

Report of the 23rd Single Antigen, Flow and Virtual Crossmatch Exchange

September 15, 2021

Cells	133-134
Serum	135-138

In Exchange 23, Serum 132 (patient 2) and virtual donor V4 from Exchange 22 (June 2021) are re-examined as serum 135 and cell 133. A comparison of virtual crossmatch (VXM) predictions (serum 132 vs. V4) against the physical flow crossmatch (FXM) (**serum 135 vs. cell 133**) are summarized in **Part 1** of this report. **Part 2** examines the Luminex single antigen

data for the 4 sera tested (**serum nos. 135 - 138**) in Exchange 23. **Part 3** summarizes the flow crossmatch results for 2 cells (**cell nos. 133 - 134**) against the 4 sera. Finally, in **Part 4**, the virtual crossmatch predictions for 4 potential donors (V1 - V4) against 2 sera (serum 137 and serum 138) are evaluated.

Part 1

Physical Flow Cytometric Crossmatch vs. Virtual Crossmatch

Direct comparisons of virtual crossmatch predictions with physical FXM outcomes are shown in Tables 1a – 1c. Seventeen labs submitted virtual predictions for serum 132 vs. donor V4 in Exchange 22. Among them, 12

reported back physical T/B-cell FXM results in Exchange 23 (Table 1a). All 12 labs reported the T/B-cell FXM as positive in complete agreement with predictions (Table 1b).

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

Exchange 022					Exchange 023				
Virtual Crossmatch - Serum 132 (Patient 2) vs. Donor V4					Physical Flow Crossmatch - Serum 135 vs. Cell 133				
Donor	Serum no.	#Labs	T-cell Prediction	B-cell Prediction	Cell	Serum no.	#Labs	T-cell Results	B-cell Results
V4	132	12	POS(12)	POS(12)	133	135	12	POS(12)	POS(12)

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

		T-cell Virtual XM (Exchange 22)			B-cell Virtual XM (Exchange 22)		
		+	-	Ø	+	-	Ø
Physical T-cell FXM (Exchange 23)	+	12			12		
	-						
	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). For each, multiple class I (A23, A25, B58) and class II (DR52, DP17) DSA were reported by > 90% of labs. Respective median

MFI values reported for A23, A25, B58, DR52, and DP17 in Exchange 22 were 18353, 4854, 5885, 18838, 10438. In Exchange 23, respective MFI values were reported as 19010, 5168, 6451, 18248, and 10367.

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

Cell 133 HLA genotype: A*23:01-A*25:01-B*14:02-B*58:01-C*07:18-C*08:02-DRB1*01:01-DRB1*13:03-DRB3*01:01-DQA1*01:01-DQA1*05:05-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPA1*02:01-DPB1*104:01-DPB1*17:01

Exchange 022					Exchange 023				
Virtual Crossmatch - Serum 132 (Patient 2) vs. Donor V4					Physical Flow Crossmatch - Serum 135 vs. Cell 133				
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)
54	Positive	A25(4152) A23(14692) B58(4361)	Positive	DR52(14861) DPw3(11142) DP17(10214)	54	Positive	A*23:01(6,275); A*25:01(4,857); B*58:01(5,644); Bw4(1844-16275)	Positive	DRB3*01:01(14,529); DPB1*17:01(10,334); DPB1*104:01(11182)
774	Positive	A25(5494) A23(20040) B58(7490)	Positive	DR52(15169) DP17(10141)	774	Positive	A*23:01 22470; B*58:01 6760; A*25:01 6055	Positive	DRB3*01:01 16590; DP*17:01 11480
792	Positive	A25(2794) A23(12276) B58(3180)	Positive	DR52(12996) DP17(6170)	792	Positive	A23(17398), B58(5494), A25(4325)	Positive	DR52(15047), DP3(9403), DP17(9247),
1426	Positive	A25(4402) A23(17660) B58(5985)	Positive	DR52(15686) DQ7(1272) DPw3(11920) DP17(11080)	1426	Positive	A23(19011), A25(4947), B58(6683)	Positive	DR52(16342), DQ7(1484), DP3(10902), DP17(10951)
2400	Positive	A25(4791) A23(18582) B58(5369)	Positive	DR52(16038) DPw3(10865) DP17(10647) DQA1*05(1268)	2400	Positive	A23(23218) A25(7107) B58(8526)	Positive	DR52(17922) DPB1*17(12209)
3224	Positive	A25(4854) A23(19397) B58(5975)	Positive	DR52(15880) DPw3(10386) DP17(10094)	3224	Positive		Positive	
3753	Positive	A25(5001) A23(17001) B58(5582) Bw4(4434)	Positive	DPw3(10215) DPw6(9631) DP17(10292) DP14(10176)	3753	Positive	A23(19010), A25(4604), B58(5402), Bw4(4249)	Positive	DP17(8972), DRB3*01:01(14991), DP104[DP3(8930), DP6(8514), (DP14(8754))]
3966	Positive	A25(3455) A23(12948) B58(3971)	Positive	DR52(12444) DP17(6552)	3966	Positive		Positive	
8001	Positive	A25(5593) A23(20220) B58(6503)	Positive	DR52(18940) DP17(11171) DQA1*05(1007)	8001	Positive	A*23:01(19607), A25(5433), B58(6451)	Positive	DRB3*01:01(16203), DQA1*05:05(920), DPB1*17:01(9381)
8050	Positive	A25(4072) A23(14523) B58(5795) Bw4(5000)	Positive	DR52(16972) DPw3(10422) DP17(10438)	8050	Positive	A23(18108) A25(5583) B58(7954) Bw4(5000)	Positive	DR52/ DRB3*01:01(19812) DQA1*05(1269) DPB1*104:01/ DP3(12589) DP17(12484)
8083	Positive	A25(4611) A23(20607) B58(5503)	Positive	DR52(18697) DP17(11066)	8083	Positive	A*23:01(31314), A*25:01(12155), B*58:01(12514)	Positive	DQB1*05:01(2031), DRB3*01:01(19950), DPB1*17:01(12603)
8111	Positive	A25(3200) A23(13200) B58(4000)	Positive	DR52(9000) DPw3(4500) DP17(4500)	8111	Positive	A23(19000) B58(4400) A25(3000)	Positive	DR52(15000) DQ7(1000)

Part 2

Class I and class II Luminex single antigen results for serum samples 135 - 138 are summarized in Tables 12 - 15. Individual listing of results for

each participating laboratory are listed in Tables 16 – 23.

Antibody Identification

Serum 135: This sample was previously examined as serum 132 in Exchange 22. A comparison of results from Exchange 22 and Exchange 23 (below) shows consistency in the reporting of antibodies and antibody strength across the 2 studies.

Exchange 22		Exchange 23		Exchange 22		Exchange 23	
Class I		Class I		Class II		Class II	
*** Serum 132 ***		*** Serum 135 ***		*** Serum 132 ***		*** Serum 135 ***	
Antigen	Median	Antigen	Median	Antigen	Median	Antigen	Median
A23	18353	A23	19010	DR7	23638	DR7	23927
A24	10274	A24	11581	DR52	18838	DR52	18248
B49	9394	B49	9600	DQ2	13384	DQ2	15988
B50	7818	B50	7829	DR12	15360	DR12	15536
B57	7408	B57	7737	DPw2	15769	DPw2	15324
A32	6707	A32	7073	DP28	12652	DP28	12852
B38	6240	B38	7036	DP18	13541	DP18	12684
B58	5885	B58	6451	DR9	11000	DR9	12217
B53	5253	B53	6112	DP9	11756	DP9	11843
B51	5601	B51	5881	DR11	11341	DR11	11616
B63	5123	B63	5753	DPw3	10530	DPw3	10624
B77	4395	B77	5226	DP17	10438	DP17	10367
A25	4854	A25	5168	DP14	10314	DP14	10203
B59	4484	B59	4799	DPw6	10366	DPw6	10149
B45	4423	B45	4243	DR53	9263	DR53	9279

In this present study, strong class I and II reactivity was once again reported, including anti-A23 (19010), -A24 (11581), -B49 (9600), -DQ2 (15988), -DR12 (15536), -DR7 (23927), and -DR9 (12217) reactivity. Each were reported by 100% of labs. Additional reactivity to A25 (5168), A32 (7073), B38 (7036), B44 (4080), B45 (4243), as well as reactivity to a number of 5C, 7C, and DP specificities was reported by ≥ 90% of labs.

Multiple DSA (A23, A25, B58, DP17, and DR52) were reported against cell 133 in this sample. Against cell 134, anti-B44, -DQ2, -DR7, -DP14, and -DR53 reactivity was reported by labs.

Genotypes of cells provided by UCLA

Cell 133 (Black) - A*23:01-A*25:01-B*14:02-B*58:01-C*07:18-C*08:02-DRB1*01:01-DRB1*13:03-DRB3*01:01-DQA1*01:01-DQA1*05:05-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPA1*02:01-DPB1*104:01-DPB1*17:01

Serum 136: Strong reactivity to a number of class I and class II specificities was reported in this sample, including anti-A36 (10351), -A80 (13907), -B76 (12365), -A1 (19619), and -DR7 (13208) reactivity. Additional reactivity to A23, A24, A25, A26, A29, A43, B44, B57, DR12, DR9, DR52, as well as strong reactivity to a few 7C specificities was reported by > 90% of labs.

Reactivity to A23 (9945), A25 (3312), B58 (2247) and DR52 (5430) was reported against cell 133 in this serum. Against cell 134, anti-A29 (3879), -B44 (2388), -B61 (5961), and -DR7 (13208) reactivity was reported.

Serum 137: Strong class II reactivity was reported in this sample, with 100% of labs reporting anti-DQ7 (14790), -DQ8 (15101), -DQ9 (14582), -DR53 (6926), -DR7 (7694), and -DR9 (1129) reactivity. This sample was reported as negative for class I.

Strong anti-DQ7 (14790) reactivity was reported against cell 133 in this sample. Against cell 134, labs reported strong anti-DQ8 (15101), -DR53 (6926), and -DR7 (7695) reactivity.

Serum 138: Strong class I and II reactivity was reported in this sample, including anti-B64 (13018), -B65 (14303), -B8 (11200), -B18 (9715), -B57 (4406), -Cw7 (8875) -DQ2 (22633), -DQ5 (24452), -DQ6 (24519), -DR15 (21292), -DR51 (24469), -DR8 (11352), and -DR9 (20058) reactivity. Each were reported by 100% of labs.

Multiple DSA (B65, Cw7, B58, DQ5, DR1) were reported against cell 133, with respective MFI = 14303, 8875, 2006, 24452, 22650). Against cell 134, strong anti-DQ2 (22633) reactivity was reported. Anti-B61 (1141) and -DR7 (3993) reactivity was also reported by some labs against cell 134.

Conclusion:

Overall, good agreement (>90%) was achieved in the reporting of class I and class II antibodies for each of the sera examined in this study. Peak class I antibodies were reported with median MFI > 9000, while peak class II antibodies were reported with MFI > 11000.

Cell 134 (Hispanic) - A*29:02-A*68:03-B*40:02-B*44:03-C*03:04-C*16:01-DRB1*04:07-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQA1*03:01-DQB1*02:02-DQB1*03:02:01G-DPA1*01:03-DPA1*02:01-DPB1*04:01:01G-DPB1*14:01:01G

Part 3

Flow cytometric crossmatch results for cell 133 and cell 134 against sera sample nos. 135 - 138 are summarized in Table 2. Individual results

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

Flow Cytometric Crossmatch

Cell 133. For cell 133, good agreement ($\geq 80\%$) was achieved among labs for all 8 T/B FXM against serum samples 135 –138. Among the positive FXM, class I and/or class II DSA were present. Median MFI values for immune dominate DSA were > 6000 MFI.

Cell 134. For cell 134 against the 4 serum samples, good agreement ($\geq 80\%$) was achieved for 7 out 8 T/B FXM pairs. Among the positive FXM, class I/II DSA of > 4000 MFI were present. Against serum 138, however, T-cell FXM results were mixed, with 7 labs reporting it as positive in the presence of weak (< 1200 MF) DSA and 6 reporting it as negative.

Table 2. Summary of Flow crossmatch results for Cell #133- #134 vs. Serum #135 - #138

Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results	Cell no.	Serum no.	#Labs	T-cell Results	B-cell Results
133	135	17	POS(16) NEG(1)	POS(16) NT(1)	134	135	17	POS(16) NEG(1)	POS(15) NT(2)
133	136	17	POS(16) NEG(1)	POS(14) NEG(2) NT(1)					
133	137	17	NEG(17)	POS(15) NEG(1) NT(1)	134	136	17	POS(15) NEG(2)	POS(15) NT(2)
133	138	17	POS(17)	POS(16) NT(1)					

Conclusion:

Seven out of 8 T-cell FXM were reported in good agreement ($\geq 80\%$). Among the positive T-cell FXM, labs reported the presence of class I DSA, with MFI > 6000 . For cell 134 vs. serum 138, however, weak anti-B61 (1141) reactivity resulted in T-cell FXM outcomes to be mixed among labs. The reporting of DSA for this cell-serum pair was also mixed. Seven labs

indicated class I DSA were present and 5 noted there were no class I DSA present against the cell.

For the B-cell FXM, all 8 crossmatches were reported as positive. In each case, strong (MFI > 9900) class I and/or class II DSA were present.

Part 4

Virtual crossmatch predictions for donor V1 - V4 against sera (patient) samples 137 and 138 are summarized in Table 3 and individual laboratory

predictions are listed in Tables 24 - 31. Fictional donor histories precede each patient-donor summary.

Virtual Crossmatch Paper Challenge

For virtual **T-cell predictions**, all but 1 VXM pair achieved $\geq 80\%$ agreement among labs. In the case of positive predictions, class I DSA with MFI > 9700 were present. For serum 138 vs. donor V4, however, $< 80\%$ agreement was achieved, as 13 labs predict the T-cell FXM to be positive, 3 predict it to be negative, and 1 predicts it to be borderline in the presence of

anti-Cw7 (8875) reactivity.

For virtual **B-cell predictions** of the expected B-cell FXM, all 8 VXM achieved $\geq 80\%$ agreement among labs. Among them, 7 were reported as positive in the presence of class I and/or class II DSA with MFI > 7600 .

