

Report of the 27th Single Antigen, Flow and Virtual Crossmatch Exchange December 9, 2022

Cells	157-158
Serum	159-162

In this current study, serum 156 (patient 2) and virtual donor V3 from Exchange 26 (September 2022) are re-examined as serum 159 and cell 157. A comparison of virtual crossmatch predictions (VXM) (serum 156 vs. V3) against the physical flow crossmatch (FXM) (**serum 159 vs. cell 157**) are summarized in **Part 1** of this report. **Part 2** examines the Luminex sin-

gle antigen (SAB) data for the 4 sera tested (**sera 159 - 162**). **Part 3** summarizes the FXM results for 2 cells (**cells 157 - 158**) against the 4 sera. Finally, in **Part 4**, the VXM predictions for 3 potential donors (V1 - V3) against 2 sera (serum 161 and serum 162) are evaluated.

Part 1

Physical Flow Cytometric Crossmatch vs. Virtual Crossmatch

Direct comparisons of VXM predictions with physical FXM outcomes are shown in Tables 1a – 1c. Seventeen labs submitted VXM predictions for serum 156 vs. donor V3 in Exchange 26. Among them, 13 labs reported back physical crossmatch results (Table 1a). In this present study, all 13 labs which had predicted the T-cell FXM to be positive, reported the physi-

cal T-cell FXM as positive as well (Table 1b). Strong class I DSA of > 10000 MFI were present. For B-cell predictions, 12 labs predicted the expected B-cell FXM to be positive and 1 lab predicted it to be negative. In Exchange 27, all 13 labs reported the physical B-cell FXM as positive.

Table 1a. Summary of Virtual XM predictions vs. Physical Flow XM results - Direct comparison

Exchange 026					Exchange 027				
Virtual Crossmatch - Serum 156 (Patient 2) vs. Donor V3					Physical Flow Crossmatch - Serum 159 vs. Cell 157				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V3	156	13	POS(13)	POS(12) Borderline(1)	157	159	13	POS(13)	POS(13)

Table 1b. Direct comparison of Physical Flow Crossmatch results vs. Virtual Crossmatch results

		T-cell Virtual XM (Exchange 26)		
		+	-	Ø
Physical T-cell FXM (Exchange 27)	+	13		
	-			
	Ø			

		B-cell Virtual XM (Exchange 26)		
		+	-	Ø
Physical B-cell FXM (Exchange 27)	+	12		1
	-			
	Ø			

+/- = positive/negative

Ø = uncertain/not typed

n = number of labs

The reporting of DSA and DSA strength was also consistent across the 2 studies (Table 1c). In Exchange 26, anti-B38, -Cw7, -Cw8, and -DQ5 reactivity was reported against donor V3 with respective MFI values = 11719,

14061, 15539, and 7463). In this present study, multiple DSA (B38, Cw7, Cw8, DQ5) were once again reported, with respective MFI = 10051, 13597, 15751, and 7488).

Table 1c. Individual Physical Flow Crossmatch results vs. Virtual Crossmatch predictions - Direct Comparison

Cell #157 HLA genotype: A*02:01-A*11:01-B*15:13-B*38:02-C*07:02-C*08:01-DRB1*15:02-DRB5*01:01-DRB5*01:08N-DQA1*01:01-DQA1*01:02-DQB1*05:01-DQB1*05:02-DPA1*02:01-DPA1*02:02-DPB1*01:01-DPB1*13:01

Exchange 026					Exchange 027				
Virtual Crossmatch - Serum 156 (Patient 2) vs. Donor V3					Physical Flow Crossmatch - Serum 159 vs. Cell 157				
Ctr	Virtual T-cell Prediction	Class I DSA(MFI)	Virtual B-cell Prediction	Class II DSA(MFI)	Ctr	T-Cell RESULT	Class I DSA(MFI)	B-Cell RESULT	Class II DSA(MFI)
230	Positive	B38 (12943) Cw7 (12062) Cw8 (15454)	Positive	DQ5 (8783) DQA1*01 (6200)	230	Positive	B38(14740), Cw7(13829), Cw8(17436)	Positive	DQ5(8751)
792	Positive	B38 (8560) Cw7 (10398) Cw8 (11968)	Positive	DQ5 (6950)	792	Positive	Cw8(13594), Cw7(13277), B38(9728)	Positive	DQ5(8129)
1426	Positive	B77 (1752) B38 (9246) Cw7 (16815) Cw8 (16676)	Positive	DQ5 (8614)	1426	Positive	B*38:02(10908), C*07:02(13935), C*08:01(16786)	Positive	DQB1*05:01(8420), DQB1*05:02(4040)
2400	Positive	B77 (1078) B38 (10089) Cw7 (15138) Cw8 (15096)	Positive	DQ5 (7358) DQA1*01 (4676)	2400	Positive	B*15:13(1106), B*38(10305), C*07(13449), C*08(14988)	Positive	DQB1*05:01(8742), DQB1*05:02(4780), DQA1*01:01(6845), DQA1*01:02(2850)
3224	Positive	B77 (1186) B38 (11719) Cw7 (14748) Cw8 (15539)	Positive	DQ5 (9938)	3224	Positive		Positive	
3753	Positive	B38 (9466) Cw7 (12784) Cw8 (16500)	Positive	DQ5 (5738)	3753	Positive	B38(9665), Cw7(11122), Cw8(15751)	Positive	DQ5(6819)
3808	Positive	B38 (4349) Cw7 (5900) Cw8 (7350)	Positive	DQ5 (1887) DQA1*01 (1887)	3808	Positive strong	B*38(2928), C*07:02(4528), C*08:01(5909)	Positive moderate	DQA1*01:01(1292), DQA1*01:02(1645), DQB1*05:01(1635), DQB1*05:02(1645)
3966	Positive	B38 (8893) Cw7 (11752) Cw8 (14365)	Positive	DQ5 (7837) DPA1*02 (15547) DQA1*01 (6569)	3966	Positive		Positive	
8001	Positive	B77 (1063) Cw7 (16032) Cw8 (17364)	Positive	DQ5 (9123)	8001	Positive	A*11:01(676), B*15:13(1039), C*07:02(14899), C*08:01(16481)	Positive	DQB1*05:01(9440), DQB1*05:02(4998), DQA1*01:01(9440), DQA1*01:02(4998)
8050	Positive	B38 (9524) Cw7 (14061) Cw8 (16420)	Positive	DQ5 (7463)	8050	Positive	B38(9813) Cw7(14575) Cw8(16009)	Positive	DQ5(7488)
8083	Positive	A11 (2068) B77 (2681) Cw7 (23048) Cw8 (23043)	Positive	DQ5 (16659)	8083	Positive	C*07:02(16315), C*08:01(17301)	Positive	DQB1*05:01(11385), DQB1*05:02(5401)
8103	Positive	B15 (1041) B38 (4780) Cw7 (7111) Cw8 (7240)	Borderline	DQ5 (5194)	8103	Positive	A*11(504), B*15(1317), C*07(8775), C*08(8732)	Positive	DQA1*01(5508), DQB1*05(5508), DPA1*02(6803)
8111	Positive	B38 (9900) Cw7 (13300) Cw8 (14900)	Positive	DQ5 (6900)	8111	Positive	Cw8(13200), Cw7(12700), B38(7800),	Positive	DQ5(7300)

Part 2

Class I and class II Luminex single antigen results for serum samples 159 - 162 are summarized in Tables 12 - 15. Individual listing of results for

each participating laboratory are listed in Tables 16 – 23. Pretreatment and cutoff values are listed in Table 30.

Antibody Identification

Serum 159: This sample was previously examined as serum 156 in Exchange 26. As shown below, the reporting of antibodies and antibody strength was consistent across the 2 studies.

Exchange 26		Exchange 27		Exchange 26		Exchange 27	
Class I		Class I		Class II		Class II	
*** Serum 156 ***		*** Serum 159 ***		*** Serum 156 ***		*** Serum 159 ***	
Antigen	Median	Antigen	Median	Antigen	Median	Antigen	Median
B8	21959	B8	22085	DPw2	16575	DPw2	16255
B42	20507	B42	18815	DP9	17135	DP9	15810
Cw12	18009	Cw12	16899	DPw3	16375	DPw3	15615
B41	18122	B41	16700	DP20	16193	DP20	15496
Cw15	17406	Cw15	16414	DP17	16422	DP17	15272
Cw5	16701	Cw5	16100	DPw6	15401	DPw6	14915
Cw8	15539	Cw8	15751	DP14	16156	DP14	14676
B54	17254	B54	15583	DP10	13996	DP10	13495
B59	16196	B59	14779	DP18	13856	DP18	12933
Cw1	15172	Cw1	14583	DP28	10033	DP28	10249
Cw6	14913	Cw6	14108	DQ5	7463	DQ5	7488
Cw18	14399	Cw18	13893	DQ2	2493	DQ2	2493
Cw16	14565	Cw16	13670	DQ6	2269	DQ6	2382
Cw7	14061	Cw7	13597				
B18	15317	B18	13235				
B55	14065	B55	12789				
Cw14	12714	Cw14	12245				
A33	14314	A33	12115				

For serum 159, multiple DSA (Cw8, Cw7, B38, and DQ5) were reported against cell 157, with respective MFI = 15751, 13597, 10051, and 7488. Strong DSA (Cw1, Cw7, B7, DQ5) were also detected against cell 158. The respective strength of which was 14583, 13597, 11339, and 7488 MFI.

Serum 160: Strong class I and class II reactivity was reported by labs for this sample, including anti-B57 (13010), -B63 (10041), -DR53 (23472), -DR10 (23205), -DR1 (21251), -DR51 (20495), and -DR9 (20371) reactivity. Each were reported by 100% of labs.

Against cell 157, anti-B77 (4504), -DR51 (20495), and -DQ5 (8788) reactivity was reported. Against cell 158, the reporting of class I DSA was mixed among labs. A number of labs (n = 9) reported weak anti-B46 (1774), -B7 (1462), and -A2 (1149) reactivity, while others noted there were no class I DSA present. The reporting of class II DSA was more consistent, as ≥ 90% of labs reported anti-DQ5 (8788), -DR14 (4337), and -DR12(1613) reactivity against cell 158.

Serum 161: Strong anti-A2 (12339) and -DR4 (11895) reactivity was reported in this sample. Additional reactivity to a number of 2C, 5C and DQ antigens, including reactivity to B62 (8008), A69 (7614), B57 (7368), A68 (7214), DQ8 (7825), and DQ9 (7600) was reported by labs.

Anti-A2 (12339), -B77 (4539), and -DQ5 (2832) reactivity was reported against cell 157. Against cell 158, labs reported anti-A2 (12339), -B46 (3452), and -DQ5 (2832) reactivity.

Serum 162: This sample was strongly positive to a number of 4C specificities including, A23 (20243), B57 (19950), A24 (19406), B49 (19323), B38 (19107), A32 (19077), and Bw4 (18530). In addition, DR and DP reactivity was well detected in this sample, including anti-DR51 (12182), -DR16 (11582), -DR15 (8429), -DR9 (6060), -DP3 (6035), and -DP6 (5897) reactivity. Each were reported by 100% of labs.

Multiple DSA (B38, B77, A2, DR51, DR15) were detected against cell 157. Respective MFI for each were 19107, 15211, 9085, 12182, and 8429. Against cell 158, labs reported strong anti-A24 (19406) and -A2 (9085) reactivity. No class II DSA were reported against cell 158.

Genotypes of cells provided by UCLA

Cell 157 (Filipino): A*02:01-A*11:01-B*15:13-B*38:02-C*07:02-C*08:01-DRB1*15:02-DRB5*01:01-DRB5*01:08N-DQA1*01:01-DQA1*01:02-DQB1*05:01-DQB1*05:02-DPA1*02:01-DPA1*02:02-DPB1*01:01-DPB1*13:01

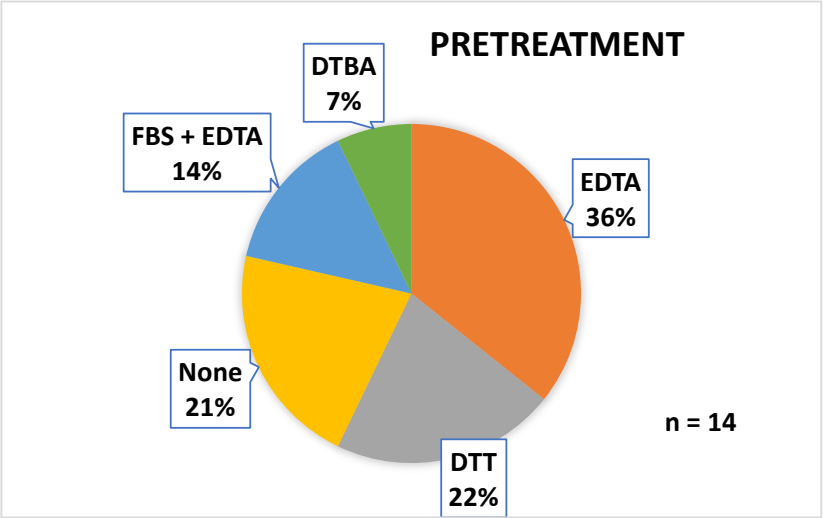
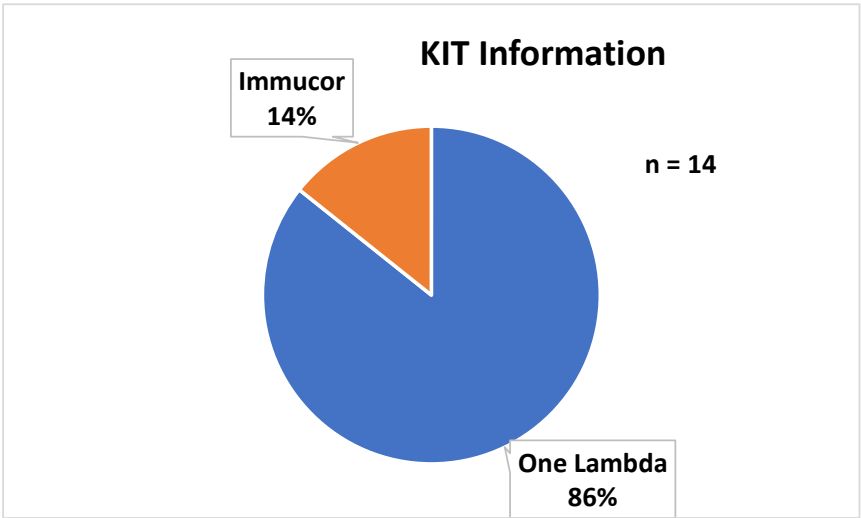
Cell 158 (Chin/Filip): A*02:03-A*24:07-B*07:06-B*46:01-C*01:02-C*07:02-DRB1*12:01-DRB1*14:04-DRB3*01:01-DQA1*01:04-DQA1*05:06-DQB1*03:01-DQB1*05:03-DPA1*02:02-DPB1*05:01

Conclusion:

A total of 14 labs submitted single antigen data for samples 159 - 162. Kit type and pretreatment information are summarized in Figure 1. The majority of labs (86%) tested the samples using One Lambda's single antigen kit; 79% of labs indicated the samples were treated prior to testing.

In this study, $\geq 90\%$ agreement was achieved in the reporting of class I and II antibodies across all 4 serum samples. In each case, antibody strength for peak antibodies was > 12000 MFI for class I antibodies and > 11000 MFI for class II antibodies.

