Dong-Feng		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	B56,B77,B39,B8101 >	LMX
Dunn, Paul	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,B56,B77,B39 >	LMX
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+		+		B2708	LMX
Esteves Kondo, Det	34	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+			+	+					+	B37	LMX	
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
Hardy, Steven PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	BW4,BW6	LMX
Hogan, Patrick		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+									+		LMX
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,B56,B77,B39 >	LMX
Klein, Tirza	30	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+					+	+	+	+							B75,B56,B77,B39 > B40,B37	LMX	
Lardy, N.M.		+	+	+	+	+	+	+	+		+		+				+																			LMX
Loewenthal MD, Ro		+	+	+	+	+	+	+		+	+	+	+	+			+	+															+	A24,B52,B56,A26 >	LMX	
Mah, Helen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	B52,B75,B56,B77 >	LMX
Mani, Rama	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A11,A24 >	LMX
Martinho, Paiva &		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
Meyer, Pieter Wa	22	+	+	+	+	+	+	+	+	+			+		+	+									+								+	B40,B8101	LMX	
Pancoska, Carol Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+		LMX
Permpikul, Vejbaesy	53	+	+	+	+	+	+	+	+	+	+	+	+				+																		A34,B37	LMX
Phelan, Donna		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			+								LMX
Ramon, Daniel PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	B37,B2708,B8201	LMX
Reed, Elaine F. Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
Rosen-Bronson, Sa		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		LMX
Suciu-Foca, Nicole I	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B75,B56,B77,B39 >	LMX
Turner, E.V. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+							+	+	B8101,B2708	LMX

Table 23. Individual laboratory results for Serum #1155 by Luminex

		**** Serum 1155 ****																																									
Investigator	% POS	A2	A23	A24	A69	B35	B45	B50	B54	B55	B56	A68	B18	B41	B44	B47	B62	B72	B42	B60	B61	B7	B75	B8	B13	B49	B71	CW18	CW5	CW17	B39	B76	B48	B82	CW2	CW15	Other	Method					
Alvarez, Carretto &	38	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+															B8101,B2708,B7801 >	LMX			
Askar, Medhat Z. M	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A203,B51 >	LMX			
Askar/WV,	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B51 >	LMX			
Brouard, Tabary/Ph	89	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A203,B51 >	LMX			
Cecka, J. Michael P	89	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B51 >	LMX			
Chen, Dong-Feng		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A203,B51 >	LMX			
Dunn, Paul		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A203,B78 >	LMX			
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B51,B53 >	LMX			
Esteves Kondo, Det	54	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B51 >	LMX				
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B51 >	LMX			
Hardy, Steven PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B51 >	LMX		
Hogan, Patrick		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B27,B53,B81	LMX		
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B27 >	LMX		
Klein, Tirza	54	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,B40,B78,B27 >	LMX			
Lardy, N.M.		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B27,B81	LMX		
Loewenthal MD, Ro		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B27,A26,A29,A30 >	LMX		
Mah, Helen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B27 >	LMX		
Mani, Rama	98	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A11,B78 >	LMX		
Martinho, Paiva &		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B51 >	LMX		
Meyer, Pieter Wa	42	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,B15,B78,B27 >	LMX		
Pancoska, Carol Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B27 >	LMX		
Permpikul, Vejbaes	89	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	A29,A30,A31,A33	LMX		
Phelan, Donna		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B51 >	LMX		
Ramon, Daniel PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B51,B53 >	LMX	
Reed, Elaine F. Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B51,B53 >	LMX	
Rosen-Bronson, Sa		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B78,B51,B67,B64 >	LMX	
Suciu-Foca, Nicole I	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,B78,B27 >	LMX	
Turner, E.V. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW6,B78,B27,B67 >	LMX

