REPORT OF THE 2nd Flow Cross Match Exchange
SEPTEMBER 10, 2014

Cells	7-8
Serum	9-12

Flow Cytometric Crossmatch

For the 2nd Flow Cross Match Exchange, 2 cells (cell nos. 7 - 8) and 4 sera (serum nos. 9 - 12) were examined. Flow crossmatch results are summarized on Table 1 and individual laboratory results, along with reported DSA, are listed in Tables 2 - 9.

Cell 7. The phenotype for this Asian cell is A11-B75-Cw8-DR12-DR52-DQ7 -DPw3-DP13. The B-cell crossmatch results for this sample against all 4 sera were reported as positive by all but 2 labs. One lab reported the B-cell crossmatch for this sample as negative against all 4 sera, while the second lab reported the B-cell crossmatch as negative against only serum 10. The T-cell crossmatch for this sample was reported as positive against sera nos. 9 - 11 and negative against serum 12. Only 1 discrepancy was reported, in which the T-cell crossmatch against serum 10 was reported as negative by 1 lab.

Cell 8. The phenotype for this Filipino sample is A2-A24-B38-Cw7-Cw12-DR8-DR15-DR51-DQ5-DQ6-DPw1-DPw3. The T-cell and B-Cell crossmatch results for this sample against sera nos. 9 – 11 were all reported as positive. Only 2 discrepancies were reported, in which 2 labs reported the B-cell crossmatch against serum 10 as negative. When tested against serum 12, the T-cell crossmatch for this sample was reported as negative, and the B-cell crossmatch was reported as positive. There were several discrepancies reported, with 1 lab reporting the T-cell crossmatch as positive and 2 labs reporting the B-cell crossmatch as negative against serum 12.

Table 1. Summary of Flow crossmatch results for Cell #007-#008 vs. Serum #009-#012

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
7	9	16	**Positive(15)** NT (1)	**Positive(14)** *Negative(1)* NT(1)
7	10	16	**Positive(14)** *Negative(1)* NT(1)	**Positive(13)** *Negative(2)* NT(1)
7	11	16	**Positive(15)** NT(1)	**Positive(14)** *Negative(1)* NT(1)
7	12	16	**Negative(15)** NT(1)	**Positive(14)** *Negative(1)* NT(1)

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
8	9	16	**Positive(15)** NT(1)	**Positive(15)** NT(1)
8	10	16	**Positive(15)** NT(1)	**Positive(13)** *Negative(2)* NT(1)
8	11	16	**Positive(15)** NT(1)	**Positive(15)** NT(1)
8	12	16	***Negative(14)*** *Positive(1)* NT(1)	**Positive(13)** *Negative(2)* NT(1)

Antibody Identification

Class I and Class II Luminex single antigen results are summarized on Tables 10 - 13 and individual laboratory results for Luminex and Flow PRA single antigen beads are listed in Tables 14 - 21.

For **serum 9**, class I and class II DSA against cell 7 and cell 8 were detected by Luminex single antigen and 1 lab using Flow PRA beads. Strong anti-B75 reactivity against cell 7 was reported with a median MFI value of 22337. Weaker reactivity to A11 (1222) was also reported by 2 labs against cell 7. Anti-B38 reactivity against cell 8 was detected with a median MFI value of 17992. Class II DSA (DR12 and DQ7) against cell 7 was reported with median MFI values of 11863 and 9049, respectively. Anti-DR8 (16551) activity against cell 8 was reported by all labs.

Serum 10 was found to be strongly positive for class I DSA against cell 7 and cell 8 by Luminex single antigen and 1 lab using Flow PRA. Anti-B75 reactivity (15090) against cell 7 was detected by all labs. All labs also reported reactivity to A2 and A24 against cell 8, with respective median MFI values of 20101 and 7975. This sample appeared to be class II negative, as no class II antigens were assigned by Luminex and only weak reactivity was reported by Flow PRA.

For **serum 11**, class I and class II DSA against cell 7 and cell 8 were detected by Luminex and Flow PRA. Anti-B75 reactivity (7628) was detected against cell 7, and anti-A24 (21891) reactivity was reported against cell 8. Anti-DR12 and –DQ7 reactivity against cell 7 was reported, with respective median MFI values of 4314 and 1458. A number of class II DSA (DQ5, DQ6, DR15, DR8) against cell 8 was detected, with strong to moderate median MFI values reported as follows: DQ5 (15090), DQ6 (15125), DR15 (13598), and DR8 (3305).

Serum 12 was found to be positive for class II DSA against cell 7 and 8 by Luminex and Flow PRA. Strong DQ7 reactivity against cell 7 was reported with a median MFI value of 20890. Additional reactivity to DPw3 (2818) and DP13 (1079) was also reported against cell 7. Reactivity to DR8, DPw3, DPw1 against cell 8 was reported, with median MFI values of 3909, 2818, and 1841, respectively. There were no class I DSA reported against either cell 7 or cell 8.

Conclusion:

For the **T-cell Flow crossmatch**, labs were in complete agreement for 6 out of the 8 crossmatch results. Among those 6 results, 5 were positive, with Luminex reporting DSA of moderate to high MFI. Only 2 labs reported results that were not consistent with the other labs. One lab reported the T-cell crossmatch for serum 10 against cell 7 as negative instead of positive, and the other reported the T-cell cross match for serum 12 against cell 8 as positive instead of negative.

For the **B-cell Flow crossmatch**, all labs were consistent in their results for sera samples 9 and 11 against cell 8. For the remaining 6 crossmatches, the majority of the labs reported positive results. In each case, Luminex reported DSA of moderate to high MFI values. Three labs reported a number (n=9) of negative results. One lab accounted for 5 of the negative results, 1 accounted for 2 of the negative results, and 1 accounted for 1 of the negative results.

NEXT MAILING DATE: March 25, 2015

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Table 2 . Individual Flow crossmatch results and DSA reported for Cell #007 vs. Serum #009

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					POS						POS				NO
3224	Chen, Dong-Fen	70	340			POS	B75(21483)	140	362			POS	DR12(10510)	5	13	YES
3135	Enczmann, J	1,2	1692	6,0		POS						POS		284		NO
792	Gandhi, Manish	52	361			POS	B75(17891)	106	544			POS	DR12(9076), DQ7(10290)	251	219	YES
216	Gebel, Bray &	1500			96269	POS	B75(30905)	4500			162001	POS	DR12(26184)	MESF 1341	MESF 1903	YES
859	Kamoun, Malek	1.5 ratio	436	50.9	132338	POS	B75(23100)	1.5 ratio	472	69.5	200894	POS	DR12(11600), DQ7(12800)	114	122	YES
23	Mah, Helen	60	7373			POS	B75(19789)	1000	17101			POS	DR12(11626), DQ7(4079)	379	5912	NO
206	McAlack-Hanau	2.98	388.85	25.08		POS	B75(20576)	4.94	1564.7	103.27		POS	DR12(11679), DQ7(13904)	16.15	15.3	YES
4661	Nishimura, Kenji	10	346			POS		20	1513			POS		15	22	YES
3966	Permpikul, Vejba	40	328			POS		100	455			*NEG*		95	375	NO
2400	Phelan, Donna	40	369			POS	B75(23161)	80	274			POS	DR12(12960), DQ7(6261)	223	435	NO
735	Ramon, Daniel	39	440		87973	POS	B75(23558)	58	430		95950	POS	DR12(11505), DQ7(9799)			YES
3753	Reed, Elaine F.	50	423			POS	B75(21751)	100	378			POS	DR12(11272)	214	330	NO
3625	Rees, Tracey	40 MCS	402		NT	POS	B75(19416)	40 MCS	341		NT	POS	DR12(3016), DQ7(3709)	112	306	NO
3798	Reinsmoen, Nan	70				NT		130				NT				YES
1160	Rosen-Bronson,	90	448			POS	B75(24078)	120	426			POS	DR12(11064), DQ7(11553)	239	329	YES