Table 3. Summary of Virtual Crossmatch Predictions (Serum #137 - #138 vs. Donors V1 - V4)

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	137	17	NEG(16) Borderline(1)	POS(16) NEG(1)	Unacceptable(16) Acceptable(1)	V3	137	17	NEG(17)	POS(16) NEG(1)	Unacceptable(16) Acceptable(1)
V1	138	17	POS(17)	POS(17)	Unacceptable(17)	V3	138	17	POS(17)	POS(17)	Unacceptable(17)
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
V2	137	17	NEG(17)	NEG(16) Borderline(1)	Acceptable(16) Unacceptable(1)	V4	137	17	NEG(17)	POS(16) NEG(1)	Unacceptable(16) Acceptable(1)
V2	138	17	POS(17)	POS(17)	Unacceptable(17)	V4	138	17	POS(13) NEG(3) Borderline(1)	POS(17)	Unacceptable(17)

DSA Identification

Patient 1 (Serum 137)

Patient's fictional case history: This individual is a 24 year old female being evaluated for her first transplant. The patient's HLA type is A*03:01-A*68:02-B*49:01-B*53:01-C*04:01-C*07:01-DRB1*01:01-DRB1*15:01-DRB5*01:01-DQA1*01:01-DQA1*01:05-DQB1*05:01-DPA1*01:03-DPB1*02:01:02G-DPB1*04:02:01G

Good agreement was achieved among labs in the reporting of DSA against donor **V1**, as 100% of labs reported the presence of strong anti-DQ7 (14790) reactivity. Additional anti-DQA1*05 (17675) reactivity was also reported against the donor by 2 labs. No class I DSA were reported. Good agreement was also achieved for virtual predictions. All but 1 lab predict the expected T-cell FXM to be negative in the absence of class I DSA and all but 1 lab predict the expected B-cell FXM to be positive. For renal transplant risk, 16 out of 17 labs predict the risk of transplant to be unacceptable.

Against **donor V2**, the majority of labs (n=14) indicated there were no class I and class II DSA present. The remaining 3 labs reported weak (MFI < 4000) class II DSA against the donor. Good agreement was achieved for virtual predictions of the expected FXM, with ≥ 90% of labs predicting the expected physical T/B-cell FXM to be negative. For renal transplant risk, all but 1 lab predict the risk to be acceptable.

Anti-DR7 (7694) and -DR53 (6926) reactivity were reported against **donor V3** by ≥ 90% of labs. No class I DSA were reported. Due to the absence of class I DSA, all 17 labs predict the expected T-cell FXM to be negative. Good agreement (≥ 90%) was also achieved for B-cell predictions, with 16 out of 17 labs predicting the physical B-cell FXM to be positive. For renal transplant risk, all but 1 lab predict the risk of transplant to be unacceptable due to class II DSA.

Multiple DSA were reported against **donor V4**, with ≥ 90% of labs reporting anti-DR7 (7694) and -DR53 (6926) reactivity. There were no class I DSA reported. As expected, all 17 labs predict the expected T-cell FXM to be negative in the absence of class I DSA. For B-cell predictions, all but 1 lab predict the physical B-cell FXM to be positive. Renal transplant risk is predicted to be unacceptable by 16 out of 17 labs.

Virtual Donors – HLA genotype

Donor 1 (V1): A*11:12 A*31:01:02-B*18:01:01-B*40:02:01-C*03:06:01-C*07:01:01-DRB1*08:02:01-DRB1*11:01:01-DRB3*02:02:01-DQA1*04:01:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*04:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Donor 2 (V2): A*03:01:01-A*68:03:01-B*07:02:01-B*14:02:01-C*07:02:01-C*08:02:01-DRB1*01:02:01-DRB1*15:01:01-DRB5*01:01:01-DQA1*01:01:02-DQA1*01:02:01-DQB1*05:01-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*04:01:01-DPB1*13:01:01G

Donor 3 (V3): A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01-DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Donor 4 (V4): A*29:02:01-A*33:03:01-B*44:03:01-C*07:06-C*16:01:01-DRB1*07:01:01-DRB1*15:01:01-DRB4*01:01:01-DRB5*01:01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*02:01:02-DPB1*03:01:01

Patient 2 (Serum 138)

Patient's fictional case history: Individual is a 46 year-old female being evaluated for her second transplant. The HLA type of her first transplant was A*01:03-A*31:01-B*35:01-B*40:01-C*03:02-C*04:01-DRB1*04:01-DRB4*01:01-DQA1*03:01:01G-DQB1*03:02-DPA1*01:03-DPA1*02:02-DPB1*02:01:01G. The patient's HLA type is A*11:12-A*31:01:02-B*18:01:01-B*40:02:01-C*03:06:01-C*07:01:01-DRB1*08:02:01-DRB1*11:01:01-DRB3*02:02:01-DQA1*04:01:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*04:02:01-DPA1*01:03:01-DRB1*04:01:01G-DPB1*04:02:01G.

Against **donor V1**, anti-B18 (9715) and -DR11 (5066) reactivity was reported by \geq 90% of labs. Additional reactivity to Cw7 (8875), B61 (1141), and DR8 (11352) was also reported against the donor by 15 labs. Two labs which did not report DR8 as a DSA noted DRB1*08:02 is not included on their single antigen bead panel. In the presence of multiple DSA, good agreement was achieved for T/B-cell predictions, with 100% of labs predicting the expected physical T-cell and physical B-cell FXM to be positive. In line with predictions, all 17 labs assess the risk of transplant for this patient-donor pair as unacceptable.

Multiple DSA (A3, B65, B7, Cw7, DR1, DR51, DQ5, DQ6, DR15) were reported against **donor V2**. Each were reported by \geq 90% of labs, with respective median MFI = 1955, 14303, 2748, 8875, 22650, 24469, 24452, 24519, and 21292. All 17 labs predict the expected physical T/B-cell FXM to be positive in the presence of strong class I and class II DSA. In turn, good agreement was achieved for predicted renal transplant risk assessments, with 100% of labs assessing the risk as unacceptable.

Good agreement (\geq 90%) was achieved among labs in the reporting of anti-B65 (14303), -Cw7 (8875), -DR8 (11352), and -DQ2 (22633) reactivity against **donor V3**. Additional anti-DR7 (3993) reactivity was also reported by 15 labs. All 17 labs predict the expected T-cell and B-cell FXM to be positive in the presence of strong DSA. Good agreement was also achieved for predicted renal transplant risk, with each lab predicting the risk of transplant to be unacceptable.

Class II DSA were reported against **donor V4**, with \geq 90% of labs reporting anti-DR15 (21292), -DR51 (24469), -DQ2 (22633), and -DQ6 (24519) reactivity. Additional anti-Cw7 (8875) reactivity was also reported by 15 labs. The presence of a single DSA at the C-locus resulted in T-cell predictions to be mixed among labs, with 13 labs predicting the expected T-cell FXM to be positive, 3 predicting it to be negative, and 1 predicting borderline results. By contrast, 100% of labs predict the expected B-cell FXM to be positive. For renal transplant risk, all 17 labs assess the predicted risk of transplant to be unacceptable.

Conclusion

Good agreement (\geq 90%) was achieved for 7 out of 8 virtual T-cell predictions. Among them, 3 are predicted to be positive due to the presence of strong ($>$ 9000) class I DSA. In the case of serum 138 vs. donor V4, however, only 13 of 17 labs (76%) predict the expected physical T-cell FXM to be positive. The remainder predict it to be negative or borderline. This may

be due to the presence of a single DSA (Cw7) at the C-locus.

For B-cell predictions of the expected physical B-cell FXM, good agreement (\geq 90%) was achieved for all 8 virtual donor-patient pairs. Among them, 7 are expected to be positive in the presence of strong ($>$ 7600 MFI) class I and/or class II DSA.

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Arlene Locke, David Gjertson, Qiuheheng Zhang, and Elaine F. Reed

Flow Cytometric Crossmatch

Cell #133 HLA Genotype: A*23:01-A*25:01-B*14:02-B*58:01-C*07:18-C*08:02-DRB1*01:01-DRB1*13:03-DRB3*01:01-DQA1*01:01-DQA1*05:05-DQB1*03:01-DQB1*05:01-DPA1*01:03-DPA1*02:01- DPB1*104:01-DPB1*17:01

Table 4. Individual Flow crossmatch results and DSA reported for Cell #133 vs. Serum #135

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	135	60	356			POSITIVE	A*23:01(6,275); A*25:01(4,857); B*58:01(5,644); Bw4(1844-16275)	90	453			POSITIVE	DRB3*01:01(14,529); DPB1*17:01(10,334); DPB1*104:01(11182)	81	79	YES
615	135	308	592			POSITIVE	A*23:01(15241); A*25:01(4048); B*58:01(4942)	366	661			POSITIVE	DRB3*01:01(14547); DQA1*05:03 DQB1*03:01(1114); DPA1*02:01 DPB1*17:01(9367)	245	294	YES
774	135	≥ 50	112			POSITIVE	A*23:01 22470; B*58:01 6760; A*25:01 6055	≥ 50	260			POSITIVE	DRB3*01:01 16590; DP*17:01 11480	274	269	NO
792	135	52	288			POSITIVE	A23(17398), B58(5494), A25(4325)	106	375			POSITIVE	DP52(15047), DP3(9403), DP17(9247),	238	252	YES
1426	135	62	323			POSITIVE	A23(19011), A25(4947), B58(6683)	102	449.5			POSITIVE	DR52(16342), DQ7(1484), DP3(10902), DP17(10951)	296	250	YES
2400	135	18	166			POSITIVE	A23(23218) A25(7107) B58(8526)	18	185			POSITIVE	DR52(17922) DPB1*17(12209)	146	261	YES
3135	135	1, 2	3502	3, 3		POSITIVE						NT		1053		NO
3224	135	70	230			POSITIVE						POSITIVE		213	160	YES
3753	135	50	322			POSITIVE	A23(19010), A25(4604), B58(5402), Bw4(4249)	100	419			POSITIVE	DP17(8972), DRB3*01:01(14991), DP104[DP3(8930), DP6(8514), (DP14(8754))]	219	214	YES
3966	135	20	295			POSITIVE		50	346			POSITIVE		173	265	NO
4345	135					POSITIVE						POSITIVE				NO
5214	135	19	107		111322	POSITIVE	A23(22,238) A25(8,665) B58(10,538)	28	122		207010	POSITIVE	DRB3*01(20,660), DP17(14,796)	251	253	YES
8001	135	50	352			POSITIVE	A*23:01(19607), A25(5433), B58(6451)	100	445			POSITIVE	DRB3*01:01(16203), DQA1*05:05(920), DPB1*17:01(9381)	207	218	YES

Table 4. Individual Flow crossmatch results and DSA reported for Cell #133 vs. Serum #135

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
8050	135	50	337		30767	POSITIVE	A23(18108) A25(5583) B58(7954) Bw4(5000)	120	358		81366	POSITIVE	DR52/ DRB3*01:01(19812) DQA1*05(1269) DPB1*104:01/ DP3(12589) DP17(12484)	42	125	YES
8058	135	80	210			NEGATIVE		80	210			POS NIH CDC		100	100	NO
8083	135	70	158			POSITIVE	A*23:01(31314), A*25:01(12155), B*58:01(12514)	140	211			POSITIVE	DQB1*05:01(2031), DRB3*01:01(19950), DPB1*17:01(12603)	374	459	YES
8111	135	32	214			POSITIVE	A23(19,000) B58(4400) A25(3000)	40	309			POSITIVE	DR52(15,000) DQ7(1000)	289	268	YES

Table 5. Individual Flow crossmatch results and DSA reported for Cell #133 vs. Serum #136

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	136	60	223			POSITIVE	A*23:01(9905); A*25:01(2967); B*58:01(1646)	90	266			POSITIVE	DRB3*01:01(4103)	81	79	YES
615	136	308	473			POSITIVE	A*23:01(9878); A*25:01(2935); B*58:01(1731)	366	510			POSITIVE	DRB3*01:01(4147)	245	294	YES
774	136	≥ 50	61			POSITIVE	A*23:01 9207; B*58:01 2134	≥ 50	135			POSITIVE	DRB3*01:01 5142	274	269	NO
792	136	52	179			POSITIVE	A23(10683), A25(2990), B58(1840)	106	220			POSITIVE	DR52(4041)	238	252	YES
1426	136	62	199			POSITIVE	A23(7295), A25(2331), B58(1653)	102	256.5			POSITIVE	DR52(4131)	296	250	YES
2400	136	18	79			POSITIVE	A23(16156) A25 (5027) B58(3239)	18	76			POSITIVE	DR52(6022)	146	261	YES
3135	136	1, 2	1246	1, 2		POSITIVE						NT		1053		NO
3224	136	70	130			POSITIVE		140	137			POSITIVE		213	160	YES
3753	136	50	196			POSITIVE	A23(8339), A25(3076), B58(1897)	100	229			POSITIVE	DRB3*01:01(3999), DQ5(1001)	219	214	YES
3966	136	20	179			POSITIVE		50	220			POSITIVE		173	265	NO
4345	136					POSITIVE						NEGATIVE				NO
5214	136	19	73		33313	POSITIVE	A23(16,540), A25(6,176), B58(3,896)	28	83		50491	POSITIVE	DRB3*01(7033)	251	253	YES
8001	136	50	254			POSITIVE	A*23:01(12155), A25(3548), B58(2281)	100	300			POSITIVE	DRB3*01:01(4627), DQA1*01:01(1065), DQB1*05:01(953)	207	218	YES
8050	136	50	207		9123	POSITIVE	A23(6417) A25(2505) B58(2242)	120	227		23902	POSITIVE	DR52 (DRB3*01:01, 5369) DQ5(1154)	42	125	YES
8058	136	80	210			NEGATIVE		80	210			NEGATIVE		100	100	NO
8083	136	70	148			POSITIVE	A*23:01(20252), A*25:01(7449), B*58:01(4043)	140	156			POSITIVE	DRB3*01:01(6043), DQB1*05:01(3118)	374	459	YES
8111	136	32	160			POSITIVE	A23(13,500), A25(4000), B58(2400)	40	225			POSITIVE	DR52(4100), DQ5(1200)	289	268	YES

Table 6. Individual Flow crossmatch results and DSA reported for Cell #133 vs. Serum #137