Figure 1. Kit information and sera pretreatment breakdown



Part 3

Flow cytometric crossmatch results for cell 157 and cell 158 against serum samples 159 - 162 are summarized in Table 2. Individual results for

each laboratory, along with reported class I and class II DSA for each serum sample, are listed in tables 4 - 11.

Flow Cytometric Crossmatch

Cell 157. For cell 157, all 4 T/B-cell FXM against serum samples 159 - 162 were reported as positive by $\geq 80\%$ agreement. In the each case, class I and/or class II DSA of > 4500 MFI were present.

Cell 158. For cell 158, 7 out of 8 T/B-cell FXM were reported as positive by $\geq 80\%$ agreement in the presence of class I DSA of > 12000 MFI. For the remaining FXM, cell 158 vs serum 160, the T-cell FXM was mixed among labs, with labs reporting weak class I DSA of < 2000 MFI.

Table 2. Summary of Flow crossmatch results for Cell #157- #158 vs. Serum #159 - #162

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
157	159	17	POS(17)	POS(16) NT(1)	158	159	17	POS(17)	POS(16) NT(1)
157	160	17	POS(14) NEG(2) Borderline(1)	POS(15) NEG(1) NT(1)	158	160	17	POS(4) NEG(8) Borderline(4) NT(1)	POS(15) NEG(1) NT(1)
157	161	17	POS(16) Borderline(1)	POS(14) NEG(1) Borderline(1) NT(1)	158	161	17	POS(17)	POS(16) NT(1)
157	162	17	POS(17)	POS(15) Borderline(1) NT(1)	158	162	17	POS(17)	POS(16) NT(1)

consensus $< 80\%$

Conclusion:

For the T-cell FXM, $\geq 80\%$ agreement was achieved for 7 out of 8 T-cell FXM. Among the FXM with no discrepancies, strong class I DSA (> 12000 MFI) were reported. As the strength of the DSA decreased, however, the number of discrepancies observed increased. For cell 158 vs. serum 160, for example, the strength of the DSA was < 2000 MFI. Only 4 labs reported

the T-cell FXM as positive, while 8 reported it as negative and 4 reported it as borderline.

For the B-cell FXM, all 8 were reported as positive by $\geq 80\%$ agreement. Among the 8 FXM, 5 were reported with no discrepancies. In each case, class II and/or class I DSA of > 8000 MFI were reported.

Part 4

Virtual crossmatch predictions for donor V1 - V3 against serum samples 161 and 162 are summarized in Table 3 and individual laboratory pre-

dictions are listed in Tables 24 - 29. Fictional donor histories precede each patient-donor summary.

Virtual Crossmatch Paper Challenge

For virtual **T-cell predictions** of the expected T-cell FXM, $\geq 80\%$ agreement was achieved for all 6 predictions. Among the positive predictions, class I DSA of > 8000 MFI were present.

For virtual **B-cell predictions** of the expected B-cell FXM, all 8 were predicted to be positive by $\geq 80\%$ agreement. In each case, class I and/or class II DSA of > 6000 MFI were present.

Table 3. Summary of Virtual Crossmatch Predictions (Serum #161 - #162 vs. Donors V1 - V3)

Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment	Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment
V1	161	18	POS(17) Borderline(1)	POS(17) Borderline(1)	Unacceptable(16) Acceptable(1) Intermediate Risk(1)	V2	161	18	POS(17) Borderline(1)	POS(17) Borderline(1)	Unacceptable(16) Acceptable(1) Intermediate Risk(1)
V1	162	18	NEG(17) POS(1)	POS(17) Borderline(1)	Unacceptable(17) Intermediate Risk(1)	V2	162	18	POS(18)	POS(17) NEG(1)	Unacceptable(17) High Risk(1)
Donor no.	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Predicted Risk Assessment						
V3	161	18	POS(18)	POS(18)	Unacceptable(16) Acceptable(1) Intermediate Risk(1)						
V3	162	17	POS(17)	POS(17)	Unacceptable(15) Acceptable(1) High Risk(1)						

DSA Identification

Patient 1 (Serum 161)

Patient's fictional case history: This individual is a 40-year-old female being evaluated for her first transplant. Patient has had 1 prior pregnancy. The HLA type of the child was A*03:01-A*29:01-B*40:01-B*35:01-C*03:04-C*04:02-DRB1*08:01-DRB1*03:01-DRB3*02:02-DQA1*05:01-DQA1*06:01-DQB1*02:01-DQB1*03:01-DPA1*01:03-DPB1*02:01:01G. **Patient 1's HLA type** is as follows:

A*03:01 A*11:01	B*40:01 B*08:01	C*03:04 C*07:02			
DRB1*08:01 DRB1*11:01	DRB3*02:02	DQA1*05:01 DQA1*02:01	DQB1*02:01 DQB1*03:01	DPA1*01:03	DPB1*02:01:01G DPB1*04:02:01G

Anti-B62 (8008), -DQ9 (7600), and -DR53 (4912) reactivity was reported against donor **V1** by all labs. In addition, 16 labs reported Cw4 (3250) as a DSA as well. In the presence of multiple DSA, 17 labs predicted the expected T/B-cell FXM to be positive and 1 lab predicted borderline results. For renal transplant risk, 16 labs assessed the predicted risk of transplant as unacceptable and 1 lab assessed it to be an intermediate risk. The one lab predicting the physical T/B-cell FXM to be borderline, noted the risk as acceptable.

Against **donor V2**, all 18 labs reported A2 (12339), DR53 (4912), DQ6 (4738), and DQ8 (7825) as DSA. Anti-B35 (2310) reactivity was also reported by 10 labs against the donor. Four other labs noted B35 was a possible DSA, however it could not be confirmed as the donor carries B*35:20 which was not included on their single antigen bead panel. Cw4 (3250) was also reported as a DSA by 15 labs. Good agreement was achieved for virtual

predictions, with 17 out of 18 labs predicting the physical T/B-cell FXM to be positive. One lab predicted each to be borderline. In line with predictions, 16 labs assessed the predicted risk of transplant as unacceptable and 1 lab specified it was an intermediate risk. One other lab assessed the risk as acceptable, as it predicted the expected T/B-cell FXM to be borderline.

Good agreement ($\geq 90\%$) was achieved in the reporting of anti-A2 (12339) and -B49 (4562) reactivity against **donor V3**. Reporting of class II DSA, however, was mixed. Four labs reported DQ6 (4738) as the only DSA present, while 11 labs indicated DQ4 (3934) was a DSA as well. For virtual predictions, all 18 labs predicted the expected T/B-cell FXM to be positive. Two labs indicated the positivity of the B-cell FXM would be due to class I antibodies. Predicted renal transplant risk was assessed as unacceptable by 16 labs. One lab predicted an intermediate risk and another lab reported the predicted risk as acceptable.

Virtual Donors – HLA genotype

Donor 1 (V1): A*11:01:01-B*15:01:01-B*40:01:02-C*03:04:01-C*04:01:01-DRB1*09:01:02-DRB1*11:01:01-DRB3*02:02:01-DRB4*01:03:01-DQA1*03:02:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*03:03:02-DPA1*02:02-DPB1*02:02:01G-DPB1*05:01:01G

Donor 2 (V2): A*02:01-A*24:02-B*35:20-B*44:03-C*04:01:01G-C*16:02:01G-DRB1*04:07:01G-DRB1*13:01-DRB3*01:01:02G-DRB4*01:01:01G-DQA1*01:03-DQA1*03:01:01G-DQB1*03:02-DQB1*06:03-DPA1*02:01-DPB1*05:01:01G-DPB1*13:01:01G

Donor 3 (V3): A*02:01:01-A*23:01:01-B*44:03:01-B*49:01:01-C*04:01:01-C*07:01:01-DRB1*08:01:01-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQA1*04:01:01-DQB1*04:02:01-DQB1*06:04:01-DPA1*01:03:01-DPB1*02:01:02G-DPB1*04:02:01G

Patient 2 (Serum 162)

Patient's fictional case history: This individual is a 30-year-old male being evaluated for his second transplant. The HLA type of his first transplant was A*03:01-A*30:01- B*39:01-B*15:01-C*12:03-C*02:02-DRB1*04:01-DRB1*03:01-DRB4*01:01:01G-DRB3*02:02-DQA1*03:01-DQB1*03:01-DQB1*02:01-DPA1*02:01-DPA1*01:03-DPB1*01:01-DPB1*04:02. **Patient 2's HLA type** is as follows:

A*03:01 A*30:01	B*39:01 B*15:01	C*12:03 C*03:03			
DRB1*04:01 DRB1*03:01	DRB4*01:01:01G DRB3*02:02	DQA1*03:01 DQA1*05:01	DQB1*03:01 DQB1*02:01	DPA1*01:03 DPA1*02:01	DPB1*01:01

Anti-DR9 (6060) and -DR11 (3844) reactivity was reported against **donor V1** by all 18 labs. In addition, a number of labs (n = 9), reported DP2 (3194) as a DSA as well. One lab noted DPB1*02:02 was not represented on the its SAB panel, and did not report it as a DSA. All but 1 lab indicated there were no class I DSA present. Good agreement was achieved in the virtual predictions, with 17 labs predicting the expected T-cell FXM to be negative and 17 labs predicting the expected B-cell FXM to be positive. Seventeen labs assessed the predicted risk of transplant as unacceptable and 1 lab noted it was an intermediate risk.

Against **donor V2**, anti-A2 (9085), -A24 (19460), and -B44 (13424) reactivity was reported by all 18 labs. In addition, some labs reported anti-Bw4 (18530) and -Cw15 (1559) reactivity against the donor. All but 1 lab

indicated there were no class II DSA present. Good agreement was achieved in virtual XM predictions, as all 18 labs predicted the expected T-cell FXM to be positive and 17 labs predicted the expected B-cell FXM to be positive. Renal transplant risk was predicted to be unacceptable by all labs, with 1 lab indicating the risk was high.

Against donor **V3**, multiple DSA (A2, A23, B44, DR8) were reported, with respective MFI = 9085, 20243, 13424, 5356. Anti-DP2 (3194) reactivity was also reported against the donor by 15 labs. Good agreement (≥ 80%) was achieved in the reporting of virtual predictions; all 17 labs predicted the expected T/B-cell FXM to be positive in the presence of strong class I DSA (> 20000 MFI). For renal transplant risk, 16 labs predicted the risk to be unacceptable, with 1 lab noting the risk as high.

Conclusion

For **serum 161**, the expected T/B-cell FXM against donors V1 - V3 were predicted to be positive by ≥ 90% agreement. For all 6 virtual predictions, DSA of > 8000 MFI were present. One lab predicted the physical T/B-cell FXM of serum 161 against donors V1 and V2 to be borderline. The strength of the DSA the lab reported were lower (< 5500 MFI) compared to the strength of the DSA reported by other labs.

For **serum 162**, good agreement (≥ 90%) was also achieved in the reporting of virtual predictions for each serum-donor pair. All but the predicted

FXM against donor V1 were reported as positive. DSA of > 19000 MFI were reported in each case. Two labs accounted for the discrepancies observed for serum 162. Against Donor V1, 1 lab misassigned B63 as a DSA and predicted the expected T-cell FXM to be positive. Other labs predicted it to be negative in the absence of class I DSA. For its B-cell prediction, the lab predicted it to be borderline, reporting class II DSA of MFI < 4500. Another lab predicted the expected B-cell FXM against Donor V2 to be negative, despite reporting strong (MFI > 20000) class I DSA. All other labs predicted the expected B-cell FXM to be positive due to class I.

NEXT MAILING DATE: April 19, 2023

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Flow Cytometric Crosmatch

Cell #157 HLA genotype: A*02:01-A*11:01-B*15:13-B*38:02-C*07:02-C*08:01-DRB1*15:02-DRB5*01:01-DRB5*01:08N-DQA1*01:01-DQA1*01:02-DQB1*05:01-DQB1*05:02-DPA1*02:01-DPA1*02:02-DPB1*01:01-DPB1*13:01

Table 4. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #159

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	159	4.9	15.95			Positive	B38-14740, Cw7-13829, Cw8-17436	50	12			Positive	DQ5-8751	2.45	24.1	NO
615	159	317	236			Positive	Yes	330	239			Positive	Yes	254	258	YES
792	159	57	336			Positive	Cw8(13594), Cw7(13277), B38(9728)	107	290			Positive	DQ5(8129)	235	240	YES
1426	159	59	282.5			Positive	B*38:02(10908), C*07:02(13935), C*08:01(16786)	86	275			Positive	DQB1*05:01(8420), DQB1*05:02(4040)	286.5	247	YES
2400	159	16	239			Positive	B*15:13(1106), B*38(10305), C*07(13449), C*08(14988)	28	196			Positive	DQB1*05:01(8742), DQB1*05:02(4780), DQA1*01:01(6845), DQA1*01:02(2850)	374	416	YES
3135	159	1,2	3527	2,44		Positive						NT		1443		NO
3224	159	70	264			Positive		140	208			Positive		174	134	YES
3753	159	50	262			Positive	B38(9665), Cw7(11122), Cw8(15751)	100	210			Positive	DQ5(6819)	215	210	YES
3808	159	307	294			Positive strong	B*38(2928), C*07:02(4528), C*08:01(5909)	431	142			Positive moderate	DQA1*01:01(1292), DQA1*01:02(1645), DQB1*05:01(1635), DQB1*05:02(1645)	238	319	YES
3966	159	20	312			Positive		50	270			Positive		165	272	NO
4345	159					Positive						Positive				NO
5214	159	19	102		37714	Positive	A11(1117), B38(15101), B77(1,424), C7(15947), C8(18993)	28	87		29390	Positive	DQ5(5350-11145)	257	266	YES
8001	159	50	355			Positive	A*11:01(676), B*15:13(1039), C*07:02(14899), C*08:01(16481)	100	268			Positive	DQB1*05:01(9440), DQB1*05:02(4998), DQA1*01:01(9440), DQA1*01:02(4998)	217	298	YES
8050	159	50	317			Positive	B38(9813) Cw7(14575) Cw8(16009)	120	223			Positive	DQ5(7488)	29	68	YES
8083	159	83	298			Positive	C*07:02(16315), C*08:01(17301)	123	128			Positive	DQB1*05:01(11385), DQB1*05:02(5401)			YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #159, cont.

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8103	159	397	415	1.2		Positive	A*11(504), B*15(1317), C*07(8775), C*08(8732)	1070	1613	1.7		Positive	DQA1*01(5508), DQB1*05(5508), DPA1*02(6803)	198	861.9	YES
8111	159	60	1757			Positive	Cw8(13200), Cw7(12700), B38(7800),	554	3308			Positive	DQ5(7300)	190	668	NO

Table 5. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #160

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	160	4.9	1.2			Borderline	B77-7322	50	29.5			Positive	DR51-25802	2.45	24.1	NO
615	160	317	53			Positive	Yes	330	208			Positive	Yes	254	258	YES
792	160	57	127			Positive	B77(6646)	107	391			Positive	DR51(20385), DQ5(9003)	235	240	YES
1426	160	59	85.5			Positive	B*15:13(4350); Possible 44RMA epitope- specificAntiboDies present.	86	357			Positive	DQB1*05:01(10996), DQB1*05:02(4661), DRB5*01:01(20710)	286.5	247	YES
2400	160	16	64			Positive	B*15:13(4866)	28	265			Positive	DRB5*01:01(20163), DQB1*05:01(10096), DQB1*05:02(4997)	374	416	YES
3135	160	1,2	1566	1,08		Negative						NT		1443		NO
3224	160	70	25			Positive		140	298			Positive		174	134	YES
3753	160	50	78			Positive	A11(1199), B77(1828)	100	322			Positive	DR51(20638), DQ5(7171)	215	210	YES
3808	160	307	93			Positive moderate	B*15:13(1127)	431	139			Positive moderate	DRB5*01:01(17117), DQA1*01:01(913), DQB1*05:01(1434), DQB1*05:02(1568)	238	319	YES
3966	160	20	121			Positive		50	214			Positive		165	272	NO
4345	160					Positive						Positive				NO
5214	160	19	49		5085	Positive	A11(1511), A2(1651), B77(4940)	28	107		59823	Positive	DR1(22913-23204), DQ5(7721-16038)	257	266	YES
8001	160	50	183			Positive	A*02:01(1115), A*11:01(1020), B*15:13(4504)	100	346			Positive	DRB5*01:01(23797), DQB1*05:01(11015), DQB1*05:02(5834), DQA1*01:01(11015), DQA1*01:02(5834)	217	298	YES
8050	160	50	84			Positive	B77(3520)	120	348			Positive	DR51(20495) DQ5(8788)	29	68	YES
8083	160	83	106			Positive	A*02:01(1815), A11:01(1561), B*15:13(7429),	123	295			Positive	DR51*01:01(25270), DQB1*05:01(16212), DQB1*05:02(7869)			YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #160, cont.