Table 3 . Individual Flow crossmatch results and DSA reported for Cell #007 vs. Serum #010

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					*NEG*						*NEG*				NO
3224	Chen, Dong-Fen	70	203			POS	B75(14700)	140	52			POS	no antigens assigned	5	13	YES
3135	Enczmann, J	1,2	410	1,4		POS						POS		284		NO
792	Gandhi, Manish	52	202			POS	B75(12007)	106	228			POS	no antigens assigned	251	219	YES
216	Gebel, Bray &	1500			17712	POS	B75(28027)	4500			6679	POS	no antigens assigned	MESF 1341	MESF 1903	YES
859	Kamoun, Malek	1.5 ratio	277	12.1	26504	POS	B75(15900)	1.5 ratio	271	11.4	26646	POS	no antigens assigned	114	122	YES
23	Mah, Helen	60	1406			POS	B75(12689)	1000	1751			POS	no antigens assigned	379	5912	NO
206	McAlack-Hanau	2.98	72.05	5.46		POS	B75(11481)	4.94	118.7	8.76		POS	no antigens assigned	16.15	15.3	YES
4661	Nishimura, Kenji	10	93			POS		20	461			POS		15	22	YES
3966	Permpikul, Vejba	40	175			POS		100	291			*NEG*		95	375	NO
2400	Phelan, Donna	40	199			POS	B75(13287)	80	111			POS	no antigens assigned	223	435	NO
735	Ramon, Daniel	39	301		21678	POS	B75(16111)	58	332		35883	POS	no antigens assigned			YES
3753	Reed, Elaine F.	50	220			POS	B75(11986)	100	211			POS	no antigens assigned	214	330	NO
3625	Rees, Tracey	40 MCS	196		NT	POS	B75(13767)	40 MCS	166		NT	POS	no antigens assigned	112	306	NO
3798	Reinsmoen, Nan	70				NT		130				NT				YES
1160	Rosen-Bronson,	90	286			POS	B75(16030)	120	249			POS	no antigens assigned	239	329	YES

Table 4 . Individual Flow crossmatch results and DSA reported for Cell #007 vs. Serum #011

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					POS						POS				NO
3224	Chen, Dong-Fen	70	170			POS	B75(7264)	140	243			POS	DR12(3833)	5	13	YES
3135	Enczmann, J	1,2	434	1,5		POS						POS		284		NO
792	Gandhi, Manish	52	178			POS	B75(4780)	106	543			POS	DR12(2524), DQ7(540)	251	219	YES
216	Gebel, Bray &	1500			8254	POS	B75(20317)	4500			35194	POS	DR12(11306), DQ7(3321)	MESF 1341	MESF 1903	YES
859	Kamoun, Malek	1.5 ratio	242	8.8	18100	POS	B75(6500)	1.5 ratio	357	24.7	64024	POS	DR12(4100)	114	122	YES
23	Mah, Helen	60	1523			POS	B75(8488)	1000	4043			POS	DR12(4293), DQ7(1422)	379	5912	NO
206	McAlack-Hanau	2.98	79.05	5.89		POS	B75(6536)	4.94	1434.7	94.77		POS	DR12(4166)	16.15	15.3	YES
4661	Nishimura, Kenji	10	51			POS		20	264			POS		15	22	YES
3966	Permpikul, Vejba	40	179			POS		100	388			*NEG*		95	375	NO
2400	Phelan, Donna	40	164			POS	B75(6660)	80	148			POS	DR12(4274)	223	435	NO
735	Ramon, Daniel	39	204		7650	POS	B75(7167)	58	276		20128	POS	DR12(3999), DQ7(909)			YES
3753	Reed, Elaine F.	50	171			POS	B75(4978)	100	227			POS	DR12(2544)	214	330	NO
3625	Rees, Tracey	40 MCS	138		NT	POS	B75(6145)	40 MCS	166		NT	POS	DR12(3199), DQ7(1099)	112	306	NO
3798	Reinsmoen, Nan	70				NT		130				NT				YES
1160	Rosen-Bronson,	90	244			POS	B75(5071)	120	299			POS	DR12(3217)	239	329	YES

Table 5 . Individual Flow crossmatch results and DSA reported for Cell #007 and Serum #012

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					NEG						POS				NO
3224	Chen, Dong-Fen	70				NEG	No DSA reported	140	221			POS	DQ7(20797)	5	13	YES
3135	Enczmann, J	1,2	242	0,9		NEG						POS		284		NO
792	Gandhi, Manish	52	16			NEG	No DSA reported	106	465			POS	DQ7(17409), DPw3(1592)	251	219	YES
216	Gebel, Bray &	1500			357	NEG	No DSA reported	4500			25288	POS	DQ7(30525), DPw3(6210)	MESF 1341	MESF 1903	YES
859	Kamoun, Malek	1.5 ratio	24	1.2	489	NEG	No DSA reported	1.5 ratio	349	23.2	59642	POS	DQ7(22100), DPw3(2000)	114	122	YES
23	Mah, Helen	60	0			NEG	No DSA reported	1000	4001			POS	DQ7(17989)	379	5912	NO
206	McAlack-Hanau	2.98	-1.15	0.93		NEG	No DSA reported	4.94	241.7	16.8		POS	DQ7(19282)	16.15	15.3	YES
4661	Nishimura, Kenji	10	7			NEG		20	244			POS		15	22	YES
3966	Permpikul, Vejba	40	96			NEG		100	376			*NEG*		95	375	NO
2400	Phelan, Donna	40	-23			NEG	No DSA reported	80	136			POS	DQ7(20921), DPw3(2842)	223	435	NO
735	Ramon, Daniel	39	10		120	NEG	No DSA reported	58	323		32719	POS	DQ7(23113), DPw3(2928)			YES
3753	Reed, Elaine F.	50	11			NEG	No DSA reported	100	238			POS	DQ7(19224)	214	330	NO
3625	Rees, Tracey	40 MCS	25		NT	NEG	No DSA reported	40 MCS	111		NT	POS	DQ7(15730), DPw3(1333)	112	306	NO
3798	Reinsmoen, Nan	70				NT		130				NT				YES
1160	Rosen-Bronson,	90	-45			NEG	No DSA reported	120	284			POS	DQ7(22705)	239	329	YES