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	137	60	-19			NEGATIVE	No Class I DSA	90	267			POSITIVE	DQB1*03:01(14438)	81	79	YES
615	137	308	237			NEGATIVE	No Class I DSA	366	507			POSITIVE	DQA1*05:03	245	294	YES
774	137	≥ 50	-18			NEGATIVE	No Class I DSA	≥ 50	157			POSITIVE	DQB1*03:01(9685)	274	269	NO
792	137	52	13			NEGATIVE	No Class I DSA	106	251			POSITIVE	DQB1*03:01 16610	238	252	YES
1426	137	62	-19			NEGATIVE	No Class I DSA	102	256.5			POSITIVE	DQ7(14445)	296	250	YES
2400	137	18	13			NEGATIVE	No Class I DSA	18	60			POSITIVE	DQ7(9969)	146	261	YES
3135	137	1, 2	1192	1, 1		NEGATIVE						NT		1053		NO
3224	137	70				NEGATIVE		140	143			POSITIVE		213	160	YES
3753	137	50	25			NEGATIVE	No Class I DSA	100	227			POSITIVE	DQ7(10689)	219	214	YES
3966	137	20	19			NEGATIVE		50	197			POSITIVE		173	265	NO
4345	137					NEGATIVE						POSITIVE				NO
5214	137	19	3		271	NEGATIVE	No Class I DSA	28	81		46982	POSITIVE)	DQ7/ DQA05:05(20537	251	253	YES
8001	137	50	-1			NEGATIVE	No Class I DSA	100	321			POSITIVE	DQ7(16282), DQA1*05:05(15695)	207	218	YES
8050	137	50	28		1711	NEGATIVE	No Class I DSA	120	161		12895	POSITIVE	DQ7(15076)	42	125	YES
8058	137	80	210			NEGATIVE		80	210			NEGATIVE		100	100	NO
8083	137	70	66			NEGATIVE	No Class I DSA	140	145			POSITIVE	DQB1*05:01(3472), DQB1*03:01(20310),	374	459	YES
8111	137	32	0			NEGATIVE	No Class I DSA	40	202			POSITIVE	DQ7(13,100)	289	268	YES

Table 7. Individual Flow crossmatch results and DSA reported for Cell #133 vs. Serum #138

Ctr	Serum no	T-Cell Pos cutoff	T Cell MCS	RATIO	MESF	T-Cell RESULT	Class I DSA(MFI)	B-Cell Pos cutoff	B-cell MCS	RATIO	MESF	B-Cell RESULT	Class II DSA(MFI)	T-Cell NEG Control MC	B-Cell NEG Control MC	Pronase Treated
54	138	60	385			POSITIVE	B*14:02(12629); Cw7(6429); B*58:01(1308)	90	522			POSITIVE	DRB1*01:01(20746); DQA1*01:01/ DQB1*05:01(25585)	81	79	YES
615	138	308	620			POSITIVE	B*14:02(11931); B*58:01(1602); C*07:02(5795)	366	729			POSITIVE	DRB1*01:01(19050); DQA1*01:01/ DQB1*05:01(23462)	245	294	YES
774	138	≥ 50	278			POSITIVE	B*14:02 14303; Cw7 9822	≥ 50	398			POSITIVE	DQB1*05:01 24789; DRB1*01:01 23454	274	269	NO
792	138	52	368			POSITIVE	B65(13471), Cw7(6909), B58(1904)	106	489			POSITIVE	DQ5(27836), DR1(21976)	238	252	YES
1426	138	62	332			POSITIVE	A25(1012), B58(3897), B65(15455), Cw7(11489)	102	492.5			POSITIVE	DR1(15154), DQ7(1276), DQ5(6805), DP17(1719)	296	250	YES
2400	138	18	169			POSITIVE	B65(18778) B58(3225) C7(12919)	18	236			POSITIVE	DR1(24128) DQ5(25806)	146	261	YES
3135	138	1, 2	12535	11, 9		POSITIVE						NT		1053		NO
3224	138	70	311			POSITIVE		140	414			POSITIVE		213	160	YES
3753	138	50	363			POSITIVE	B58(2006), B65(17263), Cw7(9386)	100	481			POSITIVE	DQ5(19654), DR1(22763)	219	214	YES
3966	138	20	384			POSITIVE		50	427			POSITIVE		173	265	NO
4345	138					POSITIVE						POSITIVE				NO
5214	138	19	112		132194	POSITIVE	B58(2301), B65(17,666), C7(11219)	28	143		423559	POSITIVE	DR1(23273), DQ5(23,821)	251	253	YES
8001	138	50	443			POSITIVE	B*14:02(13574), B58(1498)	100	517			POSITIVE	DRB1*01:01(22537), DQA1*01:01(24483), DQ5(24284)	207	218	YES
8050	138	50	317		25508	POSITIVE	B65(13329) Cw7(7961)	120	317		159837	POSITIVE	DR1(23741) DQ5(28530)	42	125	YES
8058	138	80	210			POS NIH CDC		80	210			POS NIH CDC		100	100	NO
8083	138	70	270			POSITIVE	B*14:02(21590), B*58:01(3074),	140	377			POSITIVE	DRB1*01:01(30923), DQB1*05:01(38635),	374	459	YES
8111	138	32	267			POSITIVE	B65(20,600), Cw7(13, 300), B58(3900)	40	348			POSITIVE	DQ5(29,100), DR1(23,500), DR13(1000)	289	268	YES

Cell #134 HLA Genotype: A*29:02-A*68:03-B*40:02-B*44:03-C*03:04-C*16:01-DRB1*04:07-DRB1*07:01-DRB4*01:01-DRB4*01:03-DQA1*02:01-DQA1*03:01-DQB1*02:02-DQB1*03:02:01G-DPA1*01:03-DPA1*02:01-DPB1*04:01:01G-DPB1*14:01:01G

Table 8. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #135

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
54	135	60	253			POSITIVE	B*44:03(4043); Bw4(1843-16422)	90	495			POSITIVE	DRB1*07:01(22589); DR53(8861); DQA1*02:01/ DQB1*02:02(8933); DPB1*14:01(10060)	88	155	YES
615	135	303	470			POSITIVE	B*40:01(1249); B*44:03(3753)	353	736			POSITIVE	DRB1*07:01(20416) plus others	240	281	YES
774	135	≥ 50	90			POSITIVE	B*44:03 3967	≥ 50	291			POSITIVE	DRB1*07:01 23927; DQB1*02:02 10772; DPB1*17:01 11480; DRB4*01:03 10727; DRB4*01:01 9548	254	295	NO
792	135	52	214			POSITIVE	B44(4049)	106	360			POSITIVE	DR7(23340), DQ2(9813), DP14(9251), DR53(8938)	257	345	YES
1426	135	62	191.5			POSITIVE	A44(4811), B61(1221)	102	444.5			POSITIVE	DR7(24387), DR53(9095), DQ2(9050), DP14(10806)	302	342	YES
2400	135	18	63			POSITIVE	B44(6261) B61(2090)	18	170			POSITIVE	DR7(24455) DR53(10614) DQ2(12089) DPB1*14(11431)	164	305	YES
3135	135	1,2	2270	1,6		POSITIVE						NT		1452		NO
3224	135	70	150			POSITIVE		140	429			POSITIVE		183	152	YES
3753	135	50	169			POSITIVE	B44(2861), Bw4(4249)	100	522			POSITIVE	DQ2(11914), DR7(23950), DR53(8596), DP14(8754)	237	243	YES
3966	135	20	219			POSITIVE		50	349			POSITIVE		177	312	NO
4345	135					POSITIVE						POSITIVE				NO

Table 8. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #135

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
5214	135	19	68		28553	POSITIVE	B44(6750), B61(1608)	28	120		275470	POSITIVE	DR7(23709), DR53(13223) DQ2(ave 15988)	252	263	YES
8001	135	50	226			POSITIVE	B*40:02(1210), B*44:03(4395)	100	397			POSITIVE	DR7(23285), DRB4*01:01(7571), DRB4*01:03(8536), DQB1*02:02(9503), DPB1*14:01(9407)	218	299	YES
8050	135	50	183		7855	POSITIVE	A68(1102) B61(1316) B44(4319) Bw4(5000)	120	401		168736	POSITIVE	DR7(30088) DR53(12905) DQ2(16897) DP14(12604)	50	160	YES
8058	135	80				NEGATIVE		80				NT		100	100	NO
8083	135	70	134			POSITIVE	B*40:02(3780), B*44:03(8793)	140	358			POSITIVE	DRB1*07:01(28790), DRB4*01:01(10909), DRB4*01:03(12270) DQB1*02:02(12230), DPB1*14:01(12449)	208	334	YES
8111	135	32	88			POSITIVE	B44(2500), B61(1000), A68(1000)	40	293			POSITIVE	DR52(15,000), DQ7(1000)	304	311	YES

Table 9. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #136

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
54	136	60	243			POSITIVE	A*29:02(4416); B*40:02(5177); B*44:03(2300)	90	390			POSITIVE	DRB1*07:01(11883)	88	155	YES
615	136	303	469			POSITIVE	A*29:02(4036); B*40:01(5151); B*44:03(2196)	353	646			POSITIVE	DRB1*07:01(11630)	240	281	YES
774	136	≥ 50	69			POSITIVE	B*40:02 5951; B*29:02 3298; B*44:02 2163	≥ 50	208			POSITIVE	DRB1*07:01 13932	254	295	NO
792	136	52	201			POSITIVE	B61(5283), A29(4366), B44(2388)	106	295			POSITIVE	DR7(12288)	257	345	YES
1426	136	62	188.5			POSITIVE	A29(1798), B44(2003), B61(4819)	102	337.5			POSITIVE	DR7(11549)	302	342	YES
2400	136	18	60			POSITIVE	A29(7130) B44(3808) B61(8650)	18	111			POSITIVE	DR7(14864)	164	305	YES
3135	136	1,2	2283	1,6		POSITIVE						NT		1452		NO
3224	136	70	143			POSITIVE		140	315			POSITIVE		183	152	YES
3753	136	50	147			POSITIVE	A29(3189), B44(2075), B61(4746)	100	356			POSITIVE	DR7(11930)	237	243	YES
3966	136	20	215			POSITIVE		50	299			POSITIVE		177	312	NO
4345	136					NEGATIVE						POSITIVE				NO
5214	136	19	66		25716	POSITIVE	A29(8960), B44(4303) B61(9274)	28	98		123223	POSITIVE	DR7(18690)	252	263	YES
8001	136	50	220			POSITIVE	A*29:02(5608), B*40:02(5961), B*44:03(2713)	100	320			POSITIVE	DR7(12734)	218	299	YES
8050	136	50	153		5934	POSITIVE	A29(2209) B44(2184) B61(5621)	120	298		64404	POSITIVE	DR7(15887)	50	160	YES
8058	136	80				NEGATIVE		80				NT		100	100	NO
8083	136	70	322			POSITIVE	A*29:02(9745), B*40:02(10103), B*44:03(4997)	140	381			POSITIVE	DRB1*07:01(16593)	208	334	YES
8111	136	32	120			POSITIVE	B61(5900), A29(5800), B44(2600)	40	295			POSITIVE	DR7(14000)	304	311	YES

Table 10. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #137

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
54	137	60	-28			NEGATIVE	No Class I DSA	90	308			POSITIVE	DRB1*07:01(7246); DRB53(6857); DQA1*03:01/ DQB1*03:02(11136)	88	155	YES
615	137	303	235			NEGATIVE	No Class I DSA	353	586			POSITIVE	DRB1*07:01(5795) plus others	240	281	YES
774	137	≥ 50	-3			NEGATIVE	No Class I DSA	≥ 50	175			POSITIVE	DQB1*03:02 16213; DRB1*07:01 8070; DRB4*01:03 6817; DRB4*01:01 5920	254	295	NO
792	137	52	11			NEGATIVE	No Class I DSA	106	251			POSITIVE	DQ8(14933), DR7(7317), DR53(7027)	257	345	YES
1426	137	62	-22.5			NEGATIVE	No Class I DSA	102	248.5			POSITIVE	DR7(5828), DR53(4618), DQ8(10034)	302	342	YES
2400	137	18	11			NEGATIVE	No Class I DSA	18	76			POSITIVE	DR7(10265) DR53(7720) DQ8(14540)	164	305	YES
3135	137	1,2	1538	1,1		NEGATIVE						NT		1452		NO
3224	137	70				NEGATIVE		140	250			POSITIVE		183	152	YES
3753	137	50	15			NEGATIVE	No Class I DSA	100	265			POSITIVE	DQ8(10382), DR53(4836), DR7(5876)	237	243	YES
3966	137	20	19			NEGATIVE		50	223			POSITIVE		177	312	NO
4345	137					NEGATIVE						POSITIVE				NO
5214	137	19	1		84	NEGATIVE	No Class I DSA	28	94		109437	POSITIVE	DR7(13783), DR53(11947), DQ8(17,896)	252	263	YES
8001	137	50	-21			NEGATIVE	No Class I DSA	100	313			POSITIVE	DR7(7230), DRB4*01:03(6825), DRB4*01:01(6288), DQB1*03:02(15526)	218	299	YES
8050	137	50	29		1861	NEGATIVE	No Class I DSA	120	224		32240	POSITIVE	DR7(9698) DR53(8182) DQ8(15268)	50	160	YES
8058	137	80				NEGATIVE		80				POS NIH CDC		100	100	NO

Table 10. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #137

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	137	70	264			POSITIVE	No Class I DSA	140	303			POSITIVE	DRB1*07:01(9982), DRB4*01:01(8585), DRB4*01:03(9864), DQB1*03:02(20250)	208	334	YES
8111	137	32	0			NEGATIVE	No Class I DSA	40	168			POSITIVE	DQ8(13,300), DR53(7800), DR7(8100)	304	311	YES

Table 11. Individual Flow crossmatch results and DSA reported for Cell #134 vs. Serum #138