Table 24. Individual laboratory results for Serum #1156 by Luminex

		**** Serum 1156 ****																														
Investigator	% POS	B27	B41	B44	B45	B47	A23	A24	B13	B50	B7	B73	B60	B61	A68	B49	A2	B81	A69	B48	CW2	B76	B52	A1	A6602	A66	B2708	A2403	Other	Method		
Alvarez, Carretto &	23	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+								+		+	+	B8101	LMX		
Askar, Medhat Z. M	96	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	A203,B8101	LMX		
Askar/WV,	95	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+		LMX		
Brouard, Tabary/Ph	64	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	A203,B8101	LMX		
Cecka, J. Michael P	67	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX		
Chen, Dong-Feng		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	A203,B8101	LMX	
Dunn, Paul	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW4,CW6,A203,B65 >	LMX		
Eckels/CPMC,		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Esteves Kondo, Det	33	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+					LMX	
Hardy, Steven PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		BW4,BW6	LMX		
Hogan, Patrick		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Holdsworth, Rhonda		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	CW17	LMX	
Klein, Tirza	34	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B40,A29,B35	LMX		
Lardy, N.M.		+	+	+	+	+					+	+	+	+				+													LMX	
Loewenthal MD, Ro		+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A80,B77,B42,B72	LMX		
Mah, Helen		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		CW17	LMX		
Mani, Rama	78	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B82,B67,A74,A36 >	LMX		
Martinho, Paiva &		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Meyer, Pieter Wa	27	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+		B40,B82,A29,A2C	LMX		
Pancoska, Carol Ph		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Permpikul, Vejbaesy	62	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		A25,A34,A32,B37 >	LMX		
Phelan, Donna		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX	
Ramon, Daniel PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX
Reed, Elaine F. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX
Rosen-Bronson, Sa		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+				LMX
Suciu-Foca, Nicole I	100	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+			LMX
Turner, E.V. PhD		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	B8101	LMX	

Table 25. Individual laboratory results for Serum #1153-1156 by ELISA and C1q

		**** Serum 1153 ****													**** Serum 1154 ****													
Investigator	% POS	A32	B60	B61	B13	B27	B41	B45	B47	B7	A30	B46	B50	Other	% POS	B13	B27	B41	B44	B45	B49	B60	B61	B7	B51	Other	Method	
Esteves Kondo, Dek	51	+	+	+	+	+	+	+	+	+	+	+	+	A80,B18,CW7	55	+	+	+	+	+	+	+	+	+	+	B67,A30,A31,A69 >	Elisa	
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	+	+	+	B48,A29,A31,A33 >		+	+	+	+	+	+	+	+	+	+	B48,B50,B47,B53 >	Elisa	

		**** Serum 1155 ****											**** Serum 1156 ****													
Investigator	% POS	A2	A24	B13	B47	B56	B61	B64	B81	B38	Other	% POS	B13	B27	B45	B47	B49	B60	B61	B7	B81	A24	B52	B41	Other	Method
Esteves Kondo, Dek	91	+	+	+	+	+	+	+	+	+	A26,A29,A30,A31 >	58	+	+	+	+	+	+	+	+	+	+	+	+	B78,A29,B18,B73 >	Elisa
Hahn, Amy B. PhD		+	+	+	+	+	+	+	+	+	B60,B48,B78,B62 >		+	+	+	+	+	+	+	+	+	+	+	+	B48,B50,B44,A23 >	Elisa

		**** Serum 1153 ****											**** Serum 1154 ****														
Investigator	% POS	B48	B60	B61	B81	CW10	CW14	CW18	CW2	CW4	CW6	CW7	Other	% POS	B13	B27	B41	A6602	B47	B48	B60	B61	B7	B73	B81	Other	Method
Phelan, Donna		+	+	+	+	+	+	+	+	+	+				+	+	+	+	+	+	+	+	+	+		C1q	

		**** Serum 1155 ****											**** Serum 1156 ****														
Investigator	% POS	A23	A24	B13	B47	B18	B35	B41	B44	B45	B48	B49	Other	% POS	B13	B27	B73	B47	B48	B60	B61	B7	A23	A24	A6602	Other	Method
Phelan, Donna		+	+	+	+	+	+	+	+	+	+	+	B60,B61,B62,B50 >		+	+	+	+	+	+	+	+	+	+	+	B81,CW2	C1q

Table 26. Summary of the 540th Serum Exchange (Serum #1153-1156) by Luminex and Other - class II

Investigator	**** Serum 1153 ****			**** Serum 1154 ****			**** Serum 1155 ****		**** Serum 1156 ****				Method
	% POS	DQ2	Other	% POS	DR4	Other	% POS	no antigens assigned	% POS	DP14	DPW6	Other	
Askar, Medhat Z. M				94	+								LMX
Brouard, Tabary/Ph	85	+											LMX
Chen, Dong-Feng					+								LMX
Dunn, Paul	99	+		96	+				100	+	+	DPW2,DPW3,DPW5,DP9 >	LMX
Fort, Marylise		+			+								LMX
Holdsworth, Rhonda		+			+					+			LMX
Klein, Tirza	24	+											LMX
Mani, Rama	96	+	DR7,DR17	98	+	DQ2							LMX
Pancoska, Carol Ph	46	+											LMX
Ramon, Daniel PhD					+								LMX
Reed, Elaine F. PhD					+								Other
Rosen-Bronson, Sai		+		0									LMX
Turner, E.V. PhD		+		0									LMX
Vather, Nelson/		+	DR14		+						+	DR51	LMX