Table 6 . Individual Flow crossmatch results and DSA reported for Cell #008 vs. Serum #009

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					POS						POS				NO
3224	Chen, Dong-Fen	70	234			POS	B38(16410)	140	394			POS	DR8(15173)	4	27	YES
3135	Enczmann, J	1,2	571	1,7		POS						POS		345		NO
792	Gandhi, Manish	52	266			POS	B38(12639)	106	413			POS	DR8(12876)	243	347	YES
216	Gebel, Bray &	1500			16674	POS	B38(30477)	4500			251094	POS	DR8(29750)	MESF 1287	MESF 2046	YES
859	Kamoun, Malek	1.5	266	10.99	28819	POS	B38(17400)	1.5	449	56.7	269142	POS	DR8(17300)	130	173	YES
23	Mah, Helen	60	3382			POS	B38(18000)	1000	39149			POS	DR8(16017)	441	1994	NO
206	McAlack-Hanau	2.98	121.3	8.73		POS	B38(18805)	4.94	1397.15	79.27		POS	DR8(16707)	15.7	17.85	YES
4661	Nishimura, Kenji	10	96			POS		20	890			POS		12	20	YES
3966	Permpikul, Vejba	40	202			POS		100	444			POS		108	318	NO
2400	Phelan, Donna	40	252			POS	B38(19776)	80	278			POS	DR8(18891)	185	418	NO
735	Ramon, Daniel	39	390		56119	POS	B38(17141)	58	562		582967	POS	DR8(17048)			YES
3753	Reed, Elaine F.	50	202			POS	B38(16101)	100	354			POS	DR8(16378)	230	353	NO
3625	Rees, Tracey	40 MCS	242		NT	POS	B38(14241)	40 MCS	384		NT	POS	DR8(4810)	111	305	NO
3798	Reinsmoen, Nar	70				NT		130				NT				YES
1160	Rosen-Bronson	90	338			POS	B38(17637)	120	484			POS	DR8(17115)	199	298	YES

Table 7 . Individual Flow crossmatch results and DSA reported for Cell #008 vs. Serum #010

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					POS						*NEG*				NO
3224	Chen, Dong-Fen	70	272			POS	A2(18347), A24(7407)	140	277			POS	no antigens assigned	4	27	YES
3135	Enczmann, J	1,2	808	2,3		POS						POS		345		NO
792	Gandhi, Manish	52	257			POS	A2(15298),A 24(4738)	106	229			POS	no antigens assigned	243	347	YES
216	Gebel, Bray &	1500			39901	POS	A2(30038),A 24(20016)	4500			61487	POS	no antigens assigned	MESF 1287	MESF 2046	YES
859	Kamoun, Malek	1.5	283	12.69	34022	POS	A2(22900),A 24(4600)	1.5	262	10.65	41877	POS	no antigens assigned	130	173	YES
23	Mah, Helen	60	4387			POS	A2(17655).A 24(8572)	1000	14041			POS	no antigens assigned	441	1994	NO
206	McAlack-Hanau	2.98	114.3	8.28		POS	A2(18309),A 24(7536)	4.94	268.65	16.05		POS	no antigens assigned	15.7	17.85	YES
4661	Nishimura, Kenji	10	110			POS		20	334			POS		12	20	YES
3966	Permpikul, Vejba	40	245			POS		100	384			*NEG*		108	318	NO
2400	Phelan, Donna	40	260			POS	A2(20082), 24(8046)	80	135			POS	no antigens assigned	185	418	NO
735	Ramo, Daniel	39	415		72513	POS	A2(21361),A 24(7727)	58	354		74347	POS	no antigens assigned			YES
3753	Reed, Elaine F.	50	239			POS	A2(22095),A 24(6155)	100	222			POS	no antigens assigned	230	353	NO
3625	Rees, Tracey	40 MCS	242		NT	POS	A2(15301),A 24(6720)	40 MCS	258		NT	POS	no antigens assigned	111	305	NO
3798	Reinsmoen, Nan	70				NT	NT	130				NT				YES
1160	Rosen-Bronson	90	296			POS	A2(19722),A 24(6208)	120	284			POS	no antigens assigned	199	298	YES

Table 8 . Individual Flow crossmatch results and DSA reported for Cell #008 vs. Serum #011

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					POS						POS				NO
3224	Chen, Dong-Fen	70	256			POS	A24(21725)	140	374			POS	DQ5(14838), DQ6(16163), DR15(12591), DR8(2699)	4	27	YES
3135	Enczmann, J	1,2	1248	3,6		POS						POS		345		NO

Table 8 . Individual Flow crossmatch results and DSA reported for Cell #008 vs. Serum #011 - cont.

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
792	Gandhi, Manish	52	252			POS	A24(18466)	106	348			POS	DQ5(9982) , DQ6(10664), DR15(9547), DR8(1672)	243	347	YES
216	Gebel, Bray &	1500			19229	POS	A24(30515)	4500			125378	POS	DQ5(30402), DQ6(30347), DR15(29209), DR8(8178)	MESF 1287	MESF 2046	YES
859	Kamoun, Malek	1.5	282	12.64	33850	POS	A24(22900)	1.5	428	47.2	220514	POS	DQ5(14800), DQ6(15900), DR15(13000), DR8(2900)	130	173	YES
23	Mah, Helen	60	4144			POS	A24(19110)	1000	25914			POS	DQ5(14695), DQ6(13336), DR15(12881), DR8(4820)	441	1994	NO
206	McAlack-Hanau	2.98	132.3	9.43		POS	A24(21526)	4.94	955.15	54.51		POS	DQ5(14206), DQ6(12619), DR15(12802)	15.7	17.85	YES
4661	Nishimura, Kenji	10	72			POS		20	615			POS		12	20	YES
3966	Permpikul, Vejba	40	251			POS		100	433			POS		108	318	NO
2400	Phelan, Donna	40	276			POS	A24(23742)	80	237			POS	DQ5(14431), DQ6(13195), DR15(13752), DR8(2981)	185	418	NO
735	Ramon, Daniel	39	409		68278	POS	A24(24355)	58	510		351286	POS	DQ5(15466), DQ6(16479), DR15(13801), DR8(2538)			YES
3753	Reed, Elaine F.	50	259			POS	A24(21536)	100	316			POS	DQ5(12707), DQ6(11280), DR15(11538), DR8(2761)	230	353	NO
3625	Rees, Tracey	40 MCS	279			NT	POS	A24(17904)	40 MCS	335		NT	POS	DQ5(11732), DQ6(12443), DR15(9075), DR8(2335)	111	305	NO
3798	Reinsmoen, Nar	70				NT	NT	130				NT				YES
1160	Rosen-Bronson	90	285			POS	A24(19023)	120	416			POS	DQ5(12735), DQ6(13954), DR15(11381), DR8(2165)	199	298	YES

Table 9 . Individual Flow crossmatch results and DSA reported for Cell #008 vs. Serum #012