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8103	160	397	182	1.2		Negative	A*02(813), A*11(798), B*15(6712), C*07(652), C*08(523)	1070	577	1.7		Negative	DRB1*15(724), DRB5*01(12185), DQA1*01(6549), DQB1*05(6549)	198	861.9	YES
8111	160	60	155			Positive	B77(4800), A11(1200), A2(100)	554	5414			Positive	DR51(22000), DQ5(9300)	190	668	NO

Table 6. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #161

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	161	4.9	9.65			Positive	A2-19468, B77-6870	50	21.9			Positive	DQ5-3130, DQA1*01-4945	2.45	24.1	NO
615	161	317	289			Positive Strong	Yes	330	254			Positive	Yes	254	258	YES
792	161	57	279			Positive	A2(13424), B77(4506)	107	253			Positive	DQ5(2832)	235	240	YES
1426	161	59	285.5			Positive	A*02:01(10947), B*15:13(4410)	86	270			Positive	DQB1*05:01(3537), DQB1*05:02(1675)	286.5	247	YES
2400	161	16	205			Positive	A*02:01(14394), B*15:13(5190)	28	184			Positive	DQB1*05:01(3181), DQB1*05:02(1480)	374	416	YES
3135	161	1.2	2177	1.51		Positive						NT		1443		NO
3224	161	70	225			Positive		140	183			Positive		174	134	YES
3753	161	50	258			Positive	A2(11253), B77(3233)	100	181			Positive	DQ5(1947)	215	210	YES
3808	161	307	314			Positive strong	A*02:01(2755), B*15:13(1058)	431	193			Positive moderate	Class IDSA present	238	319	YES
3966	161	20	283			Positive		50	260			Positive		165	272	NO
4345	161					Positive						Negative				NO
5214	161	19	103		38936	Positive	A11(1376), A2(19182), B77(7644)	28	90		33299	Positive	DQ5(7721-16038)	257	266	YES
8001	161	50	347			Positive	A*02:01(16697), A*11:02(1190), B*15:13(5661)	100	286			Positive	DQB1*05:01(3134), DQB1*05:02(1439), DQA1*01:01(3134), DQA1*01:02(1439)	217	298	YES
8050	161	50	314			Positive	A2(9914) B77(4571)	120	246			Positive	DQ5(1817)	29	68	YES
8083	161	83	325			Positive	A*02:01(18983), B*15:13(6559)	123	277			Positive	DQB1*05:01(4369), DQB1*05:02(1820)			YES
8103	161	397	242	1.2		Borderline	A*02(4600), B*15(2936),	1070	940	1.7		Borderline	DQA1*01(3255), DQB1*05(1714)	198	861.9	YES
8111	161	60	1671			Positive	A2(13100), B77(4600)	554	2301			Positive	DQ5(2300)	190	668	NO

Table 7. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #162

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	162	4.9	21.85			Positive	A2-13247, B77-20832, B38-25895, BW4-21645	50	40.6			Positive	DR15-13468, DR51-17370	2.45	24.1	NO
615	162	317	353			Positive Strong	Yes	330	284			Positive	Yes	254	258	YES
792	162	57	354			Positive	B38(16690), B77(12933), A2(8256)	107	351			Positive	DR51(13040), DR15(8402)	235	240	YES
1426	162	59	374.5			Positive	A*02:01(10917), B*38:02(18544), B*15:03(15224)	86	390			Positive	DPB1*01:01(2044), DRB1*15:02(8711), DRB5*01:01(13476)	286.5	247	YES
2400	162	16	301			Positive	A*02:01(8792), B*15:13(15071), B*38(18822)	28	286			Positive	DRB1*15:02(8640), DRB5*01:01(14530)	374	416	YES
3135	162	1,2	3915	2,71		Positive						NT		1443		NO
3224	162	70	324			Positive		140	309			Positive		174	134	YES
3753	162	50	354			Positive	A2(7921), B77(13015), B38(17414), Bw4(13958)	100	298			Positive	DR15(7320), DR51(9814)	215	210	YES
3808	162	307	397			Positive strong	A*02:01(1612), B*15:13(6895), B*38(7120)	431	237			Positive	DRB1*15:02(3166), DRB5*01:01(6785)	238	319	YES
3966	162	20	212			Positive		50	176			Positive		165	272	NO
4345	162					Positive						Positive				NO
5214	162	19	120		69755	Positive	A2(12222), B38(22279), B77(19005)	28	113		73662	Positive	DR15(10715), DR51(5*01, 15537)	257	266	YES
8001	162	50	405			Positive	A*02:01(10411), B*15:13(17390)	100	369			Positive	DRB1*15:02(8421), DRB5*01:01(15236)	217	298	YES
8050	162	50	416			Positive	A2(9123) B38(20522) B77(15732) Bw4(Strong)	120	337			Positive	DR15(8817) DR51(12212)	29	68	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #157 vs. Serum #162, cont.

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	162	83	250			Positive	A*02:01(11385), B*15:13(17713), BW4(23878)	123	123			Positive	DRB1*15:02(10100),D RB5*01:01(16582), DPB1*01:01(2213)			YES
8103	162	397	406	1.2		Positive	A*02(4600), A*11(2936), B*15(11215), C*07(642), C*08(796)	1070	1075	1.7		Borderline	DRB1*15(4698), DRB5*01(7613), DPA1*02(2662), DPB1*01(1320), DPB1*13(630)	198	861.9	YES
8111	162	60	2813			Positive	B38(19800), B77(14900), A2(9800)	554	4637			Positive	DR51(12600), DR15(9300), DP1(1300)	190	668	NO

Cell #158 HLA genotype: A*02:03-A*24:07-B*07:06-B*46:01-C*01:02-C*07:02-DRB1*12:01-DRB1*14:04-DRB3*01:01-DQA1*01:04-DQA1*05:06-DQB1*03:01-DQB1*05:03-DPA1*02:02-DPB1*05:01

Table 8. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #159

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	159	2.87	10.43			Positive	B7-15762, CW1-17974, CW7-13829	18.2	18.61			Positive	DQ5-8751	1.87	9.19	YES
615	159	348	219			Positive	Yes	372	239			Positive	Yes	285	300	YES
792	159	57	306			Positive	Cw7(13277), Cw1(12982), B7(10102)	107	317			Positive	DQ5(8129)	240	258	YES
1426	159	59	285			Positive	B7(11377), C*01:02(14583), C*07:02(13935)	86	317			Positive	DQB1*05:03(3539)	259	244	YES
2400	159	16	195			Positive	B*07:02(11778), C*01(14148), C*07(13449)	28	231			Positive	DQB1*05:02(4780)	405	416	YES
3135	159	1,2	3345	2,4		Positive						NT		1395		NO
3224	159	70	224			Positive		140	242			Positive		220	181	YES
3753	159	50	267			Positive	B7(10425), Cw7(11122), Cw1(14598)	100	235			Positive	DQ5(6819)	215	210	YES
3808	159	357	245			Positive	B*07(2946), C*01:02(6399), C*07:02(4528)	464	175			Positive moderate	DQA1*01:04(1586), DQB1*05:03(1586)	288	351	YES
3966	159	20	297			Positive		50	310			Positive		155	242	NO
4345	159					Positive						Positive				NO
5214	159	19	90		25302	Positive	B7(15114), C1(18263), C7(15947)	28	83		34594	Positive	DQ5(possible; 7721-16038)	258	274	YES
8001	159	50	353			Positive	C*01:02(15940), C*07:02(14899)	100	320			Positive		192	291	YES
8050	159	50	296			Positive	B7(11339) Cw1(14979) Cw7(14575)	120	194			Positive	DQ5(7488)	45	117	YES

Table 8. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #159, cont.

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	159	83	271			Positive	C*01:02(16663), C*07:02(16315) , B*07:06 not Accounted for on SAB.	123	217			Positive	DQB1*05:03 is Not accounted for on SAB.			YES
8103	159	516	294	1.2		Positive	B*07(5990), C*01(8484), C*07(8775)	1953	1279	1.7		Positive	DQA1*01(5508), DQB1*05(5508), DPA1*02(6803)	103.84	1001.3	YES
8111	159	60	2139			Positive	Cw1(12,700); Cw7(12,700); B7(8900)	554	8026			Positive	DQ5(7300)	288	1178	NO

Table 9. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #160

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	160	2.87	1.7			Borderline	B7-2446, B46-1832	18.2	17.61			Positive	DR12-2426, DR14-4200, DQ5-11271	1.87	9.19	YES
615	160	348	-13			NT	Yes	372	195			Positive moderate	Yes	285	300	YES
792	160	57	48			Negative	B46(1875)	107	329			Positive	DQ5(9003), DR14(4740), DR52(2119), DR12(1502)	240	258	YES
1426	160	59	51			Negative	B*46:01(1005); Borderline reactivity possible due to 44RMA epitope-specificAntibodies.	86	326			Positive	DQB1*05:03(4784), DRB1*12:01(1484), DRB1*14:04(2809), DRB3*01:01(2252)	259	244	YES
2400	160	16	24			Positive	B*07:02(1475)	28	217			Positive	DRB1*12:01(1542), DRB1*14:54(4503), DRB3*01:01(2142), DQB1*05:02(4997)	405	416	YES
3135	160	1,2	1321	0,95		Negative						NT		1395		NO
3224	160	70	0			Borderline		140	219			Positive		220	181	YES
3753	160	50	23			Negative		100	235			Positive	DR12(1111), DR14(2475), DQ5(7171)	215	210	YES
3808	160	357	-40			Negative		464	112			Positive moderate	DRB1*14:04(1277), DQB1*05:03(1301)	288	351	YES
3966	160	20	36			Borderline		50	189			Positive		155	242	NO
4345	160					Negative						Positive				NO
5214	160	19	20		1212	Positive	A2(1573), B7(1358), B46(1461)	28	90		43729	Positive	DR12(2038-2055), DR52(3:01, 4516), DQ5(possible; 7721-16038)	258	274	YES
8001	160	50	112			Positive	A*02:03(1063), B*46:01(1174)	100	326			Positive	DRB1*12:01(1765), DRB3*01:01(2468)	192	291	YES
8050	160	50	17			Negative	NONE	120	240			Positive	DR12(1837) DR14(4178) DR52(DRB3*01:01, 2753) DQ5(8788)	45	117	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #160, cont.

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8083	160	83	177			Positive	A*02:03(1612), B*46:01(2200), B*07:06 is not Accounted for on SAB.	123	387			Positive	DRB1*14:04 andDQB1*05:03 are Not accounted for on SAB			YES
8103	160	516	111	1.2		Borderline	A*02(813), B*07(1336), B*46(1358), C*01(684), C*07(652)	1953	979	1.7		Negative	DRB1*12(1415), BRB1*14(2847), DR52(1962), DQA1*01(6549), DQA1*05(6107),	103.84	1001.3	YES
8111	160	60	0			Negative	B46(1500); B7(1300)	554	3722			Positive	DQ5(9300); DR14(4700); DR52(2600); DR12(1900)	288	1178	NO

Table 10. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #161

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	161	2.87	7			Positive	A2-19468, B46-5217	18.2	25.01			Positive	DQ5-3130 + CLASS I	1.87	9.19	YES
615	161	348	167			Positive	Yes	372	225			Positive	Yes	285	300	YES
792	161	57	194			Positive	A2(12942), B46(3452)	107	247			Positive	DQ5(2832)	240	258	YES
1426	161	59	234			Positive	A*02:03(10220), B*46:01(3090)	86	286			Positive	DQB1*05:03(1475)	259	244	YES
2400	161	16	126			Positive	A*02:03(13294), A*24:02(1017), B*46:01(3634)	28	192			Positive	DQB1*05:02(1480)	405	416	YES
3135	161	1,2	1780	1,28		Positive						NT		1395		NO
3224	161	70	112			Positive		140	179			Positive		220	181	YES
3753	161	50	168			Positive	A2(11253), B46(2397)	100	157			Positive	DQ5(1947)	215	210	YES
3808	161	357	170			Positive	A*02:03(2770)	464	145			Positive moderate	Class I DSAs present but No CClass II	288	351	YES
3966	161	20	220			Positive		50	308			Positive		155	242	NO
4345	161					Positive						Positive				NO
5214	161	19	79		16892	Positive	A2(18914), A24(1376-1759), B46(5916)	28	80		30646	Positive	DQ5(7721-16038)	258	274	YES
8001	161	50	299			Positive	A*02:03(16165), B*46:01(4197)	100	297			Positive		192	291	YES
8050	161	50	220			Positive	A2(9914) B46(2985)	120	207			Positive	DQ5(1817)	45	117	YES
8083	161	83	351			Positive	A*02:03(19241), B*46:01(5139)	123	340			Positive	DQB1*05:03 is Not accounted for on SAB			YES
8103	161	516	225	1.2		Positive	A*02(4600), B*46(1381)	1953	2375	1.7		Positive	DQA1*01(3255), DQB1*03(5463), DQB1*05(1714)	103.84	1001.3	YES
8111	161	60	852			Positive	B46(3300)	554	2987			Positive	DQ5(2300)	288	1178	NO

Table 11. Individual Flow crossmatch results and DSA reported for Cell #158 vs. Serum #162

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA()	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	class IIDSA()	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
230	162	2.87	6.23			Positive	A2-13247, A24-27402	18.2	15.11			Positive	DR12-3420	1.87	9.19	YES
615	162	348	153			Positive	Yes	372	159			Positive moderate	No Class II DSA	285	300	YES
792	162	57	267			Positive	A24(18022), A2(8183)	107	264			Positive		240	258	YES
1426	162	59	265			Positive	A*02:03(11211), A24(20158)	86	306			Positive		259	244	YES
2400	162	16	159			Positive	A*02:03(9592), A*24:02(19041)	28	204			Positive	No Class II DSA, PositiveDue to Class I Reactivity	405	416	YES
3135	162	1,2	2598	1,86		Positive						NT		1395		NO
3224	162	70	162			Positive		140	202			Positive		220	181	YES
3753	162	50	226			Positive	A2(7921), A24(19005)	100	204			Positive		215	210	YES
3808	162	357	184			Positive	A824(7845), A*02:03(1864)	464	125			Positive	Class I DSAs present but No CClass II	288	351	YES
3966	162	20	291			Positive		50	287			Positive		155	242	NO
4345	162					Positive						Positive				NO
5214	162	19	83		19614	Positive	A2(13099), A24(22194-22452)	28	75		25834	Positive		258	274	YES
8001	162	50	306			Positive	A*02:03(10357)	100	266			Positive		192	291	YES
8050	162	50	273			Positive	A2(9123), A24(10227)	120	206			Positive	No Class II DSA	45	117	YES
8083	162	83	267			Positive	A*02:03(11745), A*24:07 not Accounted for on SAB	123	272			Positive				YES
8103	162	516	180	1.2		Positive	A*02(5937), A*24(9014), C*01(723), C*07(642)	1953	1158	1.7		Positive	DRB1*12(3875), DQB1*03(1262), DPA1*02(2662), DPB1*05(664)	103.84	1001.3	YES
8111	162	60	1354			Positive	A24(13,600)	554	2280			Positive	DR12(5800)	288	1178	NO

