

# REPORT OF THE 415<sup>th</sup> CELL EXCHANGE

## MARCH 11, 2020

B-cell Lines	571-572
Cells	1657-1660

### B-cell Line Exchange #286

The results for B-cell Line Exchange #286 are summarized in Tables 1 - 2 and individual laboratory results reported for each sample are listed in Tables 3 - 6. We are once again grateful to the generosity of **Welsh Blood Service, Pontyclun** for sharing the valuable reference cells examined in this study.

We would like to also acknowledge and thank the labs performing NGS for sharing their results and encourage other NGS labs to share their findings. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

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**Ter-571.** The consensus type for this cell from a Caucasian donor was DRB1\*09:01-DRB1\*11:04-DRB3\*02:02-DRB4\*01:03-DQA1\*03:02-DQA1\*05:05-DQB1\*03:01-DQB1\*03:03-DPA1\*01:03-DPA1\*02:01-DPB1\*04:02-DPB1\*13:01/A\*02:01-A\*26:01-B\*18:01-B\*44:22-C\*01:02-C\*07:01. One likely association present in this cell is A\*02:01-B\*18:01-DRB1\*11:04, observed commonly in Caucasians, with HF = 0.00425. The other association present is then likely A\*26:01-B\*44:22-DRB1\*09:01.

Previously examined in the Cell Exchange as Extract 338 in 2005, this cell would later become one of the Reference cells for B\*44:22, known as 42323. In this present retyping, B\*44:22 was reported by 100% of labs reporting by high resolution. Good agreement (>90%) was also achieved for all other loci by labs reporting by low and high resolution.

**Ter-572.** The consensus type for this cell from a Caucasian donor was DRB1\*04:01-DRB1\*13:02-DRB3\*03:01-DRB4\*01:03-DQA1\*01:02-DQA1\*03:03-DQB1\*03:01-DQB1\*06:09-DPA1\*01:03-DPA1\*02:01-DPB1\*04:02-DPB1\*14:01/A\*02:01-A\*03:01-B\*14:02-B\*44:14-C\*05:01-C\*08:02. One likely association present in this cell is A\*03:01-B\*14:02-DRB1\*13:02, observed in Caucasians, with HF = 0.00257. The other likely association present may then be A\*02:01-B\*44:14-DRB1\*04:01. The association of A\*02:01-B\*44:14 was observed in the B\*44:14 reference cell, HC43756 cell.

Ter-572 was also a reference cell for B\*44:14, known as IP. It was previously examined in the Cell Exchange as Extracts 572 (2011) and 273 (2004). In this present retyping, B\*44:14 was reported by 100% of labs reporting at high resolution. For all remaining loci, good agreement (>90%) was also achieved by labs reporting low and high resolution typing results.