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
54	138	60	66			Borderline	No DSA detected. In routine work, we will repeat T Cell FXM with no pronase treatment.	90	323			POSITIVE	DRB1*07:01(2635); DQA1*02:01/ DQB1*02:02(15801)	88	155	YES
615	138	303				NT	No Class I DSA	353	601			POSITIVE	DRB1*07:01(4644) plus others	240	281	YES
774	138	≥ 50	55			NEGATIVE	No Class I DSA	≥ 50	199			POSITIVE	DQB1*02:02 17700; DRB1*07:01 3705	254	295	NO
792	138	52	110			POSITIVE	B61, Cw16 DSA <1500	106	269			POSITIVE	DQ2(19297), DR7(3993)	257	345	YES
1426	138	62	37.5			NT	B61(1380), Cw10(1637)	102	268.5			POSITIVE	DQ2(17326), DQ8(1439)	302	342	YES
2400	138	18	18			POSITIVE	B61(1297) C3(839) C16(829)	18	77			POSITIVE	DR7(7028) DQ2(21779) DQA1*02(1309)	164	305	YES
3135	138	1,2	1813	1,2		POSITIVE						NT		1452		NO
3224	138	70				NEGATIVE		140	297			POSITIVE		183	152	YES
3753	138	50	9			NEGATIVE	B61(1141)	100	302			POSITIVE	DQ2(19715), DR7(2030)	237	243	YES
3966	138	20	59			POSITIVE		50	232			POSITIVE		177	312	NO
4345	138					POSITIVE						POSITIVE				NO
5214	138	19	21		3189	Borderline	B61(1078)	28	90		93134	POSITIVE	DR7(4165), DQ2(avg 22633)	252	263	YES
8001	138	50	119			POSITIVE	B*40:02(699), C*16:01(512)	100	299			POSITIVE	DR7(2669), DQB1*02:02(17398)	218	299	YES
8050	138	50	0		1342	NEGATIVE	No Class I DSA	120	210		28284	POSITIVE	DQ2(20795)	50	160	YES
8058	138	80				NEGATIVE		80				POS NIH CDC		100	100	NO
8083	138	70	91			POSITIVE	No Class I DSA	140	294			POSITIVE	DRB1*07:01(6654), DQB1*02:02(24682)	208	334	YES
8111	138	32	0			NEGATIVE	B61(1300), Cw10(900), A29(800)	40	101			POSITIVE	DQ2(22,800), DR7(3200), DQ8(1100)	304	311	YES

Single Antigen

Table 12. Summary of Single Antigen results for Serum #135

Class I								
*** Serum 135 ***								
13 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A23	13	100%	19010	16997	8352	23	31314	
A24	13	100%	11581	11281	6033	24	24686	
A25	13	100%	5168	5166	3045	25	12155	
A32	13	100%	7073	6662	3772	32	13844	
B38	13	100%	7036	6616	3748	38	14067	
B44	13	100%	4080	3904	2166	44	8793	
B45	13	100%	4243	4396	2739	45	10387	
B47	13	100%	2154	2284	1438	47	5699	
B49	13	100%	9600	9358	5047	49	18298	
B50	13	100%	7829	7885	4355	50	16580	
B51	13	100%	5881	5627	3256	51	11226	
B52	13	100%	3711	3719	2309	52	9119	
B53	13	100%	6112	5719	3305	53	12616	
B57	13	100%	7737	7458	4006	57	15105	
B58	13	100%	6451	6104	3424	58	12514	
B59	13	100%	4799	4772	2808	59	10567	
B62	13	100%	2189	2509	1663	62	6862	
B63	13	100%	5753	5537	3057	63	11478	
B77	13	100%	5226	4836	2689	77	9952	
A2	12	92%	1602	1800	1174	2	5120	
B37	12	92%	2484	2384	1429	37	5140	
B56	12	92%	1787	2019	1330	56	5662	
B72	12	92%	2720	2839	1645	72	6925	
B13	11	84%	3224	3363	1588	13	6606	
Cw15	11	84%	2406	2482	1426	15	5271	
Cw5	11	84%	2257	2550	1553	5	5882	
Cw6	11	84%	2577	2774	1590	6	5955	
B27	10	76%	3023	2829	1996	27	7244	
B71	10	76%	1533	1659	1107	71	4393	
Cw18	10	76%	2166	2413	1494	18	5604	
Cw17	9	69%	2181	2207	1373	17	4974	
Cw2	9	69%	2048	1899	1127	2	4001	
A69	8	61%	1229	1493	1168	69	4178	
B41	8	61%	1407	1532	1029	41	3650	
B61	7	53%	1316	1569	1068	61	3780	
B75	7	53%	1396	1763	1113	75	3919	
B35	6	46%	1223	1490	1158	35	3851	

Class II								
*** Serum 135 ***								
13 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DQ2	13	100%	15988	14277	6395	2	23162	
DR12	13	100%	15536	14102	5065	12	20007	
DR7	13	100%	23927	21925	7191	7	30088	
DR9	13	100%	12217	12125	4565	9	18700	
DP14	12	92%	10203	10345	2169	6906	14360	
DP17	12	92%	10367	10440	2359	6181	14796	
DP18	12	92%	12684	12083	4484	18	17811	
DP28	12	92%	12852	12932	2232	9545	16671	
DP9	12	92%	11843	11819	2478	7706	16495	
DPw2	12	92%	15324	15505	3340	8920	20751	
DPw3	12	92%	10624	10751	2253	7167	15115	
DPw6	12	92%	10149	10135	1965	6534	13965	
DR11	12	92%	11616	11517	2278	7851	15653	
DR52	12	92%	18248	16761	6296	52	23720	
DR53	12	92%	9279	9683	2165	5928	12905	
DP10	10	76%	12310	12292	1859	9938	15993	
DP20	10	76%	12283	12255	1826	9884	15789	
DP402	7	53%	13363	14209	3148	8996	19366	
DPw4	6	46%	14874	13560	3108	8996	17038	
DQA1*05	3	23%	1914	3016	2033	1269	5867	
DPA1*02	2	15%	4774	4773	4772	2	9545	
DQA1*06	2	15%	1226	1225	177	1049	1402	
DPA1*01	1	7%	10201	10201	-	10201	10201	
DPA1*03	1	7%	9650	9650	-	9650	9650	
DQ5	1	7%	716	716	-	716	716	
DQ7	1	7%	1825	1825	-	1825	1825	
DQA1*02	1	7%	6114	6114	-	6114	6114	

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 13. Summary of Single Antigen results for Serum #136

Class I								
*** Serum 136 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
A23	12	100%	9945	10260	5396	1809	20252	
A24	12	100%	7295	8202	5052	2130	18195	
A25	12	100%	3312	3522	1928	619	7449	
A26	12	100%	4229	4828	2956	600	10313	
A29	12	100%	3879	4399	2845	622	9745	
A36	12	100%	10351	10326	5316	1515	20224	
A43	12	100%	4719	5326	2888	999	10232	
A80	12	100%	13907	13100	5670	1321	20267	
B42	12	100%	10933	10386	4773	794	17126	
B54	12	100%	6364	6216	2881	1036	11057	
B55	12	100%	9961	9643	4118	1802	15595	
B56	12	100%	10244	9407	4267	1462	16550	
B60	12	100%	7108	6710	3217	500	11545	
B67	12	100%	11249	10823	4790	1593	18572	
B7	12	100%	18397	16766	6257	3517	24482	
B73	12	100%	4278	4180	1977	520	7177	
B76	12	100%	12365	11864	4887	2363	19432	
B81	12	100%	14653	13709	5972	744	20432	
B82	12	100%	8181	7692	3493	1132	13578	
A1	11	91%	19619	18965	5690	4925	28515	
B27	11	91%	9638	8953	4024	1425	16598	
B44	11	91%	2388	2662	1114	532	4997	
B57	11	91%	4056	4148	1714	534	7348	
B61	11	91%	5961	6023	2453	565	10829	
A11	10	83%	2302	2767	1885	613	6742	
A66	10	83%	2791	2808	1594	735	6464	
B13	10	83%	5180	5282	1287	3603	7344	
B45	10	83%	3181	3606	1119	2595	5880	
B48	10	83%	5871	6448	1914	4234	10370	
B58	10	83%	2247	2571	808	1812	4043	
B63	10	83%	2323	2739	898	1862	4472	
B2708	4	33%	6997	7959	5382	2625	15220	
B47	4	33%	1804	1964	732	1238	3011	
A6601	3	25%	3425	3444	2103	878	6029	
A1101	2	16%	1700	1700	1086	614	2786	
A1102	2	16%	1943	1942	1355	588	3297	
A6602	2	16%	2321	2320	547	1774	2867	

Class II								
*** Serum 136 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DR12	12	100%	4417	4284	1344	1444	6490	
DR7	12	100%	13208	13417	2945	6447	18690	
DR9	12	100%	7066	6682	1524	3680	9538	
DR52	11	91%	6430	6268	2243	1714	9736	
DQ6	8	66%	1366	1517	724	662	2996	
DQ5	5	41%	1065	1395	879	638	3118	
DQA1*01	1	8%	1556	1556	-	1556	1556	
DR53	1	8%	6447	6447	-	6447	6447	

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 14. Summary of Single Antigen results for Serum #137

Class I								
*** Serum 137 ***								
7 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
Neg	7	100%	-	-	-	-	-	

Class II								
*** Serum 137 ***								
12 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DQ7	12	100%	14790	13077	5675	7	20310	
DQ8	12	100%	15101	13085	5588	8	20250	
DQ9	12	100%	14582	12471	5529	9	19788	
DR53	12	100%	6926	6713	2600	2393	11527	
DR7	12	100%	7694	8145	2439	5247	13783	
DR9	12	100%	11290	10632	3023	5625	15654	
DQ6	4	33%	1613	2086	1174	1097	4022	
DQA1*03	2	16%	1083	1082	23	1060	1105	
DQ3	1	8%	4899	4899	-	4899	4899	
DQ5	1	8%	3472	3472	-	3472	3472	
DR14	1	8%	1133	1133	-	1133	1133	

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 15. Summary of Single Antigen results for Serum #138

Class I								
*** Serum 138 ***								
13 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
B18	13	100%	9715	9109	5007	18	15573	
B57	13	100%	4406	4194	2387	57	8341	
B64	13	100%	13018	12493	5000	64	19412	
B65	13	100%	14303	13518	5490	65	21590	
B8	13	100%	11200	10102	5066	8	17663	
Cw7	13	100%	8875	8588	3568	7	13337	
B7	12	92%	2748	2719	1363	7	4828	
A3	11	84%	1955	2284	1121	782	3897	
B51	11	84%	3443	3673	1738	51	6711	
B73	11	84%	2633	3133	2246	73	8450	
B78	11	84%	2363	2653	1368	78	5455	
B55	10	76%	2105	2279	1180	54	4419	
B42	9	69%	1774	2021	1018	42	3641	
B58	9	69%	2006	2252	1119	58	4062	
B54	6	46%	1350	1572	974	53	3007	
B37	5	38%	2438	2163	1412	37	4004	
B67	5	38%	1454	1407	804	67	2289	
Cw18	4	30%	1027	933	603	18	1662	
A33	3	23%	2942	3465	871	2761	4693	
A74	3	23%	2275	1865	968	529	2792	
B61	3	23%	1141	907	618	61	1519	
Cw12	3	23%	1132	1155	943	12	2321	
Cw6	3	23%	515	690	642	6	1550	
A26	2	15%	642	641	616	26	1257	
A32	2	15%	1310	1309	1278	32	2587	
B27	2	15%	1745	1745	602	1143	2347	
B52	2	15%	907	906	855	52	1761	
B56	2	15%	671	671	615	56	1286	
B59	2	15%	1013	1013	954	59	1967	
B60	2	15%	634	633	574	60	1207	
B76	2	15%	1715	1715	1640	75	3355	
B77	2	15%	698	698	621	77	1319	
B81	2	15%	1041	1040	960	81	2000	
Cw1	2	15%	1028	1028	1027	1	2055	
Cw10	2	15%	947	947	937	10	1884	
Cw14	2	15%	676	676	662	14	1338	
Cw5	2	15%	684	684	679	5	1363	

Class II								
*** Serum 138 ***								
13 typing Labs								
Antigen	No.Labs	Consensus	Median	Mean	Std Dev	Min	Max	
DQ2	13	100%	22633	21003	7695	2	33984	
DQ5	13	100%	24452	22675	9212	5	40364	
DQ6	13	100%	24519	22807	9076	6	39870	
DR12	13	100%	4525	4227	1652	12	6496	
DR15	13	100%	21292	20068	6518	15	29430	
DR51	13	100%	24469	23125	8439	51	38043	
DR8	13	100%	11352	11567	3834	8	16154	
DR9	13	100%	20058	19594	5972	9	26402	
DR1	12	92%	22650	22559	3219	16787	30923	
DR10	12	92%	19827	20079	2003	17770	25218	
DR103	12	92%	21445	21748	2470	18826	28029	
DR11	12	92%	5066	4988	960	3511	6214	
DR16	12	92%	15256	16142	1843	13590	20280	
DR7	11	84%	3993	4537	2104	2030	9107	
DR52	7	53%	2272	2998	1652	1284	5946	
DP17	3	23%	1036	1233	432	831	1833	
DP9	3	23%	769	1261	698	767	2248	
DQ4	3	23%	2286	2196	269	1832	2472	
DR13	3	23%	4054	3724	1017	2347	4772	
DQ7	2	15%	1525	1524	81	1444	1605	
DQ8	2	15%	1998	1998	356	1642	2354	
DQ9	2	15%	1819	1819	9	1810	1828	
DQA1*01	2	15%	24396	24396	2847	21549	27243	
DR14	2	15%	4038	4038	1859	2179	5897	
DR1403	2	15%	3439	3438	244	3195	3682	
DR1404	2	15%	6215	6214	318	5897	6532	
DPw6	1	7%	1531	1531	-	1531	1531	
DQA1*02	1	7%	19711	19711	-	19711	19711	
DQA1*03	1	7%	1974	1974	-	1974	1974	
DQA1*04	1	7%	2286	2286	-	2286	2286	

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 16a. Individual laboratory results for Serum #135 - class I by One Lambda Single Antigen