Center	Investigator	T Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T Cell NEG Control MC	B Cell NEG Control MC	Pronase Treated
4345	Blasczyk, Rainer					NEG						POS				NO
3224	Chen, Dong-Fen	70				NEG	No DSA reported	140	191			POS	DR8(3737)	4	27	YES
3135	Enczmann, J	1,2	272	0,8		NEG						POS		345		NO
792	Gandhi, Manish	52	36			NEG	No DSA reported	106	203			POS	DR8(2890), DPw3(1592), DPw1(1106)	243	347	YES
216	Gebel, Bray &	1500			352	NEG	No DSA reported	4500			12192	POS	DR8(6800), DPw3(6210), DPw1(3755)	MESF 1287	MESF 2046	YES
859	Kamoun, Malek	1.5	26	1.26	681	NEG	No DSA reported	1.5	215	6.94	25147	POS	DR8(2900), DPw3(2000), DPw1(1300)	130	173	YES
23	Mah, Helen	60	0			NEG	No DSA reported	1000	4103			POS	DR8(4916)	441	1994	NO
206	McAlack-Hanau	2.98	2.55	1.16		NEG	No DSA reported	4.94	100.15	6.61		POS	DR8(3733)	15.7	17.85	YES
4661	Nishimura, Kenji	10	6			NEG		20	75			POS		12	20	YES
3966	Permpikul, Vejba	40	106			NEG		100	265			*NEG*		108	318	NO
2400	Phelan, Donna	40	19			NEG	No DSA reported	80	107			POS	DR8(4609), DPw3(2842)	185	418	NO
735	Ramon, Daniel	39	84		1606	*POS*	No DSA reported	58	300		43023	POS	DR8(3602), DPw3(2928), DPw1(2057)			YES
3753	Reed, Elaine F.	50	11			NEG	No DSA reported	100	100			*NEG*	DR8(2980)	230	353	NO
3625	Rees, Tracey	40 MCS	17		NT	NEG	No DSA reported	40 MCS	68		NT	POS	DR8(3161), DPw3(1333), DPw1(985)	111	305	NO
3798	Reinsmoen, Nar	70				NT		130				NT				YES
1160	Rosen-Bronson	90	58			NEG	No DSA reported	120	281			POS	DR8(3672)	199	298	YES

Table 10 . Summary of Single Antigen results for Serum #009

Class I							
*** Serum 9 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B18	11/11	100%	22663	14664	3250	18018	31088
B35	11/11	100%	23862	15440	3683	19874	34213
B37	11/11	100%	20294	13131	3643	15706	30281
B38	11/11	100%	17992	11641	4360	12639	30477
B75	11/11	100%	22337	14453	3278	17891	30905
B41	11/11	100%	12804	8284	5125	7893	28160
B42	11/11	100%	11204	7249	5160	6323	26643
B45	11/11	100%	10042	6498	4703	5479	24180
B46	11/11	100%	15941	10314	3852	10915	27021
B48	11/11	100%	16298	10545	4738	11327	30231
B49	11/11	100%	20531	13284	3745	15603	30848
B50	11/11	100%	21592	13971	3646	16223	31284
B51	11/11	100%	23271	15057	3018	19031	30998
B52	11/11	100%	17996	11644	3941	12996	29589
B53	11/11	100%	22426	14510	3289	17104	30946
B54	11/11	100%	16533	10698	4279	11494	29284
B55	11/11	100%	11477	7426	4925	6718	26198
B56	11/11	100%	20735	13416	3737	14987	30746
B57	11/11	100%	12801	8282	4612	8498	26834
B58	11/11	100%	11959	7738	4226	7830	24569
B59	11/11	100%	11816	7645	4184	8069	24516
B60	11/11	100%	12557	8124	5270	7537	28404
B61	11/11	100%	11450	7408	5301	7562	27696
B62	11/11	100%	22198	14363	3437	17070	31296
B63	11/11	100%	17814	11526	3922	12788	29187
B64	11/11	100%	11005	7121	4454	6751	24197
B65	11/11	100%	10166	6577	4174	6099	22595
B67	11/11	100%	14582	9435	5130	9201	29822
B72	11/11	100%	21860	14144	3296	17330	31070
B71	11/11	100%	21305	13785	3354	16459	30507
B7	11/11	100%	10134	6557	5031	5587	25546
A25	11/11	100%	5812	3760	2463	3418	12994
A33	11/11	100%	5355	3464	2412	3251	12282
A34	11/11	100%	5457	3531	1203	3415	7136

Class II							
*** Serum 9 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ4	11/11	100%	19637	12706	5029	9773	30868
DQ9	11/11	100%	10978	7103	5524	2786	26901
DR11	11/11	100%	5674	3671	3348	741	15122
DR12	11/11	100%	11863	7676	5183	3016	26184
DR13	11/11	100%	7869	5091	4376	1506	20570
DR14	11/11	100%	6405	4144	3986	975	18118
DR17	11/11	100%	5653	3657	3231	774	14644
DR8	11/11	100%	16551	10709	5514	4810	29750
DQ8	10/11	91%	10295	6055	5621	2675	25963
DR18	10/11	91%	4925	2897	3134	590	13254
DQ7	8/11	73%	9049	4258	3657	3709	13904
DQ2	3/11	27%	1179	208	131	997	1300

DSA present
Red = DSA against cell #007 only
Blue = DSA against cell #008 only

Table 11 . Summary of Single Antigen results Serum #010

Class I							
*** Serum 10 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A2	11/11	100%	20101	14740	3939	15298	30038
A24	11/11	100%	7975	5848	3998	4600	20016
A68	11/11	100%	18289	13411	4061	13252	29906
A69	11/11	100%	18806	13790	3998	12834	29523
B13	11/11	100%	15764	11560	4345	11936	28908
B57	11/11	100%	13742	10077	4190	9792	26463
B62	11/11	100%	17921	13141	4037	13387	29479
B63	11/11	100%	12174	8927	3673	8481	23306
B75	11/11	100%	15090	11065	4401	11481	28027
B76	11/11	100%	16318	11966	3413	12013	26093
B77	11/11	100%	13693	10041	3754	9955	24991
A23	10/11	91%	2891	1927	1583	1200	7168
B49	10/11	91%	2980	1986	874	1860	5118
B50	10/11	91%	2785	1856	799	1802	4683
B55	10/11	91%	3444	2295	1120	2108	6318
B56	10/11	91%	2624	1749	2624	1701	3591
B67	10/11	91%	3390	2260	3390	2078	5664
B72	10/11	91%	2681	1787	2681	1608	4552
B46	9/11	82%	2592	1555	2592	1494	4248
B42	8/11	73%	2304	1228	2304	1372	3795
B41	6/11	55%	1402	560	1402	728	2591
Cw9	5/11	45%	1636	545	1636	710	3513
A2403	3/11	27%	6447	1289	6447	4500	7933
B71	3/11	27%	817	163	817	416	1110

Class II							
*** Serum 10 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
no antigens assigned							