Single Antigen

Table 12. Summary of Single Antigen results for Serum #159

Class I							
*** Serum 159***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B8	13	100%	22085	20613	5698	9701	27998
B42	13	100%	18815	17931	5572	7368	26447
Cw12	13	100%	16899	15770	4951	5781	23871
B41	13	100%	16700	15857	4953	5614	21787
Cw15	13	100%	16414	15002	5491	3826	22454
Cw5	13	100%	16100	14583	5180	3367	20581
Cw8	13	100%	15751	14276	3717	5909	18993
B54	13	100%	15583	14958	4627	5926	20829
B59	13	100%	14779	14033	4313	5303	19703
Cw1	13	100%	14583	13723	3413	6399	18263
Cw6	13	100%	14108	13613	3551	6528	18726
Cw18	13	100%	13893	12842	3848	4355	18028
Cw16	13	100%	13670	13184	3989	5340	21144
Cw7	13	100%	13597	12370	3413	4528	16315
B18	13	100%	13235	12731	4330	3801	18628
B55	13	100%	12789	12395	4266	4506	20262
Cw14	13	100%	12245	12074	3387	5845	20099
A33	13	100%	12115	11688	4780	3027	18708
B37	13	100%	11562	11318	3433	4979	16459
B73	13	100%	11488	10634	4074	1448	15672
B7	13	100%	11339	10624	3451	2718	15762
B61	13	100%	11302	9876	3717	1343	14352
B64	13	100%	11264	10898	3615	3481	16526
B67	13	100%	10504	9877	3556	2165	14323
A32	13	100%	10233	9499	3597	2621	14653
B38	13	100%	10051	9922	3484	2928	15101
Cw2	13	100%	9752	9037	2989	1698	13999
Cw4	13	100%	9163	9048	3193	2409	14594
B60	13	100%	8288	7745	3022	1214	12052
A74	13	100%	8199	7757	3171	1648	12393
B65	13	100%	7157	7130	2014	2614	10277
B51	13	100%	6466	6295	2245	1506	10036
A29	13	100%	5751	5347	2147	1026	8694
B53	13	100%	4452	4358	1470	1130	6892
B35	13	100%	3823	3678	1241	1078	5778
B52	13	100%	3525	3454	1149	887	5379

Class I							
*** Serum 159***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B81	12	92%	6125	6068	1462	3530	8264
A34	12	92%	5892	5638	2259	2181	9073
B48	12	92%	5327	4809	1789	653	6984
A68	12	92%	4735	4361	1957	1186	7502
A1	12	92%	4172	4086	1361	1902	6555
A36	12	92%	3238	3174	1053	1477	5129
B49	12	92%	3236	3345	1080	1567	5197
A31	12	92%	3128	3149	1179	1429	4946
B78	12	92%	2938	3074	722	1877	4656
B39	11	84%	12844	12807	2809	6229	18324
A30	11	84%	2610	2675	823	1102	3728
A69	10	76%	2912	2941	1190	895	4753
B63	10	76%	1909	2004	584	1317	3281
B13	10	76%	1770	1804	509	996	2643

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Class II							
*** Serum 159 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DPw2	13	100%	16255	15238	4316	6195	22185
DPw3	13	100%	15615	15064	4246	6069	21639
DPw6	13	100%	14915	14329	3652	6564	20357
DP18	13	100%	12933	12706	3444	5190	17955
DP28	13	100%	10249	9510	2590	5133	13666
DQ5	13	100%	7488	7354	2671	1645	11385
DP9	12	92%	15810	14830	3831	6803	20111
DP17	12	92%	15272	14535	3858	6583	20042
DP14	12	92%	14676	13991	3708	5729	19267
DP20	11	84%	15496	15443	3404	6609	20368
DP10	11	84%	13495	13377	3023	5561	18086
DQ2	11	84%	2493	2502	792	893	3708
DQ6	11	84%	2382	2267	623	1460	3446
DP402	7	53%	15147	13068	4576	4512	18325

Table 13. Summary of Single Antigen results for Serum #160

Class I							
*** Serum 160***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
B57	13	100%	13010	12348	5068	2416	20624
B63	13	100%	10041	9331	3889	2264	17092
B75	13	100%	5820	5151	2358	993	9286
B62	13	100%	4540	4370	1730	1105	6562
B77	13	100%	4504	4413	2003	1127	7429
B76	13	100%	3693	3374	1540	879	5571
B44	12	92%	3924	3909	1806	855	6475
B13	12	92%	3469	3374	1538	826	6369
B35	12	92%	2680	2907	1349	617	5208
A3	12	92%	2394	2579	1169	956	4429
B58	11	84%	3290	3378	1489	740	6193
B53	10	76%	2482	2640	902	1254	4203
A74	9	69%	1456	1414	498	593	2123
B46	9	69%	1174	1319	465	504	2200
B7	8	61%	1462	1660	453	1173	2446
B81	7	53%	1460	1478	409	1016	2095
A11	7	53%	1199	1296	533	589	2122
A2	6	46%	1149	1184	445	529	1815
A68	5	38%	1092	983	325	515	1457
A31	4	30%	912	916	301	514	1327
A69	4	30%	704	727	178	503	1000
B72	3	23%	1065	1048	86	936	1144
A33	3	23%	1058	1028	253	705	1322
A30	3	23%	580	759	283	539	1159
A34	2	15%	990	990	187	803	1177
A66	2	15%	979	978	22	957	1000
A6602	2	15%	970	970	13	957	983
A6601	2	15%	720	720	71	649	791
B15	1	7%	6712	6712	-	6712	6712
Bw4	1	7%	3213	3213	-	3213	3213
B8101	1	7%	1461	1461	-	1461	1461
Bw6	1	7%	1353	1353	-	1353	1353
B48	1	7%	1149	1149	-	1149	1149
B51	1	7%	973	973	-	973	973
Cw3	1	7%	915	915	-	915	915
Cw9	1	7%	915	915	-	915	915

Class II							
*** Serum 160 ***							
13 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR53	13	100%	23472	22829	5093	13766	31079
DR10	13	100%	23205	22521	4833	13446	31497
DR1	13	100%	21251	21125	4005	11952	28871
DR51	13	100%	20495	20273	3665	12185	25801
DR9	13	100%	20371	20560	3664	13779	27307
DR7	13	100%	19038	19367	3959	11784	26572
DQ5	13	100%	8788	9011	4318	1568	16212
DR14	13	100%	4337	3873	1219	1440	5921
DR103	12	92%	20883	21427	3090	16005	27421
DQ2	12	92%	6219	7454	3791	1656	14920
DR4	12	92%	3662	3848	1552	1661	6107
DR52	12	92%	2719	2905	1246	893	5214
DR12	10	76%	1613	1606	444	766	2420
DQ6	9	69%	1463	1545	474	987	2563
DQA1*01	2	15%	9439	9439	2890	6549	12329
DR1404	2	15%	1686	1686	409	1277	2095
DR15	2	15%	662	662	62	600	724
DR2	1	7%	15805	15805	-	15805	15805
DQA1*05	1	7%	6107	6107	-	6107	6107
DQA1*04	1	7%	3708	3708	-	3708	3708
DQA1*03	1	7%	3216	3216	-	3216	3216
DQA1*02	1	7%	3031	3031	-	3031	3031
DQ3	1	7%	835	835	-	835	835
DQ7	1	7%	835	835	-	835	835
DR16	1	7%	561	561	-	561	561

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 14. Summary of Single Antigen results for Serum #161

Class I							
*** Serum 161***							
14 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A2	14	100%	12339	12241	5454	2972	19468
B62	14	100%	8008	7176	3115	1651	12073
A69	14	100%	7614	7830	3904	1368	13549
B57	14	100%	7368	6946	3149	1304	11239
A68	14	100%	7214	7496	3737	1690	12894
Cw18	14	100%	5290	5019	2364	967	9073
B72	14	100%	4902	4649	2236	874	8415
Cw17	14	100%	4570	4369	2093	1071	7678
B49	14	100%	4562	4225	2085	798	7784
B77	14	100%	4539	4389	2007	1058	7644
B58	14	100%	4272	4052	1942	767	7094
B50	14	100%	4180	3868	1868	756	7071
B71	14	100%	3873	3728	1798	844	6733
Cw15	13	92%	6351	6460	2886	1065	11640
B76	13	92%	6149	5464	2588	1152	9872
Cw5	13	92%	6109	6000	3165	827	11937
Cw6	13	92%	5728	5274	2610	1136	10505
Cw2	13	92%	5678	5392	2670	1030	10064
B75	13	92%	4772	4736	2340	988	8941
B63	13	92%	4610	4283	2040	1018	8168
B56	13	92%	3606	3545	1499	553	6001
B46	13	92%	3452	3418	1491	542	5916
Cw4	12	85%	3250	3276	1535	512	6345
B35	12	85%	2310	2148	850	555	3540
B51	11	78%	2588	2456	889	856	4187
B52	11	78%	2200	2152	673	797	3427
B13	11	78%	2148	2047	672	655	3091
B53	10	71%	1945	1855	625	630	2926
B78	6	42%	1411	1370	486	516	2150
A203	4	28%	3835	5130	2925	2770	10083
B55	4	28%	1538	1668	361	1337	2262
Cw16	3	21%	5069	5927	4367	1060	11654
A24	3	21%	1572	1553	176	1328	1759
A11	3	21%	1435	1670	516	1190	2387
A74	3	21%	1317	1448	342	1111	1917
B48	2	14%	4198	4197	1726	2472	5923

Class II							
*** Serum 161***							
14 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR4	14	100%	11895	11440	3441	5597	16860
DQ8	14	100%	7825	8453	3715	1854	15434
DQ9	14	100%	7600	7749	3340	1529	13420
DR53	14	100%	4912	4722	2071	1221	8375
DQ6	14	100%	4738	5024	2424	932	9781
DQ4	12	85%	3934	3305	1429	690	5634
DQ5	11	78%	2832	2950	1517	538	6534
DQA1*01	3	21%	5876	5313	1505	3255	6810
DR9	2	14%	1259	1259	396	863	1655
DR1	2	14%	1172	1172	170	1002	1342
DQ3	1	7%	5463	5463	-	5463	5463
DQA1*03	1	7%	5463	5463	-	5463	5463
DQA1*02	1	7%	3323	3323	-	3323	3323
DQA1*04	1	7%	957	957	-	957	957
DQ7	1	7%	763	763	-	763	763
DQ2	1	7%	507	507	-	507	507

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 15. Summary of Single Antigen results for Serum #162

Class I							
*** Serum 162***							
14 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
A23	14	100%	20243	18718	5877	7723	28009
B57	14	100%	19950	18783	5616	6393	27239
A24	14	100%	19406	17787	6224	7264	27019
B49	14	100%	19323	17494	5535	6000	25829
B38	14	100%	19107	17826	5241	7120	25894
A32	14	100%	19077	17840	5455	6471	26660
B59	14	100%	17619	16071	4897	5697	24117
B58	14	100%	17534	16447	4705	5958	24177
B63	14	100%	16744	15589	4537	6338	23966
A25	14	100%	16007	14533	5195	3605	22415
B51	14	100%	15274	14337	4870	4004	21458
B77	14	100%	15211	14365	3867	6895	20831
B13	14	100%	14713	14086	4653	4778	21262
B44	14	100%	13424	12849	3754	4869	18675
B52	14	100%	11710	10829	3567	3443	16783
B37	14	100%	11607	11061	3573	4652	17642
A68	14	100%	10918	11047	3808	3159	16605
B47	14	100%	10852	9949	3161	3728	15579
A69	14	100%	9990	9503	3679	2135	15984
A2	14	100%	9085	8861	3152	2066	13246
A34	14	100%	4936	4860	1927	1410	8094
A33	14	100%	4571	4596	1936	1229	8099
A26	14	100%	3142	3138	1273	976	5810
B53	13	92%	15980	14865	4128	6515	20089
Cw2	13	92%	7820	7329	2463	1264	11337
A66	12	85%	2732	2628	883	1201	4182
B27	10	71%	15823	14079	4700	5296	19323
Cw6	10	71%	2854	2700	723	719	3496
Bw4	9	64%	18530	16950	5051	8500	23878
Cw18	8	57%	2005	1920	595	525	2536
Cw5	7	50%	2007	1814	655	537	2687
Cw15	7	50%	1559	1542	510	516	2148
B2705	6	42%	15647	14065	5257	4885	19641
A2403	4	28%	9240	11647	5014	7845	20263
Cw16	4	28%	2375	2953	2079	1015	6050
A203	3	21%	3301	3700	1687	1864	5937

Class II							
*** Serum 162***							
14 typing Labs							
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max
DR51	14	100%	12182	12193	3127	6785	17369
DR16	14	100%	11582	12166	3281	6530	17019
DR15	14	100%	8429	8019	2510	3314	13467
DR9	14	100%	6060	5703	1871	1647	9718
DPw3	14	100%	6035	5919	2089	2228	10452
DPw6	14	100%	5897	6203	2179	2022	10281
DR8	14	100%	5356	5267	1224	2685	7520
DR11	14	100%	3844	3882	1090	2473	6149
DR1	14	100%	3387	3199	1009	1165	5276
DPw2	14	100%	3194	3237	1299	1021	6277
DP28	14	100%	3133	3150	1196	1105	5721
DP18	14	100%	2743	2698	1083	862	4913
DP9	13	92%	5807	5389	1711	1866	7837
DP17	13	92%	5697	5154	1663	1872	7732
DP14	13	92%	5457	5112	1599	2070	7546
DR12	13	92%	4427	4329	1147	1882	6799
DR103	13	92%	3642	3586	1082	1311	5806
DR10	13	92%	3406	3292	1026	1078	5407
DP20	12	85%	5673	5901	1786	2727	10082
DP10	11	78%	2462	2519	838	1070	4400
DPw4	6	42%	3181	3541	893	2818	5409
DP402	6	42%	2755	2633	963	940	4074
DPw1	3	21%	2044	1859	387	1320	2213
DR13	2	14%	2439	2439	1189	1250	3628
DPA1*01	1	7%	2773	2773	-	2773	2773
DPA1*03	1	7%	2727	2727	-	2727	2727
DPA1*02	1	7%	2662	2662	-	2662	2662
DPA1*04	1	7%	1167	1167	-	1167	1167
DP13	1	7%	630	630	-	630	630
DP11	1	7%	557	557	-	557	557

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 16a. Individual laboratory results for Serum #159 - class I by One Lambda Single Antigen