	**** Serum 135 ****																								
Ctr	A23	A24	A25	A32	B38	B44	B45	B47	B49	B50	B51	B52	B53	B57	B58	B59	B62	B63	B77	A2	B37	B56	B72	B13	Cw15
774	22470	13156	6055	7073	7928	3967	6863	2610	12693	11443	6200	4910	6655	9297	6760	5679	3489	6481	5226	2057	2726	2680	3396	2872	
792	17398	11217	4325	5758	6043	4049	4360	2031	8761	7617	5243	3348	5092	6874	5494	4146	2116	4912	4610	1512	1712	1575	2423	2929	1690
1426	19232	9883	5168	7426	7562	4310	5528	2597	10692	8728	6648	3913	6112	8064	6904	5469	2795	6289	5360	1551	3255	1954	2882	3224	2798
2400	23296	14836	7205	8815	8570	5502	7378	3548	12684	10960	7967	4707	8219	10014	8631	6583	3472	7733	6811	2478	3679	2661	3733	4373	2819
3224	18641	12726	4841	6682	6174	4080	4100	1885	9126	7271	5600	3265	5396	7226	5737	4319	2000	4848	4497	1415		1550	2275	3031	2204
3753	19010	11581	4604	6725	5641	2861	3530	1583	8808	7395	5276	3138	4870	6642	5402	4141	1960	4944	4228	1154	1695	1414	2165	2118	2406
5214	22238	17869	8665	11808	11259	5899	4872	3746	14236	10004	9747	5940	9409	11992	10538	7926	3175	9219	8182	2127	3939	2347	3425	5049	3966
8001	19607	13062	5433	7257	7036	4395	4243	2154	9600	7829	5881	3711	6170	7737	6451	4799	2189	5753	5301	1652	2363	1619	2558	3309	1989
8050	18108	8686	5583	8235	8526	4319	4167	2540	12544	10890	7738	4744	7063	9784	7954	6375	3276	7227	6284	1698	2604	2171	3626	3473	3625
8058	23	24	25	32	38	44	45	47	49	50	51	52	53	57	58	59	62	63	77	2	37	56	72	13	15
8083	31314	24686	12155	13844	14067	8793	10387	5699	18298	16580	11226	9119	12616	15105	12514	10567	6862	11478	9952	5120	5140	5662	6925	6606	5271
Avg	19212	12521	5824	7605	7531	4384	5043	2585	10681	8979	6507	4259	6514	8436	6949	5460	2854	6268	5503	1888	2715	2154	3044	3363	2678.3
Std Dev.S	7458	6026	2985	3482	3505	2110	2600	1428	4539	4011	2873	2202	3112	3743	3185	2621	1657	2887	2496	1247	1412	1373	1643	1665	1420.3
MFI %CV	39%	48%	51%	46%	47%	48%	52%	55%	42%	45%	44%	52%	48%	44%	46%	48%	58%	46%	45%	66%	52%	64%	54%	50%	53%

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 16b. Individual laboratory results for Serum #135 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 135 ****																								
Ctr	A23	A24	A25	A32	B38	B44	B45	B47	B49	B50	B51	B52	B53	B57	B58	B59	B62	B63	B77	A2	B37	B56	B72	B13	Cw15
8029	4762	4052	1013	1227	1616	1107	896	684	2247	2169	858	811	1283	1776	1459	1045	555	1382	1165		761				
8103	4870	4887	2088	1724	1558	1427	781	576	1918	1571	728	692	1417	2393	1462	937	672	1662	1185	841	703	546	595		522
Avg	4816	4470	1551	1476	1587	1267	838.5	630	2083	1870	793	751.5	1350	2085	1461	991	613.5	1522	1175	-	732	-	-	-	-
Std Dev.S	76	590	760	351	41	226	81	76	233	423	92	84	95	436	2	76	83	198	14	-	41	-	-	-	-
MFI %CV	2%	13%	49%	24%	3%	18%	10%	12%	11%	23%	12%	11%	7%	21%	0%	8%	13%	13%	1%	-	6%	-	-	-	-

Table 16a. Individual laboratory results for Serum #135 - class I by One Lambda Single Antigen - cont.

		**** Serum 135 ****																			Manufacturer	
Ctrl	Cw5	Cw6	B27	B71	Cw18	Cw17	Cw2	A69	B41	B61	B75	B35	A68	B60	Bw4	A2403	B2705	B76	A34	Other	Manufacturer	
774			3368	2026											12693						One Lambda	
792	1730	1994	2722		1719																One Lambda	
1426	2587	2657	3323	1805	2264	2181	2048	1356	1554	1441	1905	1553		1300			1826	1387			One Lambda	
2400	3242	3582	4474	2278	3198	2876	2398	2186	2307	2143	2498										One Lambda	
3224	2257	2577		1256	2068	1716	1535	1102	1090	1038	1225	1058	1000		9126	10408	2918				One Lambda	
3753	2194	2562	1309	1112											4249						One Lambda	
5214	3894	4271			3376	3219	2802								14236	15412	5427		A203		One Lambda	
8001	2038	2376		1331	1954	1734	1459	1423	1260	1210	1326	1134	1134	1058		3237					One Lambda	
8050	3714	3968	3658	1734	3315	2517	2306	1052	1740	1316	1396	1312	1102	1421	5000		1115				One Lambda	
8058	5	6	27	71	18	17	2	69	41	61	75	35		60			76	34	Cw4,B48,A66,B78 >		One Lambda	
8083	5882	5955	7244	4393	5604	4974	4001	4178	3650	3780	3919	3851	3615	3457				3231	4129	A80		One Lambda
Avg	2754	2995	3266	1778	2613	2404	2069	1624	1663	1570	1763	1491	1713	1459	9061	12910	3861	1562	1850			
Std																						
Dev.S	1562	1580	2140	1172	1531	1423	1157	1289	1118	1153	1202	1268	1269	1239	4462	3538	1366	1325	2086			
MFI																						
%CV	57%	53%	66%	66%	59%	59%	56%	79%	67%	73%	68%	85%	74%	85%	49%	27%	35%	85%	113%			

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 16b. Individual laboratory results for Serum #135 - class I by Lifecodes-Immucor Single Antigen - cont.

		**** Serum 135 ****																			Manufacturer
Ctrl	Cw5	Cw6	B27	B71	Cw18	Cw17	Cw2	A69	B41	B61	B75	B35	A68	B60	Bw4	A2403	B2705	B76	A34	Other	Manufacturer
8029			813												2876						Lifecodes-Immucor
8103	507	572	1354	587	623	630	547	581	614				762			3995	1354			Cw4,Cw403,A203,B15 >	Lifecodes-Immucor
Avg	-	-	1084	-	-	-	-	-	-	-	-	-	-	-	-	3436	-	-	-		
Std																					
Dev.S	-	-	383	-	-	-	-	-	-	-	-	-	-	-	-	791	-	-	-		
MFI																					
%CV	-	-	35%	-	-	-	-	-	-	-	-	-	-	-	-	23%	-	-	-		

Table 17a. Individual laboratory results for Serum #136 - class I by One Lambda Single Antigen

	**** Serum 136 ****																									
Ctr	A23	A24	A25	A26	A29	A36	A43	A80	B42	B54	B55	B56	B60	B67	B7	B73	B76	B81	B82	A1	B27	B44	B57	B61	A11	A66
774	9207	6016	3953	4079	3392	10401	4321	13544	10625	6123	9465	10605	7431	12516	18551	4425	13999	13405	8655	20070	10884	2163	4212	7042	2929	
792	10683	8573	2990	4379	4366	10300	5116	12535	9978	5969	8942	8562	6329	10254	16405	3711	10623	13661	7088	18269	9784	2388	3207	5283	2786	2921
1426	7455	4029	2491	2958	1905	6596	3462	11476	9052	4892	8116	7678	5693	9414	15595	4201	10295	12915	6203	15139	7270	1897	3088	4390	1818	2660
2400	16210	13799	5102	7886	6954	14865	8995	17724	14692	8897	13618	12490	9959	13926	21389	6549	15897	19648	10913	23198	12342	3534	5220	7506	4325	3990
3224	12091	10562	3735	5803	5653	12122	6536	14266	11240	6605	10484	10083	7044	11263	17920	4354	11791	14868	8060	19619	7864	3003	3982	6048		
3753	8339	5371	3076	3626	3189	8958	4107	13548	10295	5574	9336	8670	6056	10741	18953	3701	12144	14438	6901	19531	8318	2075	3358	4746	1709	1887
5214	16540	14265	6176	9090	8524	16959	9221	20223	15724	9685	14809	14212	10587	16040	21957	6452	16908	20432	11489	22902		3802	6427	8272	4681	
8001	12155	10178	3548	5824	5608	12222	6165	14721	11704	6642	10457	10694	7171	11234	18242	4151	12586	15765	8302	21077	11416	2713	4056	5961	3110	3740
8050	6417	2902	2505	2717	2209	7790	3639	15081	12054	7080	11050	10405	7325	12679	20151	4377	13686	15909	8509	15374	9638	2184	4206	5621	1278	1879
8058																										
8083	20252	18195	7449	10313	9745	20224	10232	20267	17126	11057	15595	16550	11545	18572	24482	7177	19432	20218	13578	28515	16598	4997	7348	10829	6742	6464
Avg	11935	9389	4103	5668	5155	12044	6179	15339	12249	7252	11187	10995	7914	12664	19365	4910	13736	16126	8970	20369	10457	2876	4510	6570	3306	3309
Std Dev.S	4487	4964	1647	2639	2645	4244	2504	3067	2688	1978	2590	2732	2036	2828	2683	1291	2914	2908	2319	3935	2849	981	1412	1927	1849	1483
MFI %CV	38%	53%	40%	47%	51%	35%	41%	20%	22%	27%	23%	25%	26%	22%	14%	26%	21%	18%	26%	19%	27%	34%	31%	29%	56%	45%

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 17b. Individual laboratory results for Serum #136 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 136 ****																									
Ctr	A23	A24	A25	A26	A29	A36	A43	A80	B42	B54	B55	B56	B60	B67	B7	B73	B76	B81	B82	A1	B27	B44	B57	B61	A11	A66
8029	1965	2130	619	668	631	1966	1129	2505	1353	1037	1802	1475	891	1645	4038	520	2649	2509	1479	4925	1425	532		565	613	735
8103	1809	2413	626	600	622	1515	999	1321	794	1036	2042	1462	500	1593	3517	553	2363	744	1132		2944		534		614	878
Avg	1887	2272	623	634	627	1741	1064	1913	1074	1037	1922	1469	695.5	1619	3778	537	2506	1627	1306	-	2185	-	-	-	614	807
Std Dev.S	110	200	5	48	6	319	92	837	395	1	170	9	276	37	368	23	202	1248	245	-	1074	-	-	-	1	101
MFI %CV	6%	9%	1%	8%	1%	18%	9%	44%	37%	0%	9%	1%	40%	2%	10%	4%	8%	77%	19%	-	49%	-	-	-	0%	13%

Table 17a. Individual laboratory results for Serum #136 - class I by One Lambda Single Antigen - cont.

**** Serum 136 **** - cont.										
Ctr	B13	B45	B48	B58	B63	B2708	B47	A6601	Other	Manufacturer
774	4373	2691	6115	2134	2609					One Lambda
792	4675	2595	5162	1840	1862					One Lambda
1426	3603	2629	4236	1812	2134					One Lambda
2400	6680	4440	8447	3320	3325		2287			One Lambda
3224	5805	3230	5703	2252	2049	11050	1321	3425	A1101,A1102,A6602	One Lambda
3753	3731	2894	4234	1897	2053					One Lambda
5214	6775	5295	8531	3896	4249	15220		6029	B2705,A6602	One Lambda
8001	5685	3132	6039	2281	2311		1238			One Lambda
8050	4152	3282	5652	2242	2334					One Lambda
8058										One Lambda
8083	7344	5880	10370	4043	4472		3011			One Lambda
Avg	5282	3607	6449	2572	2740	13135	1964	4727		
Std										
Dev.S	1357	1179	2017	852	947	2949	845	1841		
MFI										
%CV	26%	33%	31%	33%	35%	22%	43%	39%		

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 17a. Individual laboratory results for Serum #136 - class I by Lifecodes-Immucor Single Antigen - cont.

**** Serum 136 **** - cont.										
Ctr	B13	B45	B48	B58	B63	B2708	B47	A6601	Other	Manufacturer
8029						2625			B703	Lifecodes-Immucor
8103						2944		878	B40,B15,B703,B8101 >	Lifecodes-Immucor
Avg	-	-	-	-	-	2785	-	-		
Std										
Dev.S	-	-	-	-	-	226	-	-		
MFI										
%CV	-	-	-	-	-	8%	-	-		

Table 18a. Individual laboratory results for Serum #137 - class I by One Lambda Single Antigen

**** Serum 137 ****		
Ctr	Other	Manufacturer
774	-	One Lambda
792	NEG	One Lambda
1426	-	One Lambda
2400	NEG	One Lambda
3224	NEG	One Lambda
3753	NEG	One Lambda
5214	-	One Lambda
8001	-	One Lambda
8050	NEG	One Lambda
8058	NEG	One Lambda
8083	-	One Lambda
Avg	-	-
Std		
Dev.S	-	-
MFI		
%CV	-	-

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 18b. Individual laboratory results for Serum #137 - class I by Lifecodes-Immucor Single Antigen

**** Serum 137 ****		
Ctr	Other	Manufacturer
8029	NEG	Lifecodes-Immucor
8103	-	Lifecodes-Immucor
Avg	-	-
Std		
Dev.S	-	-
MFI		
%CV	-	-

Table 19a. Individual laboratory results for Serum #138 - class I by One Lambda Single Antigen