DSA present
Red = DSA against cell #007 only
Blue = DSA against cell #008 only

Table 12 . Summary of Single Antigen results Serum #011

Class I							
*** Serum 11 ***							
11 typing Labs							
				MFI			
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A23	11/11	100%	21574	15821	3459	17760	30447
A24	11/11	100%	21891	16053	3421	17904	30515
A25	11/11	100%	7713	5655	3858	4372	19142
B18	11/11	100%	5262	3858	3005	2933	14342
B35	11/11	100%	10756	7888	5012	6643	25881
B51	11/11	100%	11195	8209	5116	7193	26734
B52	11/11	100%	7287	5343	3750	4285	18670
B53	11/11	100%	8232	6036	4257	5081	21170
B71	11/11	100%	4613	3383	2316	2623	11259
B75	11/11	100%	7628	5593	4149	4780	20317
B77	11/11	100%	4799	3519	2450	2813	12036
Cw4	10/11	91%	9500	6333	4192	5589	21364
B48	9/11	82%	2966	1779	1806	1555	7780
B78	9/11	82%	11368	6821	5768	6866	26938
B37	8/11	73%	2522	1344	1611	1291	6465
B60	8/11	73%	2001	1067	1260	1037	5116
B7	8/11	73%	2120	1130	1399	1035	5647
B65	7/11	64%	1841	859	1052	865	3909
B72	7/11	64%	1875	875	1218	823	4496
A30	6/11	55%	1199	479	742	472	2655
A31	6/11	55%	1934	773	1203	836	4382
A32	6/11	55%	1094	437	512	522	2055
B64	6/11	55%	1585	633	802	712	2967
B81	6/11	55%	1582	4104	448	1060	2491
A2403	5/11	45%	23291	694	4105	18374	30688
B46	4/11	36%	1189	830	694	531	2356
B49	4/11	36%	1474	521	830	478	2346
B50	3/11	27%	859	649	521	373	1582
B56	3/11	27%	933	126	650	318	1831

Class II							
*** Serum 11 ***							
11 typing Labs							
				MFI			
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ5	11/11	100%	15090	11066	5088	9982	30402
DQ6	11/11	100%	15125	11092	5149	10664	30347
DR103	11/11	100%	3618	2653	2096	1867	9784
DR11	11/11	100%	4357	3194	2281	2459	11270
DR12	11/11	100%	4314	3163	2298	2524	11306
DR15	11/11	100%	13598	9971	5155	9075	29209
DR16	11/11	100%	11177	8196	4865	7231	26019
DR51	11/11	100%	12513	9176	5088	7999	27909
DR9	11/11	100%	3566	2614	2242	1997	10456
DQ4	10/11	91%	5066	3377	3364	2595	14899
DR13	10/11	91%	3178	2118	1934	1709	8667
DR8	10/11	91%	3305	2203	1802	1672	8178
DR1	8/11	73%	2037	1086	1483	961	5793
DR4	6/11	55%	2727	1090	2106	1394	7377
DQ7	5/11	45%	1458	486	974	540	3321
DQ8	5/11	45%	2271	757	1352	968	4866
DQ9	5/11	45%	2542	847	1670	1038	5774
DR18	4/11	36%	1254	334	347	819	1762
DR53	3/11	27%	1020	204	828	357	2187

DSA present
Red = DSA against cell #007 only
Blue = DSA against cell #008 only

Table 13 . Summary of Single Antigen results Serum #012

Class I							
*** Serum 12 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B7	11/11	100%	6072	4452	3131	3472	15064
B67	11/11	100%	3808	2792	2208	2084	10136
Cw15	10/11	91%	9332	6221	5238	5300	24151
A31	10/11	91%	3475	2316	2345	1600	9998
B55	10/11	91%	3478	2318	2179	1775	9389
B42	9/11	82%	3085	1850	2062	1481	8272
B56	9/11	82%	2718	1630	1721	1348	7074
B81	9/11	82%	3215	1929	1241	1989	5707
Cw2	9/11	82%	3075	1844	2159	1387	8674
Cw5	9/11	82%	3542	2125	2460	1663	9800
B61	8/11	73%	2149	1145	1596	1058	6034
A30	7/11	64%	2789	1301	2090	1170	7618
B48	7/11	64%	2237	1044	1597	924	5579
B60	7/11	64%	2027	946	1366	868	4819
B51	6/11	55%	1718	687	1098	701	3888
B8	6/11	55%	1831	732	1036	663	3485
A33	5/11	45%	1272	423	839	502	2797
B18	5/11	45%	1625	541	892	646	3097
B39	5/11	45%	1732	577	1293	690	4120
B41	5/11	45%	1688	562	1032	573	3342
B54	5/11	45%	1495	498	925	526	3027
B78	5/11	45%	2044	681	1441	822	4657
A74	4/11	36%	1448	386	893	462	2892
B13	4/11	36%	926	246	408	552	1550
B52	4/11	36%	828	220	360	423	1219
B82	4/11	36%	1658	442	656	1129	2762
B8201	4/11	36%	2636	702	1659	1141	5250
A68	3/11	27%	926	185	315	482	1185
B59	3/11	27%	1024	204	457	398	1479
B63	3/11	27%	828	165	347	342	1131

Class II							
*** Serum 12 ***							
11 typing Labs							
			MFI				
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DQ7	11/11	100%	20890	15319	3755	15730	30525
DQ8	11/11	100%	20159	14782	3861	16100	29440
DQ9	11/11	100%	20961	15371	3754	15893	30296
DR4	11/11	100%	20347	14921	3783	15017	30146
DR53	11/11	100%	14315	10497	4908	9360	28867
DQ4	11/11	100%	13705	10050	5445	9197	29541
DQ2	11/11	100%	10197	7477	5461	5469	26258
DR1	11/11	100%	6796	4983	3575	3914	17696
DR10	11/11	100%	6166	4521	3132	3241	15362
DR14	11/11	100%	3570	2617	1840	2081	9107
DR7	11/11	100%	4982	3653	2367	2404	11483
DR8	11/11	100%	3909	2866	1110	2890	6800
DR9	11/11	100%	7864	5766	4342	2779	20453
DPW2	9/11	82%	3777	2266	2340	2065	10126
DPW4	9/11	82%	4223	2533	2567	2285	11178
DP18	7/11	64%	2838	1324	1976	1221	7492
DPW3	6/11	55%	2818	1127	1628	1333	6210
DP11	5/11	45%	1637	545	1054	788	3652
DPW1	5/11	45%	1841	613	1027	985	3755
DP13	4/11	36%	1079	287	573	571	2000
DPW6	4/11	36%	1440	384	893	674	2900
DR18	3/11	27%	852	170	284	649	1253
DQ6	2/11	18%	375	49	59	316	433
DR13	2/11	18%	714	95	113	601	827

DSA present
Red = DSA against cell #007 only
Blue = DSA against cell #008 only
Green = DSA against cell #007 and cell #008