**Table 1: Summary of the 286<sup>th</sup> B-cell Line Exchange**

**Ter-571**

Ter-571												
<b>DNA Typing - class II</b>	<b>28 labs High; 24 labs low-DRB1</b>	%(n)	<b>15 labs High; 17 labs Low-DRB3/4/5</b>	%(n)	<b>19 labs High; 22 labs Low-DQA1</b>	%(n)	<b>27 labs High; 22 labs Low-DQB1</b>	%(n)	<b>13 labs High; 11 labs Low-DPA1</b>	%(n)	<b>24 labs High; 13 labs Low-DPB1</b>	%(n)
	DRB1*09:01:02	25(7)	DRB3*02:02:01:04	7 (1)	DQA1*03:02:01:01	11(2)	DQB1*03:01:01	19(5)	DPA1*01:03:01	23(3)	DPB1*04:02:01	25(6)
	DRB1*09:01:02G	7 (2)	DRB3*02:02:01	13(2)	DQA1*03:02	84(16)	DQB1*03:01:01G	7 (2)	DPA1*01:03	77(10)	DPB1*04:02	75(18)
	DRB1*09:01P	4 (1)	DRB3*02:02	80(12)	DQA1*03:01	5 (1)	DQB1*03:01P	7 (2)	DPA1*01	100(11)	DPB1*04(DP402)	38(5)
	DRB1*09:01	64(18)	DRB3*02	82(14)	DQA1*03	100(22)	DQB1*03:01	67(18)			DPB1*04	62(8)
	DRB1*09	100(24)	DRB3*PRESENT	18(3)			DQB1*03(DQ7)	5 (1)				
							DQB1*03	95(21)				
<b>DNA Typing - class I</b>	<b>20 labs High; 20 labs low-A</b>	%(n)	<b>20 labs High; 20 labs low- B</b>	%(n)	<b>20 labs High; 20 labs low- C</b>	%(n)	<b>26 labs High; 22 labs Low-DQB1</b>	%(n)	<b>13 labs High; 11 labs Low-DPA1</b>	%(n)	<b>24 labs High; 13 labs Low-DPB1</b>	%(n)
	A*02:01:01:48	10(2)	B*18:01:01	25(5)	C*01:02:01:01	10(2)	DQB1*03:03:02	27(7)	DPA1*02:01:01:06	8 (1)	DPB1*13:01:01:01	4 (1)
	A*02:01:01	20(4)	B*18:01P	5 (1)	C*01:02:01	20(4)	DQB1*03:03	73(19)	DPA1*02:01:01	15(2)	DPB1*13:01:01	17(4)
	A*02:01P	5 (1)	B*18:01	70(14)	C*01:02	70(14)	DQB1*03(DQ9)	5 (1)	DPA1*02:01	77(10)	DPB1*13:01:01G	8 (2)
	A*02:01	65(13)	B*18	100(20)	C*01	100(20)	DQB1*03	95(21)	DPA1*02	100(11)	DPB1*13:01P	4 (1)
	A*02	100(20)									DPB1*13:01	67(16)
											DPB1*13	100(13)
<b>DNA Typing - class I</b>	<b>20 labs High; 20 labs low-A</b>	%(n)	<b>21 labs High; 20 labs low- B</b>	%(n)	<b>20 labs High; 20 labs low- C</b>	%(n)						
	A*26:01:01:01	10(2)	B*44:22	100(21)	C*07:01:01:16	5 (1)						
	A*26:01:01	20(4)	B*44	100(20)	C*07:01:01	25(5)						
	A*26:01P	5 (1)			C*07:01P	5 (1)						
	A*26:01	65(13)			C*07:01	65(13)						
	A*26	100(20)			C*07	100(20)						

**Table 2: Summary of the 286<sup>th</sup> B-cell Line Exchange**

Ter-572

**DNA Typing - class II**

<b>28 labs High; 24 labs low-DRB1</b>	%(n)
DRB1*04:01:01	28(8)
DRB1*04:01:01G	4 (1)
DRB1*04:01	68(19)
DRB1*04	100(24)
<b>28 labs High; 24 labs low-DRB1</b>	%(n)
DRB1*13:02:01	25(7)
DRB1*13:02:01G	4 (1)
DRB1*13:02	71(20)
DRB1*13	100(24)

<b>16 labs High; 16 labs Low-DRB3/4/5</b>	%(n)
DRB3*03:01:01	25(4)
DRB3*03:01:01G	6 (1)
DRB3*03:01	69(11)
DRB3*03	81(13)
DRB3*PRESENT	19(3)
<b>16 labs High; 16 labs Low-DRB3/4/5</b>	%(n)
DRB4*01:03:01	25(4)
DRB4*01:03	75(12)
DRB4*01	75(12)
DRB4*PRESENT	25(4)

<b>19 labs High; 22 labs Low-DQA1</b>	%(n)
DQA1*01:02:01	16(3)
DQA1*01:02	84(16)
DQA1*01	100(22)
<b>19 labs High; 22 labs Low-DQA1</b>	%(n)
DQA1*03:03:01:01	11(2)
DQA1*03:03:01	5 (1)
DQA1*03:03	79(15)
DQA1*03:01	5 (1)
DQA1*03	100(22)

<b>26 Labs High; 22 labs Low-DQB1</b>	%(n)
DQB1*03:01:01	19(5)
DQB1*03:01:01G	8 (2)
DQB1*03:01	73(19)
DQB1*03(DQ7)	5 (1)
DQB1*03	95(21)
<b>27 Labs High; 22 labs Low-DQB1</b>	%(n)
DQB1*06:09:01:01	7 (2)
DQB1*06:09:01	11(3)
DQB1*06:09:01G	4 (1)
DQB1*06:09	78(21)
DQB1*06	100(22)

<b>13 labs High; 11 labs Low-DPA1</b>	%(n)
DPA1*01:03:01	23(3)
DPA1*01:03	77(10)
DPA1*01	100(11)
<b>13 labs High; 11 labs Low-DPA1</b>	%(n)
DPA1*02:01:01:02	15(2)
DPA1*02:01:01	8 (1)
DPA1*02:01:01G	8 (1)
DPA1*02:01	69(9)
DPA1*02	100(11)