	**** Serum 159 ****																									
Ctr	A29	A32	A33	A74	B18	B35	B37	B38	B41	B42	B51	B52	B53	B54	B55	B59	B60	B61	B64	B65	B67	B7	B73	B8	Cw1	Cw12
230	8694	13824	16641	11818	18175	5528	16459	14739	21591	26447	9326	5379	6476	20549	20262	19459	12052	12451	15001	9600	13481	15762	15672	27998	17973	23871
792	5751	9504	12956	7931	12293	3302	11392	9728	15233	17155	6163	3426	3959	13871	11531	13532	8288	10001	10413	6857	9187	10102	10546	19244	12982	14907
1426	5378	9744	10867	8277	14357	3910	12557	11427	16988	18724	6321	3793	4748	16556	14518	15465	9025	12127	12490	8285	13119	11377	13169	22317	14583	16899
2400	6516	11407	12115	9287	13916	3708	12439	10376	16700	17830	6090	3702	4350	15583	13103	14755	9176	11302	11413	7937	10504	11859	12168	21140	14273	16295
3224	5828	10233	13700	8199	12995	3467	10517	10051	16096	18815	6607	3277	3975	15248	12062	14072	7817	10436	11152	6725	10569	10303	10703	21802	13279	15543
3632																										
3753	5081	10264	10483	7566	12057	3917	11074	9665	18223	20812	6466	3197	4452	16694	12789	15208	7072	9877	11264	7078	10504	10425	10939	24192	14598	17050
5214	7281	14653	18708	12393	18628	5778	14958	15101	21787	22900	10036	5163	6892	20829	17163	19703	9961	14352	16526	10277	14323	15114	15103	23344	18263	20900
8001	6278	11393	15455	9565	15014	3823	13437	11727	19509	21962	6943	3525	4669	17994	14096	16951	8256	11328	12872	7924	11351	11705	11488	24660	15940	18442
8050	3716	6551	7273	5288	13235	4089	11562	9813	16138	18937	6785	3783	4709	15008	12536	14779	9582	11452	10992	7157	10038	11339	12161	22085	14979	17850
8083	8261	13482	18415	11214	17277	4677	15101	12951	20739	23072	8349	4268	5586	19687	15640	17603	10858	13840	14146	8616	13125	13881	14279	27615	16663	19759
8103	2848	4406	6307	4242	6509	2244	5533	5311	8632	9660	3834	2317	2675	7169	6411	7393	4707	6298	5972	4298	5049	5990	6645	10573	8484	8896
Avg	5967	10496	12993	8707	14041	4040	12275	10990	17421	19665	6993	3803	4772	16290	13646	15356	8799	11224	12022	7705	11023	11623	12079	22270	14729	17310
Std																										
Dev.S	1755	3053	4135	2542	3393	997	2923	2716	3723	4319	1701	874	1185	3817	3502	3353	1955	2173	2767	1595	2581	2680	2520	4685	2696	3801
MFI																										
%CV	29%	29%	32%	29%	24%	25%	24%	25%	21%	22%	24%	23%	25%	23%	26%	22%	22%	19%	23%	21%	23%	23%	21%	21%	18%	22%

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 16b. Individual laboratory results for Serum #159 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 159 ****																									
Ctr	A29	A32	A33	A74	B18	B35	B37	B38	B41	B42	B51	B52	B53	B54	B55	B59	B60	B61	B64	B65	B67	B7	B73	B8	Cw1	Cw12
3808	1026	2621	3027	1648	3801	1078	4979	2928	5614	7368	1506	887	1130	5926	4506	5303	1214	1343	3481	2614	2165	2718	1448	9701	6399	5781
8029	2853	5412	5997	3415	7257	2303	7136	5175	8899	9426	3417	2191	3035	9342	6526	8209	2685	3584	5958	5332	4995	7537	3933	13309	9984	8821
Avg	1940	4017	4512	2532	5529	1691	6058	4052	7257	8397	2462	1539	2083	7634	5516	6756	1950	2464	4720	3973	3580	5128	2691	11505	8192	7301
Std																										
Dev.S	1292	1974	2100	1249	2444	866	1525	1589	2323	1455	1351	922	1347	2415	1428	2055	1040	1585	1752	1922	2001	3408	1757	2551	2535	2150
MFI																										
%CV	67%	49%	47%	49%	44%	51%	25%	39%	32%	17%	55%	60%	65%	32%	26%	30%	53%	64%	37%	48%	56%	66%	65%	22%	31%	29%

Table 16a. Individual laboratory results for Serum #159 - class I by One Lambda Single Antigen, cont.

**** Serum 159 ****																											
Ctr	Cw14	Cw15	Cw16	Cw18	Cw2	Cw4	Cw5	Cw6	Cw7	Cw8	A1	A31	A34	A36	A68	B48	B49	B78	B81	A30	B39	A69	B13	B63	A80	B27	B2708
230	20099	22454	21144	15909	13999	14594	20581	18726	13829	17436	6555	4567	8362	5129	5808	6984	5194	4078	8264	3574	13516	4753	2643	2818	2152	2037	
792	10921	14849	11988	12531	9155	8641	14192	12579	13277	13594	3908	3106	6019	3107	4980	5107	2904	2730	5449	2610	10781	2921	1666	1750			
1426	12336	17255	14562	14471	10216	9163	17039	14520	13935	16786	3191	3150	4468	2299	2203	6022	2942	3257	6866	2593	13714		1974	1957	1436	1492	
2400	11504	16414	13016	13893	9752	9832	15848	14094	13597	15066	4288	4102	6026	3284	4490	5947	3222	2982	6823	3278	12841	3649					
3224	11113	15528	12300	12697	8655	8904	14393	13259	12987	13714	4234	3040	5764	3210	5244	4313	3142	2796	5589	2517	11953	2873	1578	1440	1295	1258	
3632																											
3753	12245	16275	13670	13286	8502	8337	16100	14108	11122	15751	4109	2654	5254	3265	3570	2499	3277	2877	4321	2219	12844	2185	1670	1861	1321	1082	
5214	15755	21138	17484	18028	11096	12332	20076	18154	15947	18993	5793	4946	9073	4446	7502	5850	5197	4656	7730	3728	18324	3753	2619	3281	2083	1574	1574
8001	13190	18150	15224	15408	9887	11071	17420	15931	14899	16481	4395	3495	6740	3448	5432	4689	3249	2893	5683	2717	13625	2903	1890	1988	1441	1103	
8050	13053	16596	14309	14725	10888	9645	17192	14617	14575	16009	2848	1461	2181	2243		5547	3539	3222	6567		11918		1870	2110	1339	1657	
8083	13727	18884	15610	16419	11731	11581	18986	16927	16315	17301	5621	4380	8561	4365	7133	6810	4226	3388	7783	3645	15140	4304					
8103	8100	8222	9225	8726	6495	7841	8487	8550	8775	8783	1902	1463	2822	1477	1732	3293	1567	1877	4217	1102	6229	895	1141	1317	909	940	940
Avg	12913	16888	14412	14190	10034	10176	16392	14679	13569	15447	4259	3306	5934	3298	4809	5187	3496	3160	6299	2798	12808	3137	1895	2058	1497	1393	1257
Std																											
Dev.S	3060	3695	3108	2454	1953	2029	3342	2824	2135	2724	1354	1160	2230	1063	1890	1398	1049	727	1365	802	2946	1158	483	628	418	365	448
MFI																											
%CV	24%	22%	22%	17%	19%	20%	20%	19%	16%	18%	32%	35%	38%	32%	39%	27%	30%	23%	22%	29%	23%	37%	25%	31%	28%	26%	36%

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 16b. Individual laboratory results for Serum #159 - class I by Lifecodes-Immucor Single Antigen - cont.

**** Serum 159 ****																											
Ctr	Cw14	Cw15	Cw16	Cw18	Cw2	Cw4	Cw5	Cw6	Cw7	Cw8	A1	A31	A34	A36	A68	B48	B49	B78	B81	A30	B39	A69	B13	B63	A80	B27	B2708
3808	5845	3826	5340	4355	1698	2409	3367	6528	4528	5909					1186												
8029	9078	5445	7521	6499	5408	3278	5901	8983	7030	9767	2196	1429	2392	1822	3053	653	1686	2136	3530	1449		1183	996	1521	741	666	752
Avg	7462	4636	6431	5427	3553	2844	4634	7756	5779	7838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Std																											
Dev.S	2286	1145	1542	1516	2623	614	1792	1736	1769	2728	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MFI																											
%CV	31%	25%	24%	28%	74%	22%	39%	22%	31%	35%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 16a. Individual laboratory results for Serum #159 - class I by One Lambda Single Antigen, cont.

**** Serum 159 ****							
Ctr	A66	A6602	Cw17	B77	B3901	Other	Manufacturer
230	14089						One Lambda
792	8714		1519				One Lambda
1426	8231		1742				One Lambda
2400	9369						One Lambda
3224		8254	1142				One Lambda
3632							
3753	8074	8074					One Lambda
5214		11648	1929	1424		B2705,A1101	One Lambda
8001		9383	1537	1039			One Lambda
8050		4938	1844				One Lambda
8083	11787						One Lambda
8103	4617	4617	2256	809	6229	A11,B40,B15,B14 >	One Lambda
Avg	9269	7819	1710	1091	-		
Std							
Dev.S	3001	2680	355	311	-		
MFI							
%CV	32%	34%	21%	28%	-		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 16b. Individual laboratory results for Serum #159 - class I by Lifecodes-Immucor Single Antigen - cont.

**** Serum 159 ****							
Ctr	A66	A6602	Cw17	B77	B3901	Other	Manufacturer
3808		2162			3799	Cw403,B703,B8101	Immucor
8029	5104		1080	755	6827	Cw403,A11,B50,B47 >	Immucor
Avg	-	-	-	-	5313		
Std							
Dev.S	-	-	-	-	2141		
MFI							
%CV	-	-	-	-	40%		

Table 17a. Individual laboratory results for Serum #160 - class I by One Lambda Single Antigen

	**** Serum 160 ****																								
Ctr	B57	B62	B63	B75	B76	B77	A3	B13	B35	B44	B58	B53	A74	B46	B7	A11	B81	A2	A68	A69	A31	A30	A33	Other	Manufacturer
230	20624	6509	17092	9286	5571	7322	4319	4666	5208	6081	4660	3542	2123		2446		2095								One Lambda
792	16483	6068	11676	7210	4928	6646	3561	5265	4126	6475	4997	3803	1914	1875	2138		2048								OneLambda
1426	12631	4226	7528	4668	3557	4350	1597	2571	2350	3116	3136	2153		1005											One Lambda
2400	13010	4540	9317	5887	3903	4959		3167	3182	4683	3812	2741													One Lambda
3224	13830	4995	10041	5995	2778	5119	2880	3770	3258	4810	3774	2717	1456	1169	1565	1306	1460	1183	1106	683				B72	One Lambda
3632																									
3753	8765	2627	6899	2588	2161	1828	1907	1171	1115	1313			1032			1199									One Lambda
5214	15052	5953	12769	5992	4655	4940	3793	3795	2505	4029	2240	1795	2002	1461	1358	2122	1212	1651	1457	1000	1327	1159	1322	B72,A66,A34,A6601>	One Lambda
8001	13934	4774	10679	5820	3838	4504	2892	3830	2855	3818	2706	1945	1530	1174	1173	1059	1055	1115	1092		1039		1058		One Lambda
8050	12577	4472	10435	4419	3693	3520	1601	2245	2036	2295	1620	1254	1142	1128	1217		1016								One Lambda
8083	18206	6562	12729	8177	5415	7429	4429	6369	5141	6420	6193	4203		2200	2053	1999		1815							One Lambda
8103	9792	3672	6712	4587	1357	4416	1659	2823	2496	3013	3290	2247	937	1358	1336	798	1461	813	745	725	784	580	705	B72,Cw4,Cw6,A203>	One Lambda
Avg	14082	4945	10534	5875	3805	5003	2864	3607	3116	4187	3643	2640	1517	1421	1661	1414	1478	1315	1100	803	1050	870	1028		
Std																									
Dev.S	3447	1236	3045	1865	1324	1652	1130	1459	1269	1702	1364	951	459	414	484	530	441	410	291	172	272	409	310		
MFI																									
%CV	24%	25%	29%	32%	35%	33%	39%	40%	41%	41%	37%	36%	30%	29%	29%	38%	30%	31%	26%	21%	26%	47%	30%		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 17b. Individual laboratory results for Serum #160 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 160 ****																								
Ctr	B57	B62	B63	B75	B76	B77	A3	B13	B35	B44	B58	B53	A74	B46	B7	A11	B81	A2	A68	A69	A31	A30	A33	Other	Manufacturer
3808	2416	1105	2264	993	879	1127	1363																		Immucor
8029	3213	1317	3168	1353	1132	1215	956	826	617	855	740		593	504		589		529	515	503	514	539		Bw4,Bw6	Immucor
Avg	2815	1211	2716	1173	1006	1171	1160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Std																									
Dev.S	564	150	639	255	179	62	288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MFI																									
%CV	20%	12%	24%	22%	18%	5%	25%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Table 18a. Individual laboratory results for Serum #161 - class I by One Lambda Single Antigen

	**** Serum 161 ****																									
Ctr	A2	A68	A69	B49	B50	B57	B58	B62	B71	B72	B77	Cw17	Cw18	B46	B56	B63	B75	B76	Cw15	Cw2	Cw5	Cw6	B35	Cw4	B13	B51
230	19468	11974	13549	6441	5928	10825	6484	9687	6733	7217	6870	7678	6802	5217	5674				9831				3069	6345	2742	3140
792	13424	8305	8557	4212	3941	7035	4226	7575	3885	4784	4506	4016	4937	3452	3409	4610	5492	5697	5258	5239	5452	4836	2082	2872	1838	2269
1426	10532	5640	6671	4527	4348	7253	4318	7927	3860	4705	4410	4606	5831	3090	3643	4589	4452	6466	7185	6059	7369	6090	2214	3245	1755	1931
2400	13695	8272	8909	4813	4317	8186	4531	8189	4239	5182	5273	4721	5217	3740	3606	5178	5186	6498	6008	5678	6107	5728	2405	3255	2148	2594
3224	15809	10339	10286	5599	5050	9152	5372	9328	4897	6285	5656	5548	6702	4159	4365	5462	6671	6284	7901	7220	8118	6932	2502	3588	2427	2862
3632	11072	6156	6287	2568	2363	4993	2534	5124	2194	3087	2843	2422	3111	2219	2807	2968	3486	3762	3969	3594	3940	3449				
3753	11253	5893	6379	3577	3160	5803	3039	6355	2907	3903	3233	3244	4502	2397	2633	3521	3588	5100	5842	5237	6109	4975	1465		1310	1628
5214	19182	12894	12722	7784	7071	11239	7094	12073	6381	8415	7644	7497	9073	5916	6001	8168	8941	9872	11640	10064	11937	10505	3540	5328	3091	4187
8001	16697	11188	11315	5364	4997	8853	5144	9158	4695	5975	5661	5143	6053	4197	4024	5754	6785	7400	7129	6760	7229	6552	2405	3635	2162	2588
8050	9914	5569	6541	4597	4042	7482	4184	8088	3647	5020	4571	4533	5363	2985	3317	4705	4772	6149	6351	6130	6949	5779	1809	3023	1663	1626
8083	19241	12412	12662	6578	5869	10572	6363	10612	5412	6909	6559	7197	8327	5139	4872	6697	7789	8975	9717	9435	10335	8757	2950	4282	2729	3344
8103	4600	2650	2738	1425	1375	3027	1614	2936	1505	1840	1983	2313	2195	1381	1188	1687	2039	2298	2095	2336	2547	2260	784	1668	655	856
Avg	13741	8441	8885	4790	4372	7868	4575	8088	4196	5277	4934	4910	5676	3658	3795	4849	5382	6227	6911	6159	6917	5988	2293	3724	2047	2457
Std																										
Dev.S	4549	3311	3302	1759	1584	2474	1645	2452	1562	1832	1691	1830	1954	1346	1331	1766	2034	2131	2641	2249	2647	2283	768	1320	704	933
MFI																										
%CV	33%	39%	37%	37%	36%	31%	36%	30%	37%	35%	34%	37%	34%	37%	35%	36%	38%	34%	38%	37%	38%	38%	34%	35%	34%	38%

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 18b. Individual laboratory results for Serum #161 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 161 ****																									
Ctr	A2	A68	A69	B49	B50	B57	B58	B62	B71	B72	B77	Cw17	Cw18	B46	B56	B63	B75	B76	Cw15	Cw2	Cw5	Cw6	B35	Cw4	B13	B51
3808	2972	1690	1368	798	756	1304	767	1651	844	874	1058	1071	967			1018	988	1152	1065	1030	827	1136		512		
8029	3526	1975	1640	877	947	1520	1062	1767	1001	894	1184	1188	1195	542	553	1330	1390	1387		1320	1084	1568	555	1561		
Avg	3249	1833	1504	838	852	1412	915	1709	923	884	1121	1130	1081	-	-	1174	1189	1270	-	1175	956	1352	-	1037	-	-
Std																										
Dev.S	392	202	192	56	135	153	209	82	111	14	89	83	161	-	-	221	284	166	-	205	182	305	-	742	-	-
MFI																										
%CV	12%	11%	13%	7%	16%	11%	23%	5%	12%	2%	8%	7%	15%	-	-	19%	24%	13%	-	17%	19%	23%	-	72%	-	-

Table 18a. Individual laboratory results for Serum #161 - class I by One Lambda Single Antigen, cont.