Table 14a. Individual laboratory results for Serum #009 - class I by Luminex

Investigator	B18	B35	B37	B38	B75	B41	B42	B45	B46	B48	B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	Other	Vendor
Chen, Dong-Fe	21602	22605	18548	16410	21483	10858	9725	8350	14323	12741	18430	20150	22344	15822	21137	15042	10000	19389	11354	10441	A26,A6601b>	One Lambda
Gandhi, Manis	18018	19874	15706	12639	17891	7893	6323	5479	10915	11327	15603	16223	19031	12996	17104	11494	6718	14987	8498	7830	A26,A11,A66 >	One Lambda
Gebel, Bray &	31088	34213	30281	30477	30905	28160	26643	24180	27021	30231	30848	31284	30998	29589	30946	29284	26198	30746	26834	24569	A26,A6601 >	
Kamoun, Male	23100	24000	20300	17400	23100	11700	9700	9100	16500	15100	21000	22000	23600	17800	23000	16000	10100	21100	11500	10800	A26,A6601 >	One Lambda
Mah, Helen	20102	20934	18881	18000	19789	14606	13573	11999	16128	17072	19486	20270	20164	16809	19811	16234	13587	19531	13535	13682	A26,A11,A66 >	One Lambda
McAlack-Hana	21652	22115	19642	18085	20576	11383	9702	8735	14498	15431	19560	20425	21779	16860	21330	15162	10035	19817	11880	11030	A66,B71,B57 >	One Lambda
Phelan, Donna	23879	24399	21557	19776	23161	12738	10187	9330	16609	17294	21774	23314	24034	18487	23534	17025	11022	22066	12328	11680	A26,A66,B71 >	One Lambda
Ramon, Daniel	23517	25180	20596	17141	23558	11316	9144	8358	15516	15238	20912	21827	24724	18238	23545	15855	9501	21180	11809	10764	A26,A1102 >	One Lambda
Reed, Elaine F	22390	23352	19592	16101	21751	10185	8651	7598	15457	14706	19611	21101	23188	16683	22122	14494	8892	20148	11118	9704	A26,A66,B71 >	One Lambda
Rees, Tracey	19578	20805	16371	14241	19416	9753	8659	8308	12937	13495	16928	17981	21208	16591	20464	14531	9042	17212	9824	9471	A26,A1102 >	One Lambda
Rosen-Bronso	24369	25006	21762	17637	24078	12249	10941	9030	15443	16642	21690	22938	24906	18086	23693	16745	11155	21910	12127	11578	A26,A2,A66 >	One Lambda
Avg	22663	23862	20294	17992	22337	12804	11204	10042	15941	16298	20531	21592	23271	17996	22426	16533	11477	20735	12801	11959		
Std Dev	3250	3683	3643	4360	3277	5125	5160	4703	3852	4738	3745	3646	3018	3941	3289	4279	4925	3737	4612	4226		
MFI %CV	14%	15%	18%	24%	15%	40%	46%	47%	24%	29%	18%	17%	13%	22%	15%	26%	43%	18%	36%	35%		

Table 14b. Individual laboratory results for Serum #009 - class I by Flow PRA

Investigator	B18	B35	B37	B38	B75	B41	B42	B45	B46	B48	B49	B50	B51	B52	B53	A25	A33	A34	A68	A69	Other	Vendor
Nishimura, Ker				19882	49491																A1101,A2,A24>	One Lambda

Table 15a. Individual laboratory results for Serum #010 - class I by Luminex

Investigator	A2	A24	A68	A69	B13	B57	B62	B63	B75	B76	B77	A23	B49	B50	B55	B56	B67	B72	B46	B42	Other	Vendor
Chen, Dong-Fe	18347	7407	17361	17641	14198	12191	16269	10873	14700	14883	11815	2554	1860	1900	2744	1835	2594	1970	2326	1598	A2403,A203 >	One Lambda
Gandhi, Manis	15298	4738	13252	12834	11936	9792	13387	8481	12007	12013	9955	1609	1982	1802	2108	1701	2078	1608	1494	1372	B71,B41,CW9	One Lambda
Gebel, Bray &	30038	20016	29906	29523	28908	26463	29479	23306	28027	26093	24991	7168	5118	4683	6318	3591	5664	4552	3799	3795	B41,CW9	
Kamoun, Male	22900	4600	18900	19700	16200	12900	18500	11800	15900	16000	13100	1200	2700	2500	3300	2700	3700	2500	1700	2100	A2403,B41	One Lambda
Mah, Helen	17655	8572	16469	17018	13807	13372	16431	11921	12689	15694	13239	3772	3689	3609	4448	3396	4029	3839	4248	2968	B71,B41	One Lambda
McAlack-Hana	18309	7536	16638	17315	13756	12488	16492	10792	11481	14866	12074											One Lambda
Phelan, Donna	20082	8046	18987	20565	15899	14426	18677	12343	13287	17816	14830	2723	3025	2726	3105	2523	3065	2381	2792			One Lambda
Ramon, Daniel	21361	7727	19202	19558	16230	12949	17716	11335	16111	16319	12981	2696	2806	2556	3061	2468	3076	2368	2329	2026	B41,CW9	One Lambda
Reed, Elaine F	22095	6155	18466	19747	14713	13261	19262	12206	11986	16350	13046	1925	2845	2543	3003	2720	3472	2427	1978	2150		One Lambda
Rees, Tracey	15301	6720	15005	15410	13077	11008	14192	10144	13767	13695	11770	2967	3183	3052	3612	2944	3280	3001	2664	2421	A2403,B71 >	One Lambda
Rosen-Bronsor	19722	6208	16989	17553	14684	12308	16721	10708	16030	15773	12824	2296	2592	2481	2738	2358	2946	2166				One Lambda
Avg	20101	7975	18289	18806	15764	13742	17921	12174	15090	16318	13693	2891	2980	2785	3444	2624	3390	2681	2592	2304		
Std Dev	3938.9	3997.8	4061.2	3997.1	4344.8	4189.9	4036.5	3672.6	4400.7	3413.4	3753.7	1583	874	799	1120	568	919	846	867	723		
MFI %CV	20%	50%	22%	21%	28%	30%	23%	30%	29%	21%	27%	55%	29%	29%	33%	22%	27%	32%	33%	31%		

Table 15b. Individual laboratory results for Serum #010 - class I by Flow PRA

Investigator	A2	A24	A68	A69	B13	B57	B62	B63	B75	B76	B77	A23	B49	B50	B55	B56	B67	B72	B46	B42	Other	Vendor
Nishimura, Ker	34495	10520							13726												A1101,B38 >	One Lambda