	**** Serum 138 ****																								
	Ctr	B57	B64	B65	B8	Cw7	B7	A3	B51	B73	B78	B55	B42	B58	B54	B37	B67	Cw18	A33	A74	B61	Cw12	Cw6	Other	Manufacturer
774	4242	12828	14303	12250	9822	2471		4169	2046	2462														One Lambda	
792	4587	12850	13471	10826	6909	2725	1793	3443	2633	2322	2068	1774	1904											One Lambda	
1426	7637	14463	15668	13206	11764	4828	3897	4540	8450	5455	4419	3641	4062	3007	4004	2289	1662	4693	2792	1519	2321	1550	A2,B60,A66,B27 >		
2400	6911	17967	19114	15722	13337	4573	3784	6711	5784	4545	3737	3389	3514	2566	3165		2942							One Lambda	
3224	4519	13434	14837	11200	8808	2771	1955	3358	3025	2321	1942	1641	1851	1243		1079								One Lambda	
3753	4406	15661	17263	12029	9386	2992	2536	2447	2576	2363	2141	1701	2006	1456		1454		1141		B27				One Lambda	
5214	5007	16165	17666	13200	11219	3600	3094	2530	2902	2707	2720	2173	2301											One Lambda	
8001	3682	12717	13574	9813	8875	2270	1696	2766	1937	1703	1659	1386	1498	1108	1171					1132				One Lambda	
8050	2378	13018	13329	10217	7961	2042	1004	4344		1817	1196													One Lambda	
8058	57	64	65	8	7	7		51	73	78	54	42	58	53	37	67	18			61	12	6	Cw4,A24,B60,B62 >	One Lambda	
8083	8341	19412	21590	17663	13213	3745	3648	6051	4372	3418	2860	2442	3074		2438	2146		2761	2275					One Lambda	
Avg	4706	13507	14625	11467	9209	2911	2601	3674	3380	2654	2280	2021	2252	1572	2163	1407	840	3465	2534	907	1155	778			
Std																									
Dev.S	2349	4999	5497	4467	3686	1321	1053	1823	2329	1435	1244	1080	1187	1067	1579	899	1162	1067	366	757	1155	1092			
MFI																									
%CV	50%	37%	38%	39%	40%	45%	40%	50%	69%	54%	55%	53%	53%	68%	73%	64%	138%	31%	14%	83%	100%	140%			

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 19a. Individual laboratory results for Serum #138 - class I by Lifecodes-Immucor Single Antigen

	**** Serum 138 ****																								
	Ctr	B57	B64	B65	B8	Cw7	B7	A3	B51	B73	B78	B55	B42	B58	B54	B37	B67	Cw18	A33	A74	B61	Cw12	Cw6	Other	Manufacturer
8029	1677	7831	8445	3347	6203			940									844							Lifecodes-Immucor	
8103	1090	6009	6416	1854	4142	614	782		671								1209		529		515	B48,B14		Lifecodes-Immucor	
Avg	1384	6920	7431	2601	5173	-	861	-	-	-	-	-	-	-	-	-	1027	-	-	-	-	-			
Std																									
Dev.S	415	1288	1435	1056	1457	-	112	-	-	-	-	-	-	-	-	-	258	-	-	-	-	-			
MFI																		25%	-	-	-	-	-		
%CV	30%	19%	19%	41%	28%	-	13%	-	-	-	-	-	-	-	-	-	25%	-	-	-	-	-			

Table 20a. Individual laboratory results for Serum #135 - class II by One Lambda Single Antigen

	**** Serum 135 ****																							
Ctr	DQ2	DR12	DR7	DR9	DP14	DP17	DP18	DP28	DP9	DPw2	DPw3	DPw6	DR11	DR52	DR53	DP10	DP20	DP402	DPw4	DQA1*05	Other			
774	21083	16553	23927	16768	11454	11481	14613	15080	12852	17007	11872	11430	12555	20572	10727	12397	12541		15454		One Lambda			
792	18030	14551	23340	15334	9251	9247	11602	11586	10365	13939	9403	8559	9743	17910	8938	9938	10264	12953				One Lambda		
1426	12379	14920	24641	9911	10999	11144	12372	12163	12586	15803	11095	10659	12552	18290	9291	12223	12025		14293		DQ7	One Lambda		
2400	15440	16846	24621	11346	11489	12230		13512	13467	16763	12117	11447	12693	19532	10705	12875	13230		15930	1914	DR18,DQA1*06	One Lambda		
3224	19117	15536	24029	15604	9353	9589	12996	12695	11100	14768	10153	9639	10340		9266	10742	10651	13828				One Lambda		
3753	11914	13646	23950	8730	8754	8972	11293	10649	10154	14844	8930	8514	9718	17271	8596	10272	9884	13248				One Lambda		
5214	15988	20007	23709	12615	14360	14796	17811	16671	16495	20751	15115	13965	15653	21780	12641	15993	15789	19366				One Lambda		
8001	18798	15760	23285	15650	9407	9381	13088	13009	10865	14810	9998	9124	10679	18205	8536	10605	10579	13363				One Lambda		
8050	16897	17743	30088	12217	12604	12484	15949	15111	14224	19745	12589	11705	13812	21822	12905	14261	13916	17710		1269	DQA1*06	One Lambda		
8058	2	12	7	9			18						52								DPA1*02	One labmda		
8083	23162	18843	28790	18700	12449	12603	16787	15472	13935	18516	13111	11779	13985	23720	12270	13616	13678		17038		DR5	One Lambda		
Avg	15710	14947	22762	12444	11012	11193	12653	13595	12604	16695	11438	10682	12173	17915	10388	12292	12256	15078	15679	1592				
Std																								
Dev.S	6203	5298	7878	5124	1818	1897	4960	1927	2018	2316	1902	1729	2005	6611	1712	1959	1924	2745	1137	456				
MFI																								
%CV	39%	35%	35%	41%	17%	17%	39%	14%	16%	14%	17%	16%	16%	37%	16%	16%	16%	18%	7%	29%				

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 20b. Individual laboratory results for Serum #135 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 135 ****																						
Ctr	DQ2	DR12	DR7	DR9	DP14	DP17	DP18	DP28	DP9	DPw2	DPw3	DPw6	DR11	DR52	DR53	DP10	DP20	DP402	DPw4	DQA1*05	Other		
8029	6677	10431	18191	11108	6906	7180	9704	9545	8081	10201	7470	8269	8629	12109	6399				9650		DPA1*01,DPA1*02>	Lifecodes-Immucor	
8103	6114	8486	16448	9636	7119	6181	8769	9695	7706	8920	7167	6534	7851	9872	5928			8996	8996	5867	DR10,DQ5,DQA1*02	Lifecodes-Immucor	
Avg	6396	9459	17320	10372	7013	6681	9237	9620	7894	9561	7319	7402	8240	10991	6164	-	-	-	9323	-			
Std																							
Dev.S	398	1375	1232	1041	151	706	661	106	265	906	214	1227	550	1582	333	-	-	-	462	-			
MFI																							
%CV	6%	15%	7%	10%	2%	11%	7%	1%	3%	9%	3%	17%	7%	14%	5%	-	-	-	5%	-			

Table 21a. Individual laboratory results for Serum #136 - class II by One Lambda Single Antigen

	**** Serum 136 ****							
Ctr	DR12	DR7	DR9	DR52	DQ6	DQ5	Other	
774	5027	13933	7797	8022				One Lambda
792	3665	12288	6015	5873				One Lambda
1426	3620	11682	4875	5340				One Lambda
2400	5449	15018	6959	7354				One Lambda
3224	4687	13682	7356		1556	1065	DQA1*01	One Lambda
3753	3567	11930	5144	5306	1001	1001		One Lambda
5214	6490	18690	9538	8961	2279			One Lambda
8001	4146	12734	6267	6430	1447			One Lambda
8050	4868	15887	7173	6903	1285	1154		One Lambda
8058								One labmda
8083	5805	16593	8137	9736	2996	3118		One Lambda
Avg	4732	14244	6926	7103	1761	1585		
Std								
Dev.S	997	2286	1412	1567	740	1024		
MFI								
%CV	21%	16%	20%	22%	42%	65%		

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 21b. Individual laboratory results for Serum #136 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 136 ****							
Ctr	DR12	DR7	DR9	DR52	DQ6	DQ5	Other	
8029	2650	12126	7247	3317	915	638		Lifecodes-Immucor
8103	1444	6447	3680	1714	662		DR53	Lifecodes-Immucor
Avg	2047	9286.5	5464	2516	789	-		
Std								
Dev.S	853	4016	2522	1133	179	-		
MFI								
%CV	42%	43%	46%	45%	23%	-		

Table 22a. Individual laboratory results for Serum #137 - class II by One Lambda Single Antigen

	**** Serum 137 ****									
Ctr	DQ7	DQ8	DQ9	DR53	DR7	DR9	DQ6	Other		
774	16610	16213	15456	6817	8070	12317			One Lambda	
792	14445	14933	14721	7027	7317	10017			One Lambda	
1426	10768	10145	9247	4688	5957	9114			One Lambda	
2400	14504	14540	13759	7812	10432	12944			One Lambda	
3224	16960	17173	16872	7965	8869	11980			One Lambda	
3753	10689	10382	9750	4836	5876	7217			One Lambda	
5214	17519	17896	16736	11527	13783	15654	2022		One Lambda	
8001	16282	15526	15128	6825	7230	10600	1097	DQA1*03	One Lambda	
8050	15076	15268	14442	8182	9698	12309	1203	DR14,DQA1*	One Lambda	
8058	7	8	9						One labmda	
8083	20310	20250	19788	9864	9982	13854	4022	DQ5	One Lambda	
Avg	13925	13849	13264	7554	8721	11601	2086			
Std										
Dev.S	5401	5457	5328	2074	2391	2435	1355			
MFI										
%CV	39%	39%	40%	27%	27%	21%	65%			

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 22b. Individual laboratory results for Serum #137 - class II by Lifecodes-Immucor Single Antigen

	**** Serum 137 ****									
Ctr	DQ7	DQ8	DQ9	DR53	DR7	DR9	DQ6	Other		
8029	3759	4688	3748	2393	5247	5625			Lifecodes-Immucor	
8103				2631	5284	5957		DQ3	Lifecodes-Immucor	
Avg	-	-	-	2512	5265.5	5791	-			
Std										
Dev.S	-	-	-	168	26	235	-			
MFI										
%CV	-	-	-	7%	0%	4%	-			

Table 23a. Individual laboratory results for Serum #138 - class II by One Lambda Single Antigen

		**** Serum 138 ****																				
Ctr	DQ2	DQ5	DQ6	DR12	DR15	DR51	DR8	DR9	DR1	DR10	DR103	DR11	DR16	DR7	DR52	DP17	DP9	DQ4	DR13	Other		
774	24309	25256	25445	4525	22806	25411	11352	22692	23454	20138	22320	5320	16844	3705							One Lambda	
792	26981	27836	27913	4627	21292	26838	10889	19831	21976	19064	20423	4323	15219	3993							One Lambda	
1426	17042	9988	10712	6496	16951	14822	14211	19290	16787	20386	18826	5862	16216	9107	2174	1833	2248	1832	2347	DR14,DQ7,DQ8,DQ9 >	One Lambda	
2400	24168	26404	25722	6233	24015	26040	14444	23455	24043	22229	23808	5843	18708	7356	2536						One Lambda	
3224	26198	26360	27243	4690	21001	26188	10899	19805	22051	17770	18882	4131	15292	4080						DQA1*01	One Lambda	
3753	19715	19654	20391	3615	21820	23508	10872	20318	22763	20387	22961	3927	14506	2030	1691						One Lambda	
5214	22633	23950	23903	5172	22898	23854	13007	21794	22906	21174	22354	4812	17740	4165							One Lambda	
8001	24447	24452	24519	3951	20756	24469	9573	19834	22537	18513	20570	3862	13590	2669	1284						One Lambda	
8050	20795	28530	28754	3060	23214	30146	10731	20058	23741	19515	22839	3511	15059								One Lambda	
8058	2	5	6	12	15	51	8	9													One labmda	
8083	33984	40364	39870	6078	29430	38043	14236	26402	30923	25218	28029	5970	20280	6654	2272						One Lambda	
Avg	21843	22982	23134	4405	20382	23579	10929	19408	23118	20439	22101	4756	16345	4862	1991	-	-	-	-			
Std																						
Dev.S	8470	10468	10309	1822	7384	9541	3996	6781	3421	2115	2702	932	2062	2331	500	-	-	-	-			
MFI																						
%CV	39%	46%	45%	41%	36%	40%	37%	35%	15%	10%	12%	20%	13%	48%	25%	-	-	-	-			

Blue = DSA against cell #133 only

Gold = DSA against cell #134 only

Green = DSA against cell #133 and #134

Table 23b. Individual laboratory results for Serum #138 - class II by Lifecodes-Immucor Single Antigen

		**** Serum 138 ****																				
Ctr	DQ2	DQ5	DQ6	DR12	DR15	DR51	DR8	DR9	DR1	DR10	DR103	DR11	DR16	DR7	DR52	DP17	DP9	DQ4	DR13	Other		
8029	17397	20427	20483	3167	18439	20008	16154	19824	19391	18531	19926	6214	15206	3050	5084	1036	767	2472	4054	DR1403,DR1404,DQ7,DQ8 >	Lifecodes-Immucor	
8103	15377	21549	21534	3326	18248	21252	13996	21421	20139	18033	20039	6084	15048	3105	5946	831	769	2286	4772	DQA1*01 , DR3,DR4,DR1403 >	Lifecodes-Immucor	
Avg	16387	20988	21009	3247	18344	20630	15075	20623	19765	18282	19983	6149	15127	3078	5515	933.5	768	2379	4413			
Std																						
Dev.S	1428	793	743	112	135	880	1526	1129	529	352	80	92	112	39	610	145	1	132	508			
MFI																						
%CV	9%	4%	4%	3%	1%	4%	10%	5%	3%	2%	0%	1%	1%	1%	11%	16%	0%	6%	12%			