	**** Serum 161 ****						
Ctr	B52	B53	B78	A203	B55	Other	
230	2626	2324				B48,Cw16,B4005	One Lambda
792	1995	1682					One Lambda
1426	2064	1871	1442		1426	B45,Cw12	One Lambda
2400	2268						One Lambda
3224	2526	2018	1564		1649	A11,A24,A32,A74 >	One Lambda
3632				10083		Cw403,B48,A210,Cw16	One Lambda
3753	1322	1152					One Lambda
5214	3427	2926	2150		2262	A11,A24,A66,B44 >	One Lambda
8001	2200	2077	1379		1337	A11,A24,A74	One Lambda
8050	1780	1475	1172				One Lambda
8083	2675	2402					One Lambda
8103	797	630	516	4451		B15,B7801	One Lambda
Avg	2153	1856	1371	7267	1669		
Std							
Dev.S	705	659	533	3982	417		
MFI							
%CV	33%	36%	39%	55%	25%		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 18b. Individual laboratory results for Serum #161 - class I by Lifecodes-Immucor Single Antigen, cont.

	**** Serum 161 ****						
Ctr	B52	B53	B78	A203	B55	Other	
3808				2770		Cw403	Immucor
8029				3218		Bw4,Bw6,Cw16	Immucor
Avg	-	-	-	2994			
Std							
Dev.S	-	-	-	317			
MFI							
%CV	-	-	-	11%			

Table 19a. Individual laboratory results for Serum #162 - class I by One Lambda Single Antigen

	**** Serum 162 ****																											
Ctr	A2	A23	A24	A25	A26	A32	A33	A34	A68	A69	B13	B37	B38	B44	B47	B49	B51	B52	B57	B58	B59	B63	B77	B53	Cw2	A66	B27	
230	13246	28009	27019	22415	5810	26660	7216	8094	16605	15984	21262	17642	25894	18675	15579	25829	21458	16783	27239	24177	24117	23966	20831		11337	3621	19323	
792	8256	18845	18022	14216	2959	16936	4694	4465	10668	9303	13143	10372	16990	11796	9313	16592	13556	10091	18708	15628	14839	14489	12933	14617	7157	2458	14201	
1426	10761	20985	20158	17128	4559	17768	5846	6407	12055	11158	15402	13862	19284	15100	11991	20104	15848	12494	20251	17758	17832	16759	15224	16288	8960	3468	17707	
2400	9047	20369	19806	16242	3488	19409	4447	4987	11110	10162	14279	12090	18929	13358	10930	18926	14896	11543	19648	17310	17434	16854	15197	15980	7973	2830	16061	
3224	10617	22073	21710	16280	3516	20225	5753	5383	13281	10847	16033	11123	20100	14212	10834	19720	16408	11876	20399	17943	17945	16728	15463	16973	7820	2704		
3632	8272	19470	18460	15771	2246	19104	3483	3468	9786	8103	13396	9636	16419	11740	8484	16670	14238	9891	18530	15690	15367	14715	13235	14719	5132			
3753	7921	20117	19005	14575	2941	19050	3536	4884	10308	8746	11551	8992	17414	11754	8202	17794	13759	9629	19369	16215	16190	14354	13015	14939	4681	1722	15584	
5214	13099	22869	22452	19270	4628	22481	8099	8053	16391	13400	20125	14471	22279	17589	13238	22013	19988	14602	22615	21098	20879	20278	19005	20089	9094	4182		
8001	10411	23252	23316	17962	3325	21829	5757	5390	13478	11844	17678	12800	22218	15927	12270	21361	18001	13783	23031	19387	18914	18194	17390	18602	7651	2760		
8050	9123	14366	10227	12804	2048	18069	3394	4139	10725	9817	15147	13309	20522	13490	10869	19877	15651	11984	21457	18027	17804	17640	15732	17000	9294	1201	17151	
8083	11745	24556	24292	19315	3892	22517	6320	6390	14977	12689	18452	13667	22231	15424	12118	21868	17931	13125	23878	20631	19683	19055	17713	19521	8818	3272	18609	
8103	5937	10659	9014	8766	1863	10846	2671	2842	7020	5708	9931	7402	12063	9124	7064	11354	10032	8212	13459	12004	11380	10863	11215	10988	6099	1747	9696	
Avg	9870	20464	19457	16229	3440	19575	5101	5375	12200	10647	15533	12114	19529	14016	10908	19342	15981	12001	20715	17989	17699	16991	15579	16338	7835	2724	16042	
Std																												
Dev.S	2188	4544	5288	3507	1161	3838	1674	1637	2852	2683	3392	2789	3576	2717	2379	3590	3085	2386	3395	3122	3201	3326	2789	2578	1883	903	3053	
MFI																												
%CV	22%	22%	27%	22%	34%	20%	33%	30%	23%	25%	22%	23%	18%	19%	22%	19%	19%	20%	16%	17%	18%	20%	18%	16%	24%	33%	19%	

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 19b. Individual laboratory results for Serum #162 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 162 ****																										
Ctr	A2	A23	A24	A25	A26	A32	A33	A34	A68	A69	B13	B37	B38	B44	B47	B49	B51	B52	B57	B58	B59	B63	B77	B53	Cw2	A66	B27
3808	2066	7723	7264	3605	976	6471	1229	1410	3159	2135	4778	4652	7120	4869	3728	6000	4004	3443	6393	5958	5697	6338	6895	6515			5296
8029	3561	8770	8276	5122	1691	8395	1910	2130	5099	3150	6034	4836	8103	6841	4669	6815	4948	4158	7990	8436	6925	8013	7271	7023	1264	1576	7170
Avg	2814	8247	7770	4364	1334	7433	1570	1770	4129	2643	5406	4744	7612	5855	4199	6408	4476	3801	7192	7197	6311	7176	7083	6769	-	-	6233
Std																											
Dev.S	1057	740	716	1073	506	1360	482	509	1372	718	888	130	695	1394	665	576	668	506	1129	1752	868	1184	266	359	-	-	1325
MFI																											
%CV	38%	9%	9%	25%	38%	18%	31%	29%	33%	27%	16%	3%	9%	24%	16%	9%	15%	13%	16%	24%	14%	17%	4%	5%	-	-	21%

Table 19a. Individual laboratory results for Serum #162 - class I by One Lambda Single Antigen, cont.

**** Serum 162 ****										
Ctr	Cw6	Bw4	Cw18	Cw15	Cw5	B2705	A2403	Cw16	Other	Manufacturer
230		21645						6050	B62	One Lambda
792	2362		1701							OneLambda
1426	3177		2536	2148	2687			1015	B8	One Lambda
2400	2994	15898								One Lambda
3224	2814	20399	1871	1418	1583	16912				One Lambda
3632		18530				14381	20263	3655	A210	One Lambda
3753		13958								One Lambda
5214	3496	20125	2397	2086	2262	19641			A6601,A6602	One Lambda
8001	2644		1858	1325	1417	18880				One Lambda
8050	2770	8500	2139	1559	2007				Cw17	One Lambda
8083	3131	23878								One Lambda
8103	2893		2336	1742	2210	9696	8856	1095	Cw4,A11,A203,B15 >	One Lambda
Avg	2920	17867	2120	1713	2028	15902	14560	2954		
Std										
Dev.S	330	4917	317	344	468	4022	8066	2401		
MFI										
%CV	11%	28%	15%	20%	23%	25%	55%	81%		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 19b. Individual laboratory results for Serum #162 - class I by Lifecodes-Immucor Single Antigen, cont.

**** Serum 162 ****										
Ctr	Cw6	Bw4	Cw18	Cw15	Cw5	B2705	A2403	Cw16	Other	Manufacturer
3808						4885	7845		A203,A6601	Immucor
8029	719	9624	525	516	537		9624		Cw4,A203,Cw17	Immucor
Avg	-	-	-	-	-	-	8735	-		
Std										
Dev.S	-	-	-	-	-	-	1258	-		
MFI										
%CV	-	-	-	-	-	-	14%	-		

Table 20a. Individual laboratory results for Serum #159 - class II by One Lambda Single Antigen

**** Serum 159 ****																
Ctr	DP18	DP28	DPw2	DPw3	DPw6	DQ5	DP14	DP17	DP9	DP10	DP20	DQ2	DQ6	DP402	DPw4	
230	17955	10520	22185	21639	20357	8750				18086	20368	3531	3192		20356	DPA1*04,DQA1*01
792	12640	10969	14607	14886	14031	8129	13801	14296	14157	12535	13830	2385	2567		12782	One Lambda
1426	12358	7828	14261	14947	13576	6230	14975	15098	15397	12306	14152	2093	1800		13205	One Lambda
2400	13173	8715	16395	15378	14984	6834	14370	15096	15733	13495	15496	2897	2386		14368	One Lambda
3224	13465	11682	16255	15964	14334	8794	14377	15445	15886	12222	14959	2899		14593		One Lambda
3632	NT															One Lambda
3753	12498	6960	17059	16397	15366	6819	16655	17297	17189	14020	16586	1532	1460	15551		DR103
5214	16663	13104	20075	20075	18772	11145	19267	20042	20111	16652	19340	3708	2470	18325		One Lambda
8001	14399	11337	17112	17116	15586	9440	16418	17065	17455	13955	16427	2975	2382	15484		One Lambda
8050	12933	7334	16048	15615	14915	7488	15478	16076	16594	13342	14959	2493	2084	15147		One Lambda
8083	16334	13666	18470	18480	17448	11385	17339	18064	18351	14976	17154				16552	One Lambda
8103	5190	5133	6195	6069	6564	5508	5729	6583	6803	5561	6609	2121	1514	4512	4512	DR1,DQ3,DQ7,DP11 >
Avg	13419	9750	16242	16051	15085	8229	14841	15506	15768	13377	15444	2663	2206	13935	13629	
Std																
Dev.S	3334	2732	4050	3968	3520	1908	3599	3567	3562	3170	3570	671	553	4795	5260	
MFI																
%CV	25%	28%	25%	25%	23%	23%	24%	23%	23%	24%	23%	25%	25%	34%	39%	

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 20b. Individual laboratory results for Serum #159 - class II by Lifecodes-Immucor Single Antigen

**** Serum 159 ****																
Ctr	DP18	DP28	DPw2	DPw3	DPw6	DQ5	DP14	DP17	DP9	DP10	DP20	DQ2	DQ6	DP402	DPw4	
3808	6957	6137	7956	7732	8092	1645	8151	7742	8001				1640	7865		DQA1*01
8029	10615	10249	11483	11543	12260	3438	11335	11620	12283			893	3446		11869	DR1,DR103,DR11,DR52 >
Avg	8786	8193	9720	9638	10176	2542	9743	9681	10142	-	-	-	2543	-	-	
Std																
Dev.S	2587	2908	2494	2695	2947	1268	2251	2742	3028	-	-	-	1277	-	-	
MFI																
%CV	29%	35%	26%	28%	29%	50%	23%	28%	30%	-	-	-	50%	-	-	

Table 21a. Individual laboratory results for Serum #160 - class II by One Lambda Single Antigen

	**** Serum 160 ****															
Ctr	DQ5	DR1	DR10	DR14	DR51	DR53	DR7	DR9	DQ2	DR103	DR4	DR52	DR12	DQ6	Other	
230	11271	28871	31497	4867	25801	31079	26572	27307	9564	27421	5665	4365	2420			One Lambda
792	9003	21099	22394	4740	20385	22991	18992	20365	8802	20664	4811	2844	1502	1592		One Lambda
1426	7829	20410	23205	3522	19138	22466	18854	20129	5545	20308	2793	2522	1472	1463		One Lambda
2400	7641	20714	22399	4351	19615	21670	18944	20378	6084	20554	3723	2593				One Lambda
3224	12329	21821	23240	4337	20776	24683	19297	20801	11952	20531			1724	2008	DQA1*01	One Lambda
3632	NT															One Lambda
3753	7171	21565	23262	2475	20638	23694	19038	20342	5110	21937	1825	2035	1111	1040		One Lambda
5214	16038	23204	23426	4959	22820	23569	22691	22605	14920	23076	5982	4516	2055	2563		One Lambda
8001	11015	23509	26675	4378	23797	27513	22459	23357	11239	23288	4991	3277	1765	1728		One Lambda
8050	8788	21251	22857	4178	20495	23472	19779	20371	6330	21102	3600	3271	1837	1304		One Lambda
8083	16212	25819	28315	5921	25270	30375	24382	25781		25541	6107	5214			DR2	One Lambda
8103	6549	11952	13446	2847	12185	13766	11784	13779	6107		2681	1969	1415	1220	DR15,DQ3,DQ7,DQA1*01 >	One Lambda
Avg	10350	21838	23701	4234	20993	24116	20254	21383	8565	22442	4218	3261	1700	1615		
Std																
Dev.S	3383	4147	4482	980	3692	4664	3839	3517	3305	2415	1508	1103	385	489		
MFI																
%CV	33%	19%	19%	23%	18%	19%	19%	16%	39%	11%	36%	34%	23%	30%		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 21b. Individual laboratory results for Serum #160 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 160 ****															
Ctr	DQ5	DR1	DR10	DR14	DR51	DR53	DR7	DR9	DQ2	DR103	DR4	DR52	DR12	DQ6	Other	
3808	1568	17594	17282	1440	17117	16606	14849	17108	1656	16700	1661	893			DR1404	Immucor
8029	1740	16820	14779	2337	15518	14904	14140	14957	2149	16005	2337	1363	766	987	DR1404,DR15,DR16	Immucor
Avg	1654	17207	16031	1889	16318	15755	14495	16033	1903	16353	1999	1128	-	-		
Std																
Dev.S	122	547	1770	634	1131	1203	501	1521	349	491	478	332	-	-		
MFI																
%CV	7%	3%	11%	34%	7%	8%	3%	9%	18%	3%	24%	29%	-	-		