<b>24 labs High; 13 labs Low-DPB1</b>	%(n)
DPB1*04:02:01	21(5)
DPB1*04:02:01G	12(3)
DPB1*04:02P	4 (1)
DPB1*04:02	63(15)
DPB1*04(DP402)	46(6)
DPB1*04	54(7)
<b>24 labs High; 13 labs Low-DPB1</b>	%(n)
DPB1*14:01:01	25(6)
DPB1*14:01:01G	8 (2)
DPB1*14:01	67(16)
DPB1*14	100(13)

**DNA Typing - class I**

<b>20 labs High; 20 labs low- A</b>	%(n)
A*02:01:01:01	5 (1)
A*02:01:01	25(5)
A*02:01P	5 (1)
A*02:01	65(13)
A*02	100(20)
<b>20 labs High; 20 labs low- A</b>	%(n)
A*03:01:01:01	10(2)
A*03:01:01	20(4)
A*03:01P	5 (1)
A*03:01	65(13)
A*03	100(20)

<b>21 labs High; 20 labs low- B</b>	%(n)
B*14:02:01:01	10(2)
B*14:02:01	19(4)
B*14:02	71(15)
B*14(B65)	5 (1)
B*14	95(19)
<b>21 labs High; 20 labs low- B</b>	%(n)
B*44:14	100(21)
B*44	100(20)

<b>20 labs High; 20 labs low- C</b>	%(n)
C*05:01:01:02	5 (1)
C*05:01:01	25(5)
C*05:01	70(14)
C*05	100(20)
<b>20 labs High; 20 labs low- C</b>	%(n)
C*08:02:01:01	5 (1)
C*08:02:01	25(5)
C*08:02	70(14)
C*08	100(20)

**Table 3a: Individual laboratory results for B-cell #571 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*09	*11	3*02	4*01	*03	*05	*03	*03	*01	*02	*04	*13	SSP SSO	
725	*09	*11	3*PRESENT	4*PRESENT	*03	*05	*03						SSP SSO	
731	*09	*11			*03	*05	*03	*03	*01	*02	*04	*13	SSP SSO SBT	
747	*09	*11	3*PRESENT	4*PRESENT	*03	*05	*03	*03	*01	*02	*04	*13	RT-PCR	
771	*09	*11			*03	*05	*03	*03					SSP SSO NGS	
774	*09	*11	3*02	4*01	*03	*05	*03				*04	*13	SSP SSO	
792	*09	*11	3*02	4*01	*03	*05	*03	*03	*01	*02	*04	*13	SSO SBT	
793	*09	*11	3*02	4*PRESENT	*03	*05	*03	*03			*04(DP402)	*13	SSP	
794	*09	*11	3*02	4*01	*03	*05	*03		*01	*02	*04	*13	SSP SSO NGS	
2400	*09	*11	3*02	4*01	*03	*05	*03	*03			*04	*13	RT-PCR	
2847	*09	*11											SSO NGS	
3519	*09	*11			*03	*05	*03		*01	*02	*04(DP402)	*13	SSO	
3753			3*02	4*01	*03	*05			*01	*02			SSP NGS	
3966													RT-PCR	
4079	*09	*11	3*02	4*01	*03	*05	*03	*03	*01	*02	*04(DP402)	*13	SSO SBT	
4251	*09	*11	3*02	4*01	*03	*05	*03	*03	*01	*02	*04(DP402)	*13	SSP	
5130	*09	*11	3*02	4*01	*03	*05	*03	*03			*04	*13	SSO NGS	
5214	*09	*11	3*02	4*01	*03	*05	*03(DQ7)	*03(DQ9)	*01	*02	*04(DP402)	*13	SSO NGS	
5219	*09	*11			*03	*05	*03	*03					RT-PCR	
5451	*09	*11	3*02	4*01	*03	*05	*03	*03					SSO NGS	
5462	*09	*11	3*02	4*01	*03	*05	*03	*03	*01	*02	NT	NT	SSO SBT	
5488			3*02	4*01									SSO	
5642	*09	*11	3*PRESENT	4*PRESENT			*03	*03					SSO SBT NGS	
6649	*09	*11											SSP	
8029	*09	*11			*03	*05	*03	*03					SSO	
8043	*09	*11			*03	*05	*03	*03					SSO	
8068	*09	*11			*03	*05	*03	*03					SSP SSO	
													SSO	