Paper Challenge

Table 24. Individual Virtual crossmatch results for Serum #137 vs Donor# V1

Donor #V1 HLA A*11:12 A*31:01:02-B*18:01:01-B*40:02:01-C*03:06:01-C*07:01:01-DRB1*08:02:01-DRB1*11:01:01-DRB3*02:02:01-DQA1*04:01:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*04:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	137	68	Negative	No Class I DSA	Positive	DQ7 (14461)	Unacceptable	Unacceptable due to Class II DSA
792	137	76	Negative	No Class I DSA	Positive	DQ7 (14445)	Unacceptable	No Class I DSA
1426	137	76%	Negative	No Class I DSA	Positive	DQ7 (10684)	Unacceptable	
1461	137	0	Negative	No Class I DSA	Positive	DQ7 (4188)	Unacceptable	
2400	137	76%	Negative	No Class I DSA	Positive	DQ7 (14379) DQA1*05 (17262)	Unacceptable	No Class I DSA. Class II DSA present.
3224	137	64%	Negative	No Class I DSA	Positive	DQ7 (16960)	Unacceptable	CLASS 2 Unacceptable Present
3753	137	76.38%	Negative	No Class I DSA	Positive	DQ7 (10689)	Unacceptable	No Class I DSA detected.
3966	137	76%	Negative	No Class I DSA	Positive	DQ7 (15611) DQA1*05 (18087)	Unacceptable	No HLA Class I DSA
								A*11:12, C*03:06, C*07:01 not included on LSAB panel; DRB1*08:02 not included on LSAB panel
8001	137	76	Negative	No Class I DSA	Positive	DQ7 (16282)	Unacceptable	
8029	137	0	Borderline	No Class I DSA	Positive	DQ7 (3759) DQ9 (3328)	Unacceptable	
8050	137	76	Negative	No Class I DSA	Positive	DQ7 (15076)	Unacceptable	
8058	137	0%	Negative	No Class I DSA	Negative	DQ7 (7) DQ8 (8) DQ9 (9)	Acceptable	DQ7,DQ8,DQ9 positive
8080	137	76	Negative	No Class I DSA	Positive	DQ7 (18539)	Unacceptable	B Cell Prediction Positive
8083	137	95.51	Negative	No Class I DSA	Positive	DQ7 (20310)	Unacceptable	DSA to Class II
8103	137	13	Negative	No Class I DSA	Positive	DQ3 (4899)	Unacceptable	low MFI on HLA II antibodies
8110	137	93%	Negative	No Class I DSA	Positive	DQ7 (18100)	Unacceptable	
8111	137	76	Negative	No Class I DSA	Positive	DQ7 (13100)	Unacceptable	

Table 25. Individual Virtual crossmatch results for Serum #137 vs Donor# V2

Donor #V2 HLA A*03:01:01-A*68:03:01-B*07:02:01-B*14:02:01-C*07:02:01-C*08:02:01-DRB1*01:02:01-DRB1*15:01:01-DRB5*01:01:01-DQA1*01:01:02-DQA1*01:02:01-DQB1*05:01-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*04:01:01-DPB1*13:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	137	68	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
792	137	76	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	No Class I DSA; No Class II DSA
1426	137	76%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
1461	137	0	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
2400	137	76%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	No Class I nor Class II DSA present.
3224	137	64%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
3753	137	76.38%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	No Class I DSA detected. No class II DSA detected.
3966	137	76%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	No HLA Class I DSA; No HLA Class II DSA
8001	137	76	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	A*68:03, C*08:02 not included on LSAB panel
8029	137	0	Negative	No Class I DSA	Negative	No Class II DSA	-	No class II anti HLA antibodies
8050	137	76	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
8058	137	0%	Negative	No Class I DSA	Negative	DQ7 (7) DQ8 (8) DQ9 (9)	Acceptable	5%
8080	137	76	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
8083	137	95.51	Negative	No Class I DSA	Borderline	DR51 (1504) DQ5 (3472) DQ6 (1395)	Unacceptable	Possible DSA to class II antibodies. Requires physical crossmatch. DSA to DRB5*01:01 and DQB1*05:01 are patient typing as well. Could be auto antibodies.
8103	137	13	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
8110	137	93%	Negative	No Class I DSA	Negative	No Class II DSA	Acceptable	
8111	137	76	Negative	No Class I DSA	Negative	DQ6 (1000)	Acceptable	

Table 26. Individual Virtual crossmatch results for Serum #137 vs Donor# V3

Donor #V3 HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01-DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DBP1*131:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	137	68	Negative	No Class I DSA	Positive	DR7 (7246) DR53 (6857)	Unacceptable	Unacceptable due to Class II DSA
792	137	76	Negative	No Class I DSA	Positive	DR7 (7317) DR53 (7027)	Unacceptable	No Class I DSA
1426	137	76%	Negative	No Class I DSA	Positive	DR7 (5828) DR53 (4579)	Unacceptable	
1461	137	0	Negative	No Class I DSA	Positive	DR7 (5088) DR53 (3131)	Unacceptable	
2400	137	76%	Negative	No Class I DSA	Positive	DR7 (10265) DR53 (8366)	Unacceptable	No Class I DSA. Class II DSA Present.
3224	137	64%	Negative	No Class I DSA	Positive	DR7 (8869) DR53 (7965)	Unacceptable	CLASS 2 Unacceptable Present
3753	137	76.38%	Negative	No Class I DSA	Positive	DR7 (5876) DR53 (4836)	Unacceptable	No Class I DSA detected.
3966	137	76%	Negative	No Class I DSA	Positive	DR7 (8562) DR53 (9562)	Unacceptable	No HLA Class I DSA
								B*39:06, C*08:02 not included on LSAB panel; DPB1*131:01 not included on LSAB panel
8001	137	76	Negative	No Class I DSA	Positive	DR7 (7230) DR53 (6825)	Unacceptable	
8029	137	0	Negative	No Class I DSA	Positive	DR7 (5247) DR53 (2393)	Unacceptable	Virtual B CELL Prediction POSITIVE
8050	137	76	Negative	No Class I DSA	Positive	DR7 (9698) DR53 (8182)	Unacceptable	
8058	137	0%	Negative	No Class I DSA	Negative	DQ7 (7) DQ8 (8) DQ9 (9)	Acceptable	5%
8080	137	76	Negative	No Class I DSA	Positive	DR7 (9645) DR53 (10208)	Unacceptable	B-Cell Prediction Positive
8083	137	95.51	Negative	No Class I DSA	Positive	DR7 (9982) DR53 (9864)	Unacceptable	Class II DSA
8103	137	13	Negative	No Class I DSA	Positive	DR7 (5284) DR53 (2631)	Unacceptable	low MFI on HLA II antibodies
8110	137	93%	Negative	No Class I DSA	Positive	DR7 (12600) DR53 (11100)	Unacceptable	
8111	137	76	Negative	No Class I DSA	Positive	DR7 (8100) DR53 (7800)	Unacceptable	

Table 27. Individual Virtual crossmatch results for Serum #137 vs Donor# V4

Donor #V4 HLA A*29:02:01-A*33:03:01-B*44:03:01-C*07:06-C*16:01:01-DRB1*07:01:01-DRB1*15:01:01-DRB4*01:01:01-DRB5*01:01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:02-DPB1*02:01:03:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	137	68	Negative	No Class I DSA	Positive	DR7 (7246) DR53 (6141)	Unacceptable	Unacceptable due to Class II DSA
792	137	76	Negative	No Class I DSA	Positive	DR7 (7317) DR53 (6199)	Unacceptable	No Class I DSA
1426	137	76%	Negative	No Class I DSA	Positive	DR7 (5828) DR53 (4657)	Unacceptable	
1461	137	0	Negative	No Class I DSA	Positive	DR7 (5088) DR53 (3131)	Unacceptable	
2400	137	76%	Negative	No Class I DSA	Positive	DR7 (10265) DR53 (7075)	Unacceptable	No Class I DSA. Class II DSA Present.
3224	137	64%	Negative	No Class I DSA	Positive	DR7 (8869) DR53 (7965)	Unacceptable	CLASS 2 Unacceptable Present
3753	137	76.38%	Negative	No Class I DSA	Positive	DR7 (5876) DR53 (4836)	Unacceptable	No Class I DSA detected.
3966	137	78%	Negative	No Class I DSA	Positive	DR7 (8562) DR53 (9562)	Unacceptable	No HLA Class I DSA
8001	137	76	Negative	No Class I DSA	Positive	DR7 (7230) DR53 (6288)	Unacceptable	C*07:06 not included on LSAB panel
8029	137	0	Negative	No Class I DSA	Positive	DR7 (5247) DR53 (2393)	Unacceptable	
8050	137	76	Negative	No Class I DSA	Positive	DR7 (9698) DR53 (8182)	Unacceptable	
8058	137	0%	Negative	No Class I DSA	Negative	DQ7 (7) DQ8 (8) DQ9 (9)	Acceptable	23%
8080	137	76	Negative	No Class I DSA	Positive	DR7 (9645) DR53 (9287)	Unacceptable	B-Cell Prediction Positive
						DR7 (9982) DR51 (1504) DR53 (8585) DQ6 (1395)		
8083	137	95.51	Negative	No Class I DSA	Positive	(8585) DQ6 (1395)	Unacceptable	DSA to class II
8103	137	13	Negative	No Class I DSA	Positive	DR7 (5284) DR53 (2631)	Unacceptable	low MFI on HLA II antibodies
8110	137	93%	Negative	No Class I DSA	Positive	DR7 (12600) DR53 (11100)	Unacceptable	
8111	137	76	Negative	No Class I DSA	Positive	DR7 (8100) DR53 (7800)	Unacceptable	

Table 28. Individual Virtual crossmatch results for Serum #138 vs Donor# V1

Donor #V1 HLA A*11:12 A*31:01:02-B*18:01:01-B*40:02:01-C*03:06:01-C*07:01:01-DRB1*08:02:01-DRB1*11:01:01-DRB3*02:02:01-DQA1*04:01:01-DQA1*05:05:01-DQB1*03:01:01G-DQB1*04:02:01-DPA1*01:03:01-DPB1*04:01:01G-DPB1*04:02:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	138	98	Positive	B18 (8653) Cw7 (2224)	Positive	DR8 (11240) DR11 (3909) DR52 (1134)	Unacceptable	
792	138	99	Positive	B18 (9715) Cw7 (6909)	Positive	DR8 (10889) DR11 (4323)	Unacceptable	
1426	138	100%	Positive	B61 (1380) B18 (13572) Cw10 (1191) Cw7 (7472)	Positive	DR8 (15285) DR11 (6289) DR52 (2012) DQ4 (1372)	Unacceptable	
1461	138	14	Positive	B18 (2183) Cw7 (2773)	Positive	DR8 (15066) DR11 (6476) DR52 (4323) DQ4 (1805) DQA1*04 (1922)	Unacceptable	
2400	138	100%	Positive	B61 (1297) B18 (14957) Cw7 (12919)	Positive	DR8 (14194) DR11 (6040) DR52 (2301) DQ4 (1486) DQA1*04 (12295)	Unacceptable	
3224	138	98%	Positive	B18 (9512) Cw7 (8808)	Positive	DR8 (10899) DR11 (4131)	Unacceptable	DRB3*02:02(1243)
								Additional allele-specific antibody detected: DRB3*02:02(1691 MFI); Additional allele-specific antibody detected: DRB3*02:02(1691 MFI)
3753	138	99.22%	Positive	B61 (1141) B18 (8957) Cw7 (9386)	Positive	DR8 (10872) DR11 (3927) DR52 (1691)	Unacceptable	
3966	138	100%	Positive	B18 (15307) Cw7 (8622)	Positive	DR8 (12608) DR11 (4762) DR52 (2347)	Unacceptable	C*07:01 not covered in SAB panel
								A*11:12, C*03:06, C*07:01 not included on LSAB panel; DRB1*08:02 not included on LSAB panel
8001	138	98	Positive	B61 (699) B18 (8902)	Positive	DR11 (3862) DR52 (1284) DQ4 (753)	Unacceptable	
8029	138	9	Positive	B18 (1688) Cw7 (5190)	Positive	DR8 (16154) DR11 (6214) DR52 (5084) DQ7 (1605)	Unacceptable	
8050	138	98	Positive	B18 (10979) Cw7 (7961)	Positive	DR8 (10731) DR11 (3511)	Unacceptable	
				Cw4 (4) Cw6 (6) A24 (24) B60 (60) B61 (61) B48 (48) B78 (78) B13 (13) B47 (47) B44 (44) B51 (51) B52 (52) B53 (53) B82 (82) B75 (75) B54 (54) B55 (55) B67 (67) A26 (26) A34 (34) A32 (32) A23 (23) A80 (80) B64 (64) B65 (65) B63 (63) B77 (77) B57 (57) B58 (58) B18 (18) B37 (37) B42 (42) B46 (46) B59 (59) B71 (71) B73 (73) B81 (81) Cw1 (1) Cw10 (10) Cw2 (2) Cw9 (9) Cw5 (5) Cw7 (7) +	Positive	DR8 (8) DR9 (9) DR12 (12) DR15 (15) DQ2 (2) DQ5 (5) DQ6 (6)	Unacceptable	23%
8058	138	59%	Positive	B18 (10064) Cw7 (7713)	Positive	DR8 (12032) DR11 (4174)	Unacceptable	
8080	138	99	Positive	B61 (1050) B18 (15573)	Positive	DR11 (5970) DR52 (2272) DQ4 (1109)	Unacceptable	Also Class I antibodies. No DRB1*08:02 bead in the panel.
8083	138	99.6	Positive	B18 (744) Cw7 (4142)	Positive	DR8 (13996) DR11 (6084) DR52 (5946) DQ4 (2286) DQA1*04 (2286)	Unacceptable	
8103	138	61	Positive	B18 (13300) Cw7 (13300)	Positive	DR8 (13000) DR11 (5600) DQ4 (1600)	Unacceptable	
8110	138	99%	Positive	B61 (1300) B18 (15300) Cw7 (13300)	Positive	DR8 (12700) DR11 (4600) DR52 (1900) DQ4 (1200)	Unacceptable	
8111	138	98	Positive					