Table 22a. Individual laboratory results for Serum #161 - class II by One Lambda Single Antigen

	**** Serum 161 ****								
Ctr	DQ6	DQ8	DQ9	DR4	DR53	DQ4	DQ5	Other	
230	7249	12177	11829	15987	8375	3962		DQA1*01	One Lambda
792	5668	9504	8598	13561	5238	3956	2832		One Lambda
1426	4795	7995	7778	9820	4564	2431	2606		One Lambda
2400	4273	7654	7422	12435	4652	4162	3262		One Lambda
3224	6810	10745	9976	12605	5491	3912	3701	DQA1*01	One Lambda
3632	4681	6564	5956	8842	2667				One Lambda
3753	3549	6885	6505	10105	4622	1767	1947		One Lambda
5214	9781	15434	13420	16860	7814	5634	6534	DR1,DR9	One Lambda
8001	5970	11536	10048	14231	5171	4122	3134		One Lambda
8050	3350	7082	6824	11355	5570	1753	1817	DR1	One Lambda
8083	8523	12846	11444	15102	6708	5030	4369		One Lambda
8103	3255	5463	4906	6743	2324	2250	1714	DR9,DQ2,DQ3,DQ7 >	One Lambda
Avg	5659	9490	8726	12304	5266	3544	3192		
Std									
Dev.S	2096	3053	2625	3051	1786	1306	1450		
MFI									
%CV	37%	32%	30%	25%	34%	37%	45%		

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 22b. Individual laboratory results for Serum #161 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 161 ****								
Ctr	DQ6	DQ8	DQ9	DR4	DR53	DQ4	DQ5	Other	
3808	932	1854	1529	5597	1221				Immucor
8029	1507	2608	2252	6929	1699	690	538		Immucor
Avg	1220	2231	1891	6263	1460	-	-		
Std									
Dev.S	407	533	511	942	338	-	-		
MFI									
%CV	33%	24%	27%	15%	23%	-	-		

Table 23a. Individual laboratory results for Serum #162 - class II by One Lambda Single Antigen

	**** Serum 162 ****																						
Ctr	DP18	DP28	DPw2	DPw3	DPw6	DR1	DR11	DR15	DR16	DR51	DR8	DR9	DP14	DP17	DP9	DR10	DR103	DR12	DP20	DP10	DP402	DPw4	Other
230	4913	5721	6277	10452	10281	5276	6149	13467	17019	17369	7520	9718				5407	5806	6799	10082	4400		5409	One Lambda
792	2596	3058	2965	5487	5539	3471	3370	8523	13562	13040	5316	5996	5129	5083	5343	3262	3540	4253	5174	2191		2872	One Lambda
1426	2890	3207	3533	6027	5942	3302	3904	8433	10794	11414	5091	6324	5457	5827	5807	3406	3779	4420	5544	2470		3223	DPw1
2400	3002	3460	3757	6125	6725	3381	3919	8425	10952	12152	5597	6124	5969	5968	6301	3647	3824	4427	5911	2824		3138	One Lambda
3224	3156	3620	3754	6539	6964	3393	4162	8563	14207	13261	5270	6146	5693	5697	6289	3340	3642		5801	2444	3096		One Lambda
3632	2028	2209	2208	4456	5851	2138	3099	4961	9734	10561	4161	4211	3484	3812	3723		2189	3212	3860				One Lambda
3753	2001	2488	2627	5281	4976	2354	2518	7320	9910	9814	4202	4733	5078	5100	5206	2717	2640	3155	5206	2001	2462		One Lambda
5214	3951	4723	4629	8156	8501	4395	4877	10715	16090	15537	5601	7393	7546	7732	7837	4242	4409	4518	7510	3026	4074		One Lambda
8001	3086	3495	3401	6834	7026	3481	3784	8421	15263	15236	5396	6336	6182	6147	6507	3487	3452	4595	6194	2462	3047		One Lambda
8050	1755	2402	2429	6042	5822	3493	3238	8817	12212	12212	6311	5989	5929	5790	6079	3837	4205	5297	5356	1600	2183		One Lambda
8083	3931	4294	4354	8133	9386	4084	5135	10100	16725	16582	7057	7372	7157	7501	7718	3869	4576	5369	7458	3229		3787	DPw1
8103	1056	1395	1390	2599	2773	2074	2504	4698	7136	7613	3817	4049	2327	2506	2662	2025		3875	2727	1070			DR53,DQ3,DQ7,DPw1 >
Avg	2864	3339	3444	6344	6649	3404	3888	8537	12800	12899	5445	6199	5450	5560	5770	3567	3824	4538	5902	2520	2972	3686	
Std																							
Dev.S	1074	1182	1284	1985	2028	927	1080	2347	3166	2896	1117	1539	1492	1482	1537	854	965	1030	1865	879	728	1019	
MFI																							
%CV	38%	35%	37%	31%	30%	27%	28%	27%	25%	22%	21%	25%	27%	27%	27%	24%	25%	23%	32%	35%	24%	28%	

Blue = DSA against cell #157 only

Gold = DSA against cell #158 only

Green = DSA against cell #157 and #158

Table 23b. Individual laboratory results for Serum #162 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 162 ****																						
Ctr	DP18	DP28	DPw2	DPw3	DPw6	DR1	DR11	DR15	DR16	DR51	DR8	DR9	DP14	DP17	DP9	DR10	DR103	DR12	DP20	DP10	DP402	DPw4	Other
3808	862	1105	1021	2228	2022	1165	2473	3314	6530	6785	2685	1647	2070	1872	1866	1078	1311	1882			940		DR13
8029	2556	2933	2986	4510	5037	2783	5224	6518	10200	9131	5726	3815	4439	3974	4723	2484	3257	4486				2818	DR13,DQ5,DQ8,DQ9 >
Avg	1709	2019	2004	3369	3530	1974	3849	4916	8365	7958	4206	2731	3255	2923	3295	1781	2284	3184	-	-	-	-	
Std																							
Dev.S	1198	1293	1389	1614	2132	1144	1945	2266	2595	1659	2150	1533	1675	1486	2020	994	1376	1841	-	-	-	-	
MFI																							
%CV	70%	64%	69%	48%	60%	58%	51%	46%	31%	21%	51%	56%	51%	51%	61%	56%	60%	58%	-	-	-	-	

Paper Challenge

Table 24. Individual Virtual crossmatch results for Serum #161 vs Donor# V1

Donor #V1 HLA A*11:01:01-B*15:01:01-B*40:01:02-C*03:04:01-C*04:01:01-DRB1*09:01:02-DRB1*11:01:01-DRB3*02:02:01-DRB4*01:03:01-DQA1*03:02:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*03:03:02-DPA1*02:02-DPB1*02:02:01G-DPB1*05:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	161	40	Positive	Cw4 (4430) B62 (9687)	Positive	DR53 (8852) DQ9 (11830) DQA1*03 (15164)	Unacceptable	
792	161	99	Positive	Cw4 (2872) B62 (7575)	Positive	DR53 (5238) DQ9 (6749)	Unacceptable	
1426	161	99	Positive	Cw4 (3245) B62 (7927)	Positive	DR53 (4919) DQ9 (7778)	Unacceptable	
1461	161	26	Positive	B62 (1107)	Positive	DR53 (860) DQ9 (1395)	Unacceptable	
2400	161	99	Positive	Cw4 (3106) B62 (8155)	Positive	DR53 (4811) DQ9 (7333) DQA1*03 (9712)	Unacceptable	
3224	161	99.8	Positive	Cw4 (3588) A11 (1435) B62 (9328)	Positive	DR53 (5491) DQ9 (9976)	Unacceptable	
3632	161	98	Positive	Cw4 (1431) B62 (5124)	Positive	DR53 (2667) DQ9 (5956)	Unacceptable	
3753	161	99	Positive	B62 (6355)	Positive	DR53 (4622) DQ9 (6505)	Unacceptable	
3808	161		Positive	Cw4 (512) B62 (1651)	Positive	DR53 (1221) DQ9 (1529)	Unacceptable	
3966	161	99	Positive	Cw4 (2274) B62 (9849)	Positive	DR53 (5860) DQ9 (8413) DQA1*03 (10977)	Unacceptable	
8001	161	100	Positive	Cw4 (3635) B62 (9158)	Positive	DR53 (5171) DQ9 (10048)	Unacceptable	DPB1*02:02 not included on LSAB panel
8029	161	29	Positive	B62 (1767)	Positive	DQ8 (2608) DQ9 (2252)	Intermediate Risk	-
8050	161	99.43	Positive	Cw4 (3023) B62 (8088)	Positive	DR53 (5570) DQ9 (6824)	Unacceptable	
8080	161	100	Positive	Cw4 (5600) B62 (10462)	Positive	DR53 (7244) DQ9 (12061)	Unacceptable	
8083	161	98.95	Positive	Cw4 (4282) B62 (10612)	Positive	DR53 (6708) DQ9 (11444) DQA1*03 (12846)	Unacceptable	Possible DSA to class I antibodies
8103	161		Borderline	Cw4 (1668) B15 (2936) B62 (2936) B75 (2039) B63 (1687) B76 (2298) B77 (1983) B71 (1505) B72 (1840)	Borderline	DR9 (863) DR53 (2324) DQ3 (5463) DQA1*03 (5463)	Acceptable	
8110	161	100	Positive	Cw4 (9354) B62 (15027)	Positive	DR53 (9730) DQ9 (13706)	Unacceptable	
8111	161	93	Positive	Cw4 (2800) B62 (8100)	Positive	DR53 (5900) DQ9 (7600)	Unacceptable	

Table 25. Individual Virtual crossmatch results for Serum #161 vs Donor# V2

Donor #V2 HLA A*02:01-A*24:02-B*35:20-B*44:03-C*04:01:01G-C*16:02:01G-DRB1*04:07:01G-DRB1*13:01-DRB3*01:01:02G-DRB4*01:01:01G-DQA1*01:03-DQA1*03:01:01G-DQB1*03:02-DQB1*06:03-DPA1*02:01-DPB1*05:01:01G-DPB1*13:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	161	40	Positive	Cw4 (4430) A2 (20216) Cw16 (11654)	Positive	DR4 (13378) DQ8 (12177) DQ6 (8607) DQA1*01 (8309) DQA1*03 (5590)	Unacceptable	
792	161	99	Positive	Cw4 (2872) A2 (13424) B35 (2082) Cw4 (3245) A2 (10947) B35 (2214) Cw16 (6349)	Positive	DR4 (13561) DR53 (4558) DQ8 (6803) DQ6 (4541)	Unacceptable	
1426	161	99	Positive	A2 (2321)	Positive	DR4 (7844) DR53 (4209) DQ8 (7995) DQ6 (5406)	Unacceptable	
1461	161	26	Positive	Cw4 (3106) A24 (1017) A2 (14394) B35 (2303)	Positive	DR4 (4352) DR53 (860) DQ8 (1626)	Unacceptable	
2400	161	99	Positive	Cw4 (3588) A24 (1572) A2 (15809) B35 (2502)	Positive	DR4 (11828) DR53 (4231) DQ8 (7553) DQ6 (4914)	Unacceptable	
3224	161	99.8	Positive	Cw4 (1431) A2 (11072) Cw16 (5069)	Positive	DR4 (12605) DR53 (5491) DQ8 (10745) DQ6 (6810) DQA1*01 (6810)	Unacceptable	
3632	161	98	Positive	A2 (11253) B35 (1465)	Positive	DR4 (6400) DR53 (2180) DQ8 (3834) DQ6 (3498)	Unacceptable	Patient has low level anti-HLA antibody to B35, donor types as B*35:20, however no beads to represent B*35:20. Considering patient antibody profile showed reactivity to B5C that includes B35, most likely B35 DSA is present.
3753	161	99	Positive	Cw4 (512) A2 (2755)	Positive	DR4 (10105) DR53 (4622) DQ8 (6885) DQ6 (3549)	Unacceptable	
3808	161		Positive	Cw4 (2274) A2 (15623)	Positive	DR53 (1221) DQ8 (1854) DQ6 (932)	Unacceptable	
3966	161	99	Positive	Cw4 (3635) A24 (991) A2 (16697) B44 (829)	Positive	DR4 (13792) DR53 (5860) DQ8 (8904) DQ6 (4767) DQA1*01 (5571)	Unacceptable	B*35:20 not included on SAB panel; DRB1*04:07 not included on SAB panel
8001	161	100	Positive	A2 (3150)	Positive	DR53 (4498) DQ8 (11536) DQ6 (5095)	Unacceptable	B*35:20, C*16:02 not included on LSAB panel; DRB1*04:07 not included on LSAB panel
8029	161	29	Positive	Cw4 (3023) A2 (9914) B35 (1809) Cw4 (5600) A2 (18478) B35 (2852) Cw16 (10888)	Positive	DR53 (1699) DQ8 (2608) DQ6 (1507)	Intermediate Risk	
8050	161	99.43	Positive	Cw4 (4282) A24 (1425) A2 (18983) B44 (1031)	Positive	DR4 (11355) DR53 (5570) DQ8 (7082) DQ6 (3350)	Unacceptable	
8080	161	100	Positive		Positive	DR4 (13439) DR53 (7244) DQ8 (8904) DQ6 (6222)	Unacceptable	
8083	161	98.95	Positive		Positive	DR53 (6708) DQ8 (12846) DQ6 (7053)	Unacceptable	No B*35:20 bead to confirm; No DRB1*04:07 bead to confirm.
8103	161		Borderline	Cw4 (1668) A2 (4600) B35 (784) Cw4 (9354) A24 (2406) B44 (1733) B35 (5029) A2C (22213)	Borderline	DR4 (6743) DR53 (2324) DQ3 (5463) DQ6 (3255) DQA1*01 (3255) DQA1*03 (5463)	Acceptable	
8110	161	100	Positive		Positive	DR4 (19370) DR53 (9730) DQ8 (13735) DQ6 (8221)	Unacceptable	
8111	161	93	Positive	Cw4 (2800) A2 (13100) B35 (200)	Positive	DR4 (11700) DR53 (5900) DQ8 (8500) DQ6 (4000)	Unacceptable	