**Table 3b: Individual laboratory results for B-cell #571 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*09:01	*11:04			*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	SSP SSO SBT NGS	
278	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	SSP SSO	
731	*09:01:02	*11:04:01					*03:01:01G	*03:03:02					SSP SSO SBT RT-PCR	
747	*09:01:02	*11:04:01	3*02:02:01	4*01:03:02	*03:02:01:01	*05:05:01	*03:01	*03:03:02	*01:03:01	*02:01:01	*04:02:01	*13:01:01	SSP SSO NGS	DPB1*107:01 DRB1*09:31 DQB1*03:297
762	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	NGS	
771	*09:01	*11:04					*03:01	*03:03					SSP SSO	
774	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01				*04:02	*13:01	SSP SSO	DRB1*09:31 DQB1*03:93 DQB1*03:49 DQB1*03:73 DQB1*03:92
792	*09:01	*11:04					*03:01	*03:03			*04:02	*13:01	SSO SBT	DPB1*107:01
793					*03:02	*05:05					*04:02	*13:01	SSP	DQA1*03:03 DQA1*05:09
794	*09:01:02	*11:04:01	3*02:02:01	4*01:03:02	*03:02	*05:05	*03:01:01	*03:03:02	NT	NT	*04:02:01	*13:01:01	SSP SSO NGS RT-PCR	DRB1*09:21 DRB1*09:31
2344	*09:01:02G	*11:04:01	NT	NT	NT	NT	*03:01:01	*03:03:02	NT	NT	*04:02:01	*13:01:01G	NGS	
2400	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03			*04:02	*13:01	SSO NGS	DRB1*09:31 DPB1*107:01 DQB1*03:297 DQB1*03:276N
3135	*09:01	*11:04	3*02:02	4*01:03	*03:01	*05:01P	*03:01P	*03:03	*01:03	*02:01	*04:02	*13:01		DQA1*03:02 DQA1*03:03
3224	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	NGS	
3511	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01		
3519	*09:01P	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01P	*03:03	*01:03	*02:01	*04:02	*13:01P	SSP NGS RT-PCR	DRB1*09:31 DPB1*107:01

**Table 3b: Individual laboratory results for B-cell #571 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DRB1*09:21 DQB1*03:10 DQB1*03:12 DQB1*03:69 DQB1*03:74 DQB1*03:113 DQB1*03:256 DQB1*03:276N DQB1*03:292 DQB1*03:293 DQB1*03:294 DQB1*03:297 DPB1*107:01 DPB1*463:01 DQB1*03:180 DQB1*03:195 DQB1*03:326 DQB1*03:342 DQB1*03:350 DQB1*03:354N DQB1*03:382 DQB1*03:389 DRB1*09:31 DPB1*996:01 DQB1*03:398
3753	*09:01	*11:04					*03:01	*03:03			*04:02	*13:01	SSO SBT	
3966	*09:01	*11:04	3*02:02	4*01:03			*03:01	*03:03					SSP	
4251	*09:01:02G	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01:01G	*03:03	*01:03	*02:01	*04:02	*13:01:01G	SSO NGS	
4337	*09:01	*11:04					*03:01	*03:03			*04:02	*13:01	SSP SBT NGS	
5130	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03			*04:02	*13:01	SSO NGS	DRB1*09:31 DPB1*107:01
5133	*09:01:02	*11:04:01	3*02:02:01:04	4*01:03:02	*03:02:01:01	*05:05:01:01	*03:01:01	*03:03:02	*01:03:01	*02:01:01:06	*04:02:01	*13:01:01:01	NGS	DPB1*107:01
5219	*09:01:02	*11:04:01					*03:01:01	*03:03:02			*04:02:01	*13:01:01	SSO NGS	
5451	*09:01:02	*11:04:01											SSO SBT	

**Table 3b: Individual laboratory results for B-cell #571 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DPB1*701:01 DPB1*724:01N DPB1*726:01 DPB1*730:01 DPB1*731:01 DPB1*734:01 DPB1*735:01 DPB1*759:01 DPB1*776:01 DPB1*936:01Q DPB1*958:01 DPB1*981:01 DPB1*985:01N DPB1*995:01N DPB1*1005:01 DPB1*1020:01 DPB1*1025:01 DPB1*1035:01+
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*04:02	*13:01	SSO	DRB1*09:31 DQB1*03:276N DPB1*107:01
5488	*09:01:02	*11:04:01			*03