Table 16a. Individual laboratory results for Serum #011 - class I by Luminex

Investigator	A23	A24	A25	B18	B35	B51	B52	B53	B71	B75	B77	CW4	B48	B78	B37	B60	B7	B65	B72	A30	Other	Vendor
Chen, Dong-Fe	21389	21725	7777	4724	10598	11060	6453	7751	4236	7264	4235	8016	1972		1851	1478	1797	1415	1423	906	A32,A2403,A31 >	One Lambda
Gandhi, Manis	17760	18466	4372	2933	6643	7193	4285	5081	2623	4780	2813	5952	1555	7299	1291	1037	1035	865	823	472	A32,A31,B56,B46>	One Lambda
Gebel, Bray &	30447	30515	19142	14342	25881	26734	18670	21170	11259	20317	12036	21364	7780	26938	6465	5116	5647	3909	4496	2655	B49,B8101,B64 >	
Kamoun, Male	22200	22900	5900	4100	8800	9600	5800	6500	3400	6500	3600	8300	2100	9900	1700	1400	1500	1100	1100		A2403,B81	One Lambda
Mah, Helen	18598	19110	9123	6489	11499	11934	8544	9055	6569	8488	6401	9805	3624	12003	3404	2670	2590	2951	2785	1631	A32,A31,B56 >	One Lambda
McAlack-Hana	21450	21526	8222	4925	10870	11020	6817	7952	4022	6536	4256			11430								One Alambda
Phelan, Donna	23048	23742	7137	4650	10123	10050	6434	7675	4197	6660	4399	9664	2598	10995								One Lambda
Ramon, Daniel	24204	24355	6703	4371	10360	10767	6582	7652	3767	7167	4109	9527	2305		2211	1529	1603	1234	1263	713	A32,A2403,A31 >	One Lambda
Reed, Elaine F	21285	21536	5218	3293	7924	8297	5035	5979	2823	4978	3190	7745	1762	8857	1419	1276	1310				B81	One Lambda
Rees, Tracey	17923	17904	5844	3793	8204	8155	6245	6627	3756	6145	4159	9042	3000	8028	1832	1504	1480	1415	1237	814	A32,A2403,A31 >	One Lambda
Rosen-Bronso	19014	19023	5400	4259	7419	8338	5292	5111	4097	5071	3590	5589		6866								One Lambda
Avg	21574	21891	7713	5262	10756	11195	7287	8232	4614	7628	4799	9500	2966	11368	2522	2001	2120	1841	1875	1199		
Std Dev	3459	3421	3858	3005	5012	5116	3750	4257	2316	4149	2450	4192	1806	5768	1611	1260	1399	1052	1218	742		
MFI %CV	16%	16%	50%	57%	47%	46%	51%	52%	50%	54%	51%	44%	61%	51%	64%	63%	66%	57%	65%	62%		

Table 16b. Individual laboratory results for Serum #011 - class I by Flow PRA

Investigator	A23	A24	A25	B18	B35	B51	B52	B53	B71	B75	B77	CW4	B48	B78	B37	B60	B7	B65	B72	A30	Other	Vendor
Nishimura, Ker		57071								6543											A2,B38,CW7,CW8>	One Lambda

Table 17a. Individual laboratory results for Serum #012 - class I by Luminex

Investigator	B7	B67	CW15	A31	B55	B42	B56	B81	CW2	CW5	B61	A30	B48	B60	B51	B8	A33	B18	B39	B41	Other	Vendor
Chen, Dong-Fe	5019	2845	8314	2723	2610	2035	1897		2421	2837	1289	2045	924	951	1038	1007			1028		B7801,B8101,B8201	One Lambda
Gandhi, Manis	3472	2084	5300	1730	1775	1481	1348	1989	1387	1663	1058	1170	940	868	763	663	502	646	690	573	A68,A74,A2,A66 >	One Lambda
Gebel, Bray &	15064	10136	24151	9998	9389	8272	7074		8674	9800	6034	7618	5579	4819	3888	3485	2797	3097	4120	3342	A74,B8101,B78 >	
Kamoun, Male	4100	2600	6700	1600	1900	1700	1600	2400	1700	1900	1100										B82	One Lambda
Mah, Helen	7109	4456	10855	4259	4438	3456	3261	4812	4378	5380	2120	3018	2499	2423	1999	2692	1423	1774	2074	1768	A68,A74,A2,B59 >	One Lambda
McAlack-Hana	5924	3652		3448	3191			3566														One Lambda
Phelan, Donna	5833	3459	8965	3024	2876	2648	2237	3536	2690	3025												One Lambda
Ramon, Daniel	7747	5232	9842	3908	4453	4533	3729	5707	2864	3227	2984	2915	3258	2926	1918	2195	1104	1862		2136	A68,A74,B71 >	
Reed, Elaine F	4594	2898	7446	2279	2323	2085	1841	2716	2078	2338	1545	1509	1489	1318							B78,B82	One Lambda
Rees, Tracey	3671	2159	5470	1783	1823	1553	1471	2104	1481	1705	1059	1249	971	885	701	942	533	747	750	620	B78,B8201,B13 >	One Lambda
Rosen-Bronso	4255	2364	6280					2107														One Lambda
Avg	6072	3808	9332	3475	3478	3085	2718	3215	3075	3542	2149	2789	2237	2027	1718	1831	1272	1625	1732	1688		
Std Dev	3131	2208	5238	2345	2179	2062	1721	1241	2159	2460	1596	2090	1597	1366	1098	1036	839	892	1293	1032		
MFI %CV	52%	58%	56%	67%	63%	67%	63%	39%	70%	69%	74%	75%	71%	67%	64%	57%	66%	55%	75%	61%		

Table 17b. Individual laboratory results for Serum #012 - class I by Flow PRA

Investigator	B7	B67	CW15	A31	B55	B42	B56	B81	CW2	CW5	B61	A30	B48	B60	B51	B8	A33	B18	B39	B41	Other	Vendor
Nishimura, Ker																					A1101,A2,A24,B75>	One Lambda

Table 18a. Individual laboratory results for Serum #009 - class II by Luminex

Investigator	DQ4	DQ9	DR11	DR12	DR13	DR14	DR17	DR8	DQ8	DR18	DQ7	DQ2	Other	
MFI														
Chen, Dong-Fer	20673	10135	4512	10510	7127	5789	4484	15173	9976	3010				One Lambda
Gandhi, Manish	17823	8685	3930	9076	6101	5026	3938	12876	8893	3488	10290	997		One Lambda
Gebel, Bray &	30868	26901	15122	26184	20570	18118	14644	29750	25963	13254				
Kamoun, Malek	22700	10900	4700	11600	7400	5900	4700	17300	10300	3900	12800	1300		One Lambda
Mah, Helen	15542	10801	6777	11626	8052	6506	6968	16017	8756	5985	4079			One Lambda
McAlack-Hanau,	17350	10660	6010	11679	7638	5486	5949	16707	8901	5194	13904			One Lambda
Phelan, Donna	19110	11434	6350	12960	7938	5989	6475	18891	9606	5690	6261			One Lambda
Ramon, Daniel	22317	8341	4841	11505	7336	6326	4745	17048			9799	1240		One Lambda
Reed, Elaine F.	17546	9884	4799	11272	5953	4321	4626	16378	7965	3913				One Lambda
Rees, Tracey	9773	2786	741	3016	1506	975	774	4810	2675	590	3709			One Lambda
Rosen-Bronson,	22309	10229	4635	11064	6936	6016	4875	17115	9914	4230	11553			One Lambda
Avg	19637	10978	5674.3	11863	7868.8	6404.7	5652.5	16551	10295	4925.4	9049.4	1179		
Std Dev	5028.6	5524.1	3347.5	5182.5	4375.7	3985.7	3231	5513.7	5621.2	3134.3	3657.2	131		
MFI %CV	26%	50%	59%	44%	56%	62%	57%	33%	55%	64%	40%	11%		

Table 18a. Individual laboratory results for Serum #009 - class II by Flow PRA

Investigator	DQ4	DQ9	DR11	DR12	DR13	DR14	DR17	DR8	DQ8	DR18	DQ7	DQ2	Other	
Nishimura, Kenji				27202				26423			189		DP13,DPW3,DQ5,DQ6 >	One Lambda