Table 26. Individual Virtual crossmatch results for Serum #161 vs Donor# V3

Donor #V3 HLA A*02:01:01-A*23:01:01-B*44:03:01-B*49:01:01-C*04:01:01-C*07:01:01-DRB1*08:01:01-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQA1*04:01:01-DQB1*04:02:01-DQB1*06:04:01-DPA1*01:03:01-DPB1*02:01:02G-DPB1*04:02:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	161	40	Positive	A2 (20216) B49 (6441)	Positive	DQ4 (5060) DQ6 (5386) DQA1*01 (5999)	Unacceptable	
792	161	99	Positive	Cw4 (2872) A2 (13424) B49 (4214)	Positive	DQ6 (3230)	Unacceptable	
1426	161	99	Positive	Cw4 (3245) A2 (10947) B49 (4527)	Positive	DQ4 (1839) DQ6 (3582)	Unacceptable	
1461	161	26	Positive	A2 (2321) B49 (580)	Positive	DQ6 (801)	Unacceptable	
2400	161	99	Positive	Cw4 (3106) A2 (14394) B49 (4739)	Positive	DQ4 (1651) DQ6 (3260)	Unacceptable	
3224	161	99.8	Positive	Cw4 (3588) A2 (15809) B49 (5599) A23 (666)	Positive	DQ4 (3912) DQ6 (6810) DQA1*01 (6810)	Unacceptable	
3632	161	98	Positive	Cw4 (1431) A2 (11072) B49 (2568)	Positive	DQ6 (2097)	Unacceptable	Positive due to Class I antibody.
3753	161	99	Positive	A2 (11253) B49 (3577)	Positive	DQ4 (1767) DQ6 (3549)	Unacceptable	
3808	161		Positive	Cw4 (512) A2 (2755) B49 (798)	Positive	DQ6 (932)	Unacceptable	
3966	161	99%	Positive	Cw4 (2274) A2 (15623) B49 (5606)	Positive	DQ4 (2535) DQ6 (4718) DQA1*01 (3947)	Unacceptable	
8001	161	100	Positive	Cw4 (3635) A2 (16697) B49 (5364) B44 (829) A23 (626)	Positive	DQ4 (1733) DQ6 (3501)	Unacceptable	C*07:01 not included on LSAB panel; DRB1*13:02 not included on LSAB panel
8029	161	29	Positive	A2 (3150) B49 (877)	Positive	DQ4 (690) DQ9 (2252) DQ6 (1507)	Intermediate Risk	
8050	161	99.43	Positive	Cw4 (3023) A2 (9914) B49 (4597)	Positive	DQ4 (1753) DQ6 (3350)	Unacceptable	
8080	161	100	Positive	Cw4 (5600) A2 (18478) B49 (6102)	Positive	DQ4 (1777) DQ6 (5037)	Unacceptable	
8083	161	98.95	Positive	Cw4 (4282) A2 (18983) B49 (6578) Bw4 (23878)	Positive	DQ4 (2085) DQ6 (4175)	Unacceptable	Also Class I antibodies
8103	161		Positive	Cw4 (1668) A2 (4600) B49 (1425)	Positive	DR8 (3187) DPw2 (1390) DPA1*01 (2599)	Acceptable	
8110	161	100	Positive	B49 (25077) B44 (21214) A23 (25971) A2C (17492)	Positive	DR8 (7671) DPw2 (6128) DP402 (5400)	Unacceptable	
8111	161	93	Positive	Cw4 (2800) A2 (13100)	Positive	DQ4 (2100) DQ6 (4000)	Unacceptable	

Table 27. Individual Virtual crossmatch results for Serum #162 vs Donor# V1

Donor #V1 HLA A*11:01:01-B*15:01:01-B*40:01:02-C*03:04:01-C*04:01:01-DRB1*09:01:02-DRB1*11:01:01-DRB3*02:02:01-DRB4*01:03:01-DQA1*03:02:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*03:03:02-DPA1*02:02-DPB1*02:02:01G-DPB1*05:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	162	33	Negative		Positive	DR9 (9718) DR11 (6150)	Unacceptable	B cell incompatible
792	162	98	Negative		Positive	DR9 (5872) DR11 (2736)	Unacceptable	No Class I DSA present
1426	162	100	Negative		Positive	DR9 (6169) DR11 (3767)	Unacceptable	
1461	162	35	Negative		Positive	DR9 (1714) DR11 (2103) DPw2 (1095)	Unacceptable	
2400	162	98%	Negative		Positive	DR9 (5971) DR11 (3480) DPw2 (3659)	Unacceptable	B Cell XM Positive
3224	162	98%	Negative		Positive	DR9 (6146) DR11 (4162) DPw2 (3754)	Unacceptable	Class 2 Unacceptable Present
3632	162	97	Negative		Positive	DR9 (4097) DR11 (2388)	Unacceptable	
3753	162	99.70%	Negative		Positive	DR9 (4733) DR11 (2518) DPw2 (2627)	Unacceptable	could be acceptable for some patients
3808	162		Negative		Positive	DR9 (1647) DR11 (2396) DPw2 (1021)	Unacceptable	Class II DSA present
3966	162	98%	Negative		Positive	DR9 (6403) DR11 (4081) DPw2 (4072)	Unacceptable	No HLA Class I DSA; DPB1*02:02 not included on SAB panel
8001	162	98	Negative		Positive	DR9 (6275) DR11 (3058)	Unacceptable	DPB1*02:02 not included on LSAB panel
8029	162	43	Negative		Positive	DR9 (3815) DR11 (5224) DQ8 (519) DQ9 (503) DP28 (2933)	Intermediate Risk	
8050	162	98.605	Negative		Positive	DR9 (5989) DR11 (3238) DPw2 (2429)	Unacceptable	
8080	162	98	Negative		Positive	DR9 (7344) DR11 (3599)	Unacceptable	Class II DSA
8083	162	98.08	Negative		Positive	DR9 (7372) DR11 (3864) DPw2 (4354)	Unacceptable	
8103	162		Positive	Cw4 (1141) A11 (707) B15 (11215) B63 (10863) B77 (11215) Cw10 (555) Cw3 (616) Cw9 (616)	Borderline	DR9 (4049) DR11 (2504) DR53 (606) DQ3 (1262) DPw2 (1390) DPw5 (664) DPA1*02 (2662) DQA1*03 (1262)	Unacceptable	
8110	162	100	Negative		Positive	DR9 (10221) DR11 (5970)	Unacceptable	
8111	162	95	Negative		Positive	DR9 (6400) DR11 (3500)	Unacceptable	

Table 28. Individual Virtual crossmatch results for Serum #162 vs Donor# V2

Donor #V2 HLA A*02:01-A*24:02-B*35:20-B*44:03-C*04:01:01G-C*16:02:01G-DRB1*04:07:01G-DRB1*13:01-DRB3*01:01:02G-DRB4*01:01:01G-DQA1*01:03-DQA1*03:01:01G-DQB1*03:02-DQB1*06:03-DPA1*02:01-DPB1*05:01:01G-DPB1*13:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	162	40	Positive	A24 (26330) A2 (14179) B44 (19506) Cw16 (6050)	Positive	No class II DSA	Unacceptable	Positive, but due to Class I antibodies. No class II dsa.
792	162	98	Positive	A24 (17653) A2 (8256) B44 (11796)	Positive	No class II DSA	Unacceptable	No Class II DSA, positivity due to Class I expression on B Cells
1426	162	100	Positive	A24 (20406) A2 (10917) B44 (15974) Cw16 (5702)	Positive	No class II DSA	Unacceptable	
1461	162	35	Positive	A24 (4928) A2 (1329) B44 (3735)	Positive	No class II DSA	Unacceptable	
2400	162	98%	Positive	A24 (19041) A2 (8792) B44 (13900) Bw4 (15898)	Positive	No class II DSA	Unacceptable	No Class II DSA. Positive due to Class I reactivity.
3224	162	98%	Positive	A24 (21710) A2 (10617) B44 (14212) Bw4 (20399)	Positive	No class II DSA	Unacceptable	CLASS 1 Unacceptable Present
3632	162	97	Positive	A24 (18460) A2 (7783) B44 (11740) Cw16 (3655)	Positive	No class II DSA	Unacceptable	Patient's antibody profile shows reactivity to Bw4, donor is Bw4 and patient has high level DSA that puts this transplant at high risk. B cell VXM positive due to Class I DSAs
3753	162	99.70%	Positive	A24 (19005) A2 (7921) B44 (11754) Bw4 (13958)	Positive	No class II DSA	Unacceptable	
3808	162		Positive	A24 (7264) A2 (1612) B44 (4869)	Positive	No class II DSA	Unacceptable	Class I DSA present
3966	162	98%	Positive	A24 (21317) A2 (9780) B44 (13251)	Positive	No class II DSA	Unacceptable	NO DSA CLASS II
8001	162	98	Positive	A24 (21438) A2 (10411) B44 (15927)	Positive	No class II DSA	Unacceptable	B*35:20, C*16:02 not included on LSAB panel; DRB1*04:07 not included on LSAB panel
8029	162	43	Positive	A24 (8276) A2 (3561) B44 (6841)	Positive	DQ8 (519) DP9 (4723)	High risk	
8050	162	98.605	Positive	A24 (10227) A2 (9123) B44 (13490) Bw4 (8500)	Positive	No class II DSA	Unacceptable	
8080	162	98	Positive	A24 (21095) A2 (11585) B44 (15519) Cw16 (6813)	Positive	No class II DSA	Unacceptable	Patient has Class I DSA
8083	162	98.08	Positive	A24 (23728) A2 (11385) B44 (15424) Bw4 (23878)	Negative	No class II DSA	Unacceptable	No B*35:20 bead to confirm. Possible DSA to class II antibodies
8103	162		Positive	Cw4 (1141) A24 (9014) A2 (5937) B44 (9124) Cw16 (1095)	Positive	DR53 (606) DQ3 (1262) DPw5 (664) DP13 (630) DPA1*02 (2662) DQA1*03 (1262)	Unacceptable	
8110	162	100	Positive	A24 (25144) B44 (21214) A2C (17492)	Positive	No class II DSA	Unacceptable	
8111	162	95	Positive	A24 (13600) A2 (9800) B44 (13200)	Positive	No class II DSA	Unacceptable	

Table 29. Individual Virtual crossmatch results for Serum #162 vs Donor# V3

Donor #V3 HLA A*02:01:01-A*23:01:01-B*44:03:01-B*49:01:01-C*04:01:01-C*07:01:01-DRB1*08:01:01-DRB1*13:02:01-DRB3*03:01:01-DQA1*01:02:01-DQA1*04:01:01-DQB1*04:02:01-

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class I DSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
230	162	33	Positive	A2 (14179) B49 (25829) B44 (19506) A23 (28010)	Positive	DR8 (7893)	Unacceptable	
792	162	98	Positive	A2 (8256) B49 (16592) B44 (11796) A23 (18845)	Positive	DR8 (5316) DPw2 (2965) DP402 (2872)	Unacceptable	
1426	162	100	Positive	A2 (10917) B49 (20104) B44 (15974) A23 (20895)	Positive	DR8 (5091) DPw2 (3553) DPw4 (3223)	Unacceptable	
1461	162	35	Positive	A2 (1329) B49 (4249) B44 (3735) A23 (5155)	Positive	DR8 (1878) DPw2 (1095) DPw4 (1071)	Unacceptable	
2400	162	98%	Positive	A2 (8792) B49 (18810) B44 (13900) A23 (20190) Bw4 (15898)	Positive	DR8 (5430) DPw2 (3659) DP402 (3034)	Unacceptable	
3224	162	98%	Positive	A2 (10617) B49 (19720) B44 (14212) A23 (22073) Bw4 (20399)	Positive	DR8 (5270) DPw2 (3754) DP402 (3096)	Unacceptable	
3632	162	97	Positive	A2 (7783) B49 (16670) B44 (11740) A23 (19470)	Positive	DR8 (4161) DPw2 (2208)	Unacceptable	Patient antibody profile shows reactivity to Bw4. Donor has Bw4 and has high level DSA that puts this transplant at high risk.
3753	162	99.70%	Positive	A2 (7921) B49 (17794) B44 (11754) A23 (20117) Bw4 (13958)	Positive	DR8 (4202) DP402 (2462)	Unacceptable	
3808	162		Positive	A2 (1612) B49 (6000) B44 (4869) A23 (7723)	Positive	DR8 (1950) DPw2 (1021) DP402 (940)	Unacceptable	
3966	162	98%	Positive	A2 (9780) B49 (19710) B44 (13251) A23 (22990)	Positive	DR8 (6546) DPw2 (4072) DPw4 (3550)	Unacceptable	
8001	162	98	Positive	A2 (10411) B49 (21361) B44 (15927) A23 (23252)	Positive	DR8 (5396) DPw2 (3401) DPw4 (3047)	Unacceptable	C*07:01 not included on LSAB panel; DRB1*13:02 not included on LSAB panel
8029	162	43	Positive	A2 (3561) B49 (6815) B44 (6841) A23 (8770)	Positive	DR8 (5726) DPw2 (2986) DPw4 (2818) DPw6 (5037) DQ6 (974)	HIGH RISK	
8050	162	98.605	Positive	A2 (9123) B49 (19877) B44 (13490) A23 (14366) Bw4 (8500)	Positive	DR8 (6311) DPw2 (2429) DP402 (2183)	Unacceptable	
8080	162	98	Positive	A2 (11585) B49 (20070) B44 (15519) A23 (22651)	Positive	DR8 (6077) DPw2 (4141) DP402 (3667)	Unacceptable	
8083	162	98.08	Positive	A2 (11385) B49 (21868) B44 (15424) A23 (24556)	Positive	DR8 (7057) DPw2 (4354) DPw4 (3787)	Unacceptable	Also Class I antibodies
8103	162		Positive	Cw4 (1141) A2 (5937) B49 (11354) B44 (9124) A23 (10659) Cw7 (642)	Positive	DR8 (3187) DPw2 (1390) DPA1*01 (2599)	Acceptable-	
8110	162		-		-		-	
8111	162	95	Positive	A2 (9800) B44 (13200) A23 (17700)	Positive	DR8 (6400)	Unacceptable	

Table 30: Individual Cutoff values and Pretreatment - Exchange 27

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
230	A	2000	DRB1	2000	One Lambda	Single Antigen/ Explex	None
	B	2000	DRB3/4/5	2000			
	C	4000	DQA1	2000			
	Class I		DQB1	2000			
			DPB1	4000			
			Class II				
792	A	1500	DRB1	1500	OneLambda	Single Antigen	FBS/EDTA
	B	1500	DRB3/4/5	1500			
	C	1500	DQA1	1500			
	Class I	1500	DQB1	1500			
			DPB1	1500			
			Class II	1500			
1426	A	1000	DRB1	1000	One Lambda	LabScreen Single Antigen	DTBA
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
2400	A	2000	DRB1	2000	One Lambda	Single Antigen	EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
3224	A	1000	DRB1	1000	One Lambda	Single Antigen	EDTA
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
3632	A	2000	DRB1	2000	One Lambda	Single Antigen	EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I		DQB1	2000			
			DPB1	5000			
			Class II				
3753	A	1000	DRB1	1000	One Lambda	Lab Screen Bead Mix	DTT
	B	1000	DRB3/4/5	1000			
	C	2000	DQA1	1000			
	Class I		DQB1	1000			
			DPB1	2000			
			Class II				

Table 30: Individual Cutoff values and Pretreatment - Exchange 27

Ctr	Locus	Pos Cutoff Value	Locus	Pos Cutoff Value	Manufacturer	Kit type	Sera pretreatment
3808	A	750	DRB1	750	Immucor	Single Antigen	Heat Inactivation
	B	750	DRB3/4/5	750			
	C	750	DQA1	750			
	Class I		DQB1	750			
			DPB1	750			
			Class II	750			
5214	A	2000	DRB1	2000	One Lambda	Single Antigen	EDTA
	B	2000	DRB3/4/5	2000			
	C	2000	DQA1	2000			
	Class I	2000	DQB1	2000			
			DPB1	2000			
			Class II	2000			
8001	A		DRB1		One Lambda	Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	1000	DQB1				
			DPB1				
			Class II	1000			
8029	A	500	DRB1	500	LIFECODES	Single Antigen	None
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I	75	DQB1	500			
			DPB1	500			
			Class II	40			
8050	A	1000	DRB1	1000	One Lambda	Single Antigen	DTT
	B	1000	DRB3/4/5	1000			
	C	1000	DQA1	1000			
	Class I	1000	DQB1	1000			
			DPB1	1000			
			Class II	1000			
8083	A		DRB1		One Lambda	Single Antigen	EDTA
	B		DRB3/4/5				
	C		DQA1				
	Class I	2000	DQB1				
			DPB1				
			Class II	2000			
8103	A	500	DRB1	500	One Lambda	Single Antigen	DTT
	B	500	DRB3/4/5	500			
	C	500	DQA1	500			
	Class I		DQB1	500			
			DPB1	500			
			Class II				