Table 29. Individual Virtual crossmatch results for Serum #138 vs Donor# V2

Donor #V2 HLA A*03:01:01-A*68:03:01-B*07:02:01-B*14:02:01-C*07:02:01-C*08:02:01-DRB1*01:02:01-DRB1*15:01:01-DRB5*01:01:01-DQA1*01:01:02-DQA1*01:02:01-DQB1*05:01-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*04:01:01-DPB1*13:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	138	98	Positive	B7 (2247) A3 (1544) B65 (12629) Cw7 (6429)	Positive	DR1 (19188) DR15 (19858) DR51 (25943) DQ5 (25585) DQ6 (26124)	Unacceptable	
792	138	99	Positive	B7 (2725) A3 (1793) B65 (13471) Cw7 (6909)	Positive	DR1 (20605) DR15 (21292) DR51 (26670) DQ5 (26375) DQ6 (27785)	Unacceptable	
1426	138	100%	Positive	B7 (4701) A3 (3776) B65 (15455) Cw7 (11489) Cw8 (1191)	Positive	DR1 (18186) DR15 (15607) DR51 (15297) DQ5 (6805) DQ6 (15469)	Unacceptable	
1461	138	14	Positive	B7 (550) A3 (781) B65 (9149) Cw7 (3614)	Positive	DR1 (19759) DR15 (18329) DR51 (20866) DQ5 (20752) DQ6 (20641) DQA1*01 (20752)	Unacceptable	
2400	138	100%	Positive	B7 (4345) A3 (3561) B65 (18778) Cw7 (12919)	Positive	DR1 (23577) DR15 (24270) DR51 (26142) DQ5 (25806) DQ6 (25581) DQA1*01 (15598)	Unacceptable	
3224	138	98%	Positive	B7 (2771) A3 (1955) B65 (14837) Cw7 (8808)	Positive	DR1 (22051) DR15 (21001) DR51 (26188) DQ5 (26360) DQ6 (27243) DQA1*01 (27243)	Unacceptable	
3753	138	99.22%	Positive	B7 (2992) A3 (2536) B65 (17263) Cw7 (9386)	Positive	DR1 (22763) DR15 (21820) DR51 (23508) DQ5 (19654) DQ6 (20391)	Unacceptable	
3966	138	100%	Positive	B7 (4077) A3 (3135) B65 (16546) Cw7 (8622)	Positive	DR1 (23568) DR15 (23854) DR51 (29831) DQ5 (29268) DQ6 (29700) DQA1*01 (29813)	Unacceptable	
8001	138	98	Positive	B7 (2270) A3 (1696) B65 (13574) Cw7 (8875)	Positive	DR1 (21049) DR15 (20109) DR51 (24395) DQ5 (24284) DQ6 (24483)	Unacceptable	A*68:03, C*08:02 not included on LSAB panel
8029	138	9	Positive	A3 (940) B65 (8445) Cw7 (6203)	Positive	DR1 (19391) DR15 (18271) DR51 (19875) DQ5 (20427) DQ6 (20483)	Unacceptable	
8050	138	98	Positive	B7 (2042) A3 (1004) B65 (13329) Cw7 (7961)	Positive	DR1 (23741) DR15 (23214) DR51 (30146) DQ5 (28530) DQ6 (28754)	Unacceptable	
8058	138	59%	Positive	Cw4 (4) Cw6 (6) A24 (24) B60 (60) B48 (48) B78 (78) B13 (13) B47 (47) B44 (44) B51 (51) B52 (52) B53 (53) B82 (82) B75 (75) B7 (7) B54 (54) B55 (55) A26 (26) A34 (34) A32 (32) A23 (23) A80 (80) B64 (64) B65 (65) B63 (63) B77 (77) B57 (57) B58 (58) B18 (18) B37 (37) B42 (42) B46 (46) B59 (59) B71 (71) B73 (73) B8 (8) B81 (81) Cw10 (10) Cw2 (2) Cw9 (9) Cw5 (5) Cw7 (7) Cw8 (8) +	Positive	DR8 (8) DR9 (9) DR12 (12) DR15 (15) DR51 (51) DQ2 (2) DQ5 (5) DQ6 (6)	Unacceptable	23%

Table 29. Individual Virtual crossmatch results for Serum #138 vs Donor# V2

Donor #V2 HLA A*03:01:01-A*68:03:01-B*07:02:01-B*14:02:01-C*07:02:01-C*08:02:01-DRB1*01:02:01-DRB1*15:01:01-DRB5*01:01:01-DQA1*01:01:02-DQA1*01:02:01-DQB1*05:01-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*04:01:01-DPB1*13:01:01G

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
8080	138	99	Positive	B7 (2699) A3 (2205) B65 (14816) Cw7 (9265)	Positive	DR1 (20038) DR15 (21613) DR51 (26767) DQ5 (26252) DQ6 (27692)	Unacceptable	
8083	138	99.6	Positive	B7 (3745) A3 (3648) B65 (21590) Cw7 (13213)	Positive	DR1 (28439) DR15 (29430) DR51 (36220) DQ5 (38635) DQ6 (39870)	Unacceptable	Also Class I antibodies
8103	138	61	Positive	B7 (614) A3 (782) B14 (6416) B64 (6009) B65 (6416) B18 (744) Cw7 (4142)	Positive	DR1 (20139) DR103 (20039) DR15 (18248) DR51 (21252) DQ5 (21549) DQ6 (21534) DQA1*01 (21549)	Unacceptable	
8110	138	99%	Positive	B7 (3000) A3 (2300) B65 (17500) Cw7 (13000)	Positive	DR1 (27000) DR15 (28000) DR51 (34400) DQ5 (34700) DQ6 (34300)	Unacceptable	
8111	138	98	Positive	B7 (5000) A3 (4300) B65 (26600) Cw7 (13300)	Positive	DR1 (23500) DR15 (23100) DR51 (29900) DQ5 (29100) DQ6 (29200)	Unacceptable	

Table 30. Individual Virtual crossmatch results for Serum #138 vs Donor# V3

Donor #V3 HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01-DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	138	98	Positive	B65 (12629) B39 (2487) Cw7 (6429)	Positive	DR7 (2635) DR8 (9567) DQ2 (15801)	Unacceptable	
792	138	99	Positive	B65 (13471) Cw7 (6909)	Positive	DR7 (3993) DR8 (10889) DQ2 (16617)	Unacceptable	
1426	138	100%	Positive	B65 (15455) B39 (4291) Cw7 (11489) Cw8 (1191)	Positive	DR7 (8855) DR8 (14053) DQ2 (17984) DQ4 (1372)	Unacceptable	
1461	138	14	Positive	B65 (9149) Cw7 (3614)	Positive	DR7 (3623) DR8 (8943) DQ2 (18167) DQ4 (1805) DP17 (986) DQA1*02 (20400) DQA1*04 (1922)	Unacceptable	
2400	138	100%	Positive	B65 (18778) Cw7 (12919)	Positive	DR7 (7028) DR8 (14194) DQ2 (24445) DQ4 (1486) DQA1*02 (7405) DQA1*04 (12295)	Unacceptable	
3224	138	98%	Positive	B65 (14837) Cw7 (8808)	Positive	DR7 (4080) DR8 (10899) DQ2 (26198)	Unacceptable	
3753	138	99.22%	Positive	B65 (17263) Cw7 (9386)	Positive	DR7 (2030) DR8 (10872) DQ2 (19715)	Unacceptable	
3966	138	100%	Positive	B65 (16546) Cw7 (8622)	Positive	DR7 (4611) DR8 (12608) DQ2 (24750)	Unacceptable	
8001	138	98	Positive	B65 (13574) Cw7 (8875)	Positive	DR7 (2669) DR8 (9573) DQ2 (24447)	Unacceptable	B*39:06, C*08:02 not included on LSAB panel; DPB1*131:01 not included on LSAB panel
8029	138	9	Positive	B65 (8445) Cw7 (6203)	Positive	DR7 (3050) DR8 (10218) DQ2 (17397) DQ4 (1733)	Unacceptable	
8050	138	98	Positive	B65 (13329) Cw7 (7961)	Positive	DR8 (10731) DQ2 (20795)	Unacceptable	
8058	138	59%	Positive	Cw4 (4) Cw6 (6) A24 (24) B60 (60) B61 (61) B48 (48) B78 (78) B13 (13) B47 (47) B44 (44) B51 (51) B52 (52) B53 (53) B82 (82) B75 (75) B7 (7) B54 (54) B55 (55) B67 (67) A26 (26) A34 (34) A32 (32) A23 (23) B64 (64) B65 (65) B63 (63) B77 (77) B57 (57) B58 (58) B18 (18) B37 (37) B42 (42) B46 (46) B59 (59) B71 (71) B73 (73) B8 (8) B81 (81) Cw1 (1) Cw10 (10) Cw2 (2) Cw9 (9) Cw5 (5) Cw7 (7) Cw8 (8) Cw14 (14) Cw12 (12) Cw16 (16) Cw17 (17) Cw15 (15) Cw18 (18)	Positive	DR8 (8) DR9 (9) DR12 (12) DR15 (15) DR51 (51) DQ2 (2) DQ5 (5) DQ6 (6)	Unacceptable	23%

Table 30. Individual Virtual crossmatch results for Serum #138 vs Donor# V3

Donor #V3 HLA A*02:01:01-A*30:01:01-B*14:02:01-B*39:06:02-C*07:02:01-C*08:02:01-DRB1*07:01:01-DRB1*08:01:01-DRB4*01:03:01-DQA1*02:01-DQA1*04:01-DQB1*02:01:01G-DQB1*04:02:01-DPA1*02:01-DPB1*10:01:01-DPB1*131:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
8080	138	99	Positive	B65 (14816) B39 (3123) Cw7 (9265)	Positive	DR7 (3842) DR8 (10288) DQ2 (20659)	Unacceptable	
8083	138	99.6	Positive	B65 (21590) Cw7 (13213)	Positive	DR7 (6654) DR8 (14236) DQ4 (1109)	Unacceptable	Also Class I antibodies
8103	138	61	Positive	B14 (6416) B64 (6009) B65 (6416) Cw7 (4142)	Positive	DR7 (3105) DR8 (13996) DR53 (628) DQ2 (15377) DQ4 (2286) DQA1*02 (19711) DQA1*04 (2286)	Unacceptable	
8110	138	99%	Positive	B65 (17500) Cw7 (13000)	Positive	DR7 (2200) DR8 (13000) DQ2 (25000) DQ4 (1600)	Unacceptable	
8111	138	98	Positive	B65 (26600) Cw7 (13300)	Positive	DR7 (3200) DR8 (12700) DQ2 (22800) DQ4 (1200)	Unacceptable	

Table 31. Individual Virtual crossmatch results for Serum #138 vs Donor# V4

Donor #V4 HLA A*29:02:01-A*33:03:01-B*44:03:01-C*07:06-C*16:01:01-DRB1*07:01:01-DRB1*15:01:01-DRB4*01:01:01-DRB5*01:01:01-DQA1*01:02:01-DQA1*02:01:01-DQB1*02:02-DQB1*06:02:01-DPA1*01:03:01-DPA1*02:01:01-DPB1*02:01:02-DPB1*03:01:01

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
54	138	98	Positive	Cw7 (6429)	Positive	DR7 (2635) DR15 (19858) DR51 (25943) DQ2 (15801) DQ6 (26124)	Unacceptable	
792	138	99	Positive	Cw7 (6909)	Positive	DR7 (3993) DR15 (21292) DR51 (26670) DQ2 (16617) DQ6 (27785)	Unacceptable	
1426	138	100%	Positive	Cw7 (7230)	Positive	DR7 (8855) DR15 (15607) DR51 (15297) DQ2 (17326) DQ6 (15469)	Unacceptable	
1461	138	14	Positive	Cw7 (3614)	Positive	DR7 (3623) DR15 (18329) DR51 (20866) DQ2 (18423) DQ6 (20641) DQA1*01 (20752)	Unacceptable	
2400	138	100%	Positive	Cw7 (12919)	Positive	DR7 (7028) DR15 (24270) DR51 (26142) DQ2 (21779) DQ6 (25581) DQA1*01 (25630) DQA1*02 (7405)	Unacceptable	
3224	138	98%	Borderline	Cw7 (8808)	Positive	DR7 (4080) DR15 (21001) DR51 (26188) DQ2 (26198) DQ6 (27243) DQA1*01 (27243)	Unacceptable	
3753	138	99.22%	Positive	Cw7 (9386)	Positive	DR7 (2030) DR15 (21820) DR51 (23508) DQ2 (19715) DQ6 (20391)	Unacceptable	
3966	138	100%	Positive	Cw7 (8622)	Positive	DR7 (4611) DR15 (23854) DR51 (29831) DQ2 (24750) DQ6 (29700) DQA1*01 (30081)	Unacceptable	C*07:06 not covered in SAB panel
8001	138	98	Negative	Cw16 (512)	Positive	DR7 (2669) DR15 (20109) DR51 (24392) DQ2 (17398) DQ6 (24483)	Unacceptable	C*07:06 not included on LSAB panel
8029	138	9	Positive	Cw7 (6203)	Positive	DR7 (3050) DR15 (18271) DR51 (19875) DQ2 (17397) DQ6 (20483)	Unacceptable	
8050	138	98	Negative	Cw7 (7961)	Positive	DR15 (23214) DR51 (30146) DQ2 (20795) DQ6 (28754)	Unacceptable	
8058	138	59%	Positive	B48 (48) B78 (78) B13 (13) B47 (47) B44 (44) B51 (51) B52 (52) B53 (53) B82 (82) B75 (75) B7 (7) B54 (54) B55 (55) A26 (26) A34 (34) A32 (32) A23 (23) A80 (80) B64 (64) B65 (65) B63 (63) B77 (77) B57 (57) B58 (58) B18 (18) B37 (37) B42 (42) B46 (46) B71 (71) B73 (73) B8 (8) B81 (81) Cw1 (1) Cw10 (10) Cw2 (2) Cw9 (9) Cw5 (5) Cw7 (7) Cw8 (8) Cw14 (14) Cw12 (12) Cw16 (16) Cw17 (17) Cw15 (15) Cw18 (18)+	Positive	DR8 (8) DR9 (9) DR12 (12) DR15 (15) DR51 (51) DQ2 (2) DQ5 (5) DQ6 (6)	Unacceptable	23%

Table 31. Individual Virtual crossmatch results for Serum #138 vs Donor# V4

Ctr	Patient	% CPRA	Virtual T Cell Prediction	Class IDSA(MFI)	Virtual B-cell prediction	Class II DSA(MFI)	Risk Assessment	Comments
8080	138	99	Positive	Cw7 (7713)	Positive	DR7 (3842) DR15 (21613) DR51 (26767) DQ2 (17838) DQ6 (28254)	Unacceptable	
8083	138	99.6	Negative	No class I DSA	Positive	DR7 (9982) DR15 (29430) DR51 (1504) DR53 (8585) DQ6 (1395)	Unacceptable	DSA to Class II
8103	138	61	Positive	Cw7 (4142)	Positive	DR7 (3105) DR15 (18248) DR51 (21252) DR52 (5946) DR53 (628) DQ2 (15377) DQ6 (21534) DQA1*01 (21549) DQA1*02 (19711)	Unacceptable	low MFI on HLA I antibodies
8110	138	99%	Positive	Cw7 (13000)	Positive	DR7 (2200) DR15 (28000) DR51 (34400) DQ2 (25000) DQ6 (34300)	Unacceptable	
8111	138	98	Positive	Cw7 (13300)	Positive	DR7 (3200) DR15 (23100) DR51 (29900) DQ2 (22800) DQ6 (29200)	Unacceptable	