Table 19a. Individual laboratory results for Serum #010 - class II by Luminex

Investigator	no antigens assigned							Other	
MFI									
Chen, Dong-Fer								One Lambda	
Gandhi, Manish								One Lambda	
Gebel, Bray &									
Kamoun, Malek								One Lambda	
Mah, Helen								One Lambda	
McAlack-Hanau,								One Lambda	
Phelan, Donna								One Lambda	
Ramon, Daniel								One Lambda	
Reed, Elaine F.								One Lambda	
Rees, Tracey								One Lambda	
Rosen-Bronson,								One Lambda	
Avg									
Std Dev									
MFI %CV									

Table 19a. Individual laboratory results for Serum #010 - class II by Flow PRA

Investigator	DP13	DPW3	DQ5	DQ6	DQ7	DR12	DR15	DR51	DR52	Other	
Nishimura, Kenji	189	189	189	189	189	222	189	189	189		One Lambda

Table 20a. Individual laboratory results for Serum #011 - class II by Luminex

Investigator	DQ5	DQ6	DR103	DR11	DR12	DR15	DR16	DR51	DR9	DQ4	DR13	DR8	DR1	DR4	DQ7	DQ8	DQ9	DR18	DR53	Other	
MFI																					
Chen, Dong-Fer	14838	16163	3010	3613	3833	12591	10454	11251	3097	5149	2833	2699	1742								One Lambda
Gandhi, Manish	9982	10664	1867	2459	2524	9547	7231	8401	1997	2909	1709	1672	961	1394	540	968	1038	819	357		One Lambda
Gebel, Bray &	30402	30347	9784	11270	11306	29209	26019	27909	10456	14899	8667	8178	5793	7377	3321	4866	5774		2187		
Kamoun, Malek	14800	15900	2600	3800	4100	13000	10400	12700	2700	4300	2500	2900	1300								One Lambda
Mah, Helen	14695	13336	5041	5075	4293	12881	11392	11623	4018	4427	4197	4820	2477	1449	1422	2099	2298	1762			One Lambda
McAlack-Hanau,	14206	12619	3327	3974	4166	12802	10072	11888	3406												One Lambda
Phelan, Donna	14431	13195	3485	4211	4274	13752	10612	12159	3176	3382	2691	2981		2343							One Lambda
Ramon, Daniel	15466	16479	2927	3830	3999	13801	11180	12437	2961	4651	2606	2538	1496	2086	909	1558	1613	1092			One Lambda
Reed, Elaine F.	12707	11280	2749	3607	2544	11538	8702	11099	2415	2595	2121	2761	1169								One Lambda
Rees, Tracey	11732	12443	2482	2985	3199	9075	7869	7999	2621	4412	2262	2335	1359	1713	1099	1864	1985	1342	517		One Lambda
Rosen-Bronson,	12735	13954	2525	3100	3217	11381	9014	10178	2375	3933	2196	2165									One Lambda
Avg	15090	15125	3617.9	4356.7	4314.1	13598	11177	12513	3566	5065.7	3178.2	3305	2037	2727	1458	2271	2542	1254	1020		
Std Dev	5087.5	5149.4	2096.2	2281.2	2297.7	5155	4864.7	5087.5	2242	3364	1933.6	1802	1483	2106	974	1352	1670	346.9	827.5		
MFI %CV	34%	34%	58%	52%	53%	38%	44%	41%	63%	66%	61%	55%	73%	77%	67%	60%	66%	28%	81%		

Table 20a. Individual laboratory results for Serum #011 - class II by Flow PRA

Investigator	DQ5	DQ6	DR103	DR11	DR12	DR15	DR16	DR51	DR9	DQ4	DR13	DR8	DR1	DR4	DQ7	DQ8	DQ9	DR18	DR53	Other	
Nishimura, Kenji	14810	5514			9938	26438		8700				2483			368					DP13,DPW3,DR52	One Lambda

Table 21a. Individual laboratory results for Serum #012 - class II by Luminex

Investigator	DQ7	DQ8	DQ9	DR4	DR53	DQ4	DQ2	DR1	DR10	DR14	DR7	DR8	DR9	DPW2	DPW4	DP18	DPW3	DP11	DPW1	DP13	Other	
MFI																						
Chen, Dong-Fer	20797	20738	21219	19738	12991	14498	10972	5888	4789	2525	3459	3737	2779	2800	3173	1922						One Lambda
Gandhi, Manish	17409	17542	17765	16814	10280	10617	7711	4671	4059	2504	3417	2890	6390	2390	2818	1552	1592	873	1106	571	DPW6,DQ6 >	One Lambda
Gebel, Bray &	30525	29440	30296	30146	28867	29541	26258	17696	15362	9107	11483	6800	20453	10126	11178	7492	6210	3652	3755	2000	DPW6	
Kamoun, Malek	22100	22600	22600	21700	13700	14500	10500	6000	5000	3200	4200	2900	8500	3100	3500	2100	2000	1200	1300			One Lambda
Mah, Helen	17989	16609	17976	16970	13139	11037	7828	7014	7275	3656	6584	4916	8185								DR18	One Lambda
McAlack-Hanau,	19282	17077	19033	19102	14682	10631	6469	6584	6420	3554	5206	3733	6776									One Lambda
Phelan, Donna	20921	18728	20285	21323	14726	10585	6669	6202	6673	3673	5768	4609	7082	3989	4421	2755	2842					One Lambda
Ramon, Daniel	23113	23101	23385	21958	15062	15959	12083	6936	5919	3784	5133	3602	9389	4115	4668	2822	2928	1671	2057	1118	DPW6	One Lambda
Reed, Elaine F.	19224	17137	18795	19590	12562	9197	5469	5001	4861	2669	3819	2980	5814	3072	3326							One Lambda
Rees, Tracey	15730	16100	15893	15017	9360	10136	7896	3914	3241	2081	2404	3161	4703	2065	2285	1221	1333	788	985	626	DPW6,DQ6 >	One Lambda
Rosen-Bronson,	22705	22672	23326	21460	12094	14050	10309	4846	4225	2515	3332	3672	6433	2340	2634							One Lambda
Avg	20890	20159	20961	20347	14315	13705	10197	6796	6166	3570	4982	3909	7864	3777	4223	2838	2818	1637	1841	1079		
Std Dev	3755	3861	3754	3783	4908	5445	5461	3575	3132	1840	2367	1110	4342	2340	2567	1976	1628	1054	1027	572.9		
MFI %CV	18%	19%	18%	19%	34%	40%	54%	53%	51%	52%	48%	28%	55%	62%	61%	70%	58%	64%	56%	53%		

Table 21a. Individual laboratory results for Serum #012 - class II by Flow PRA

Investigator	DQ7	DQ8	DQ9	DR4	DR53	DQ4	DQ2	DR1	DR10	DR14	DR7	DR8	DR9	DPW2	DPW4	DP18	DPW3	DP11	DP13	DPW1	Other	
Nishimura, Kenji	189											3397					2014		196		DQ5,DQ6,DR15>	One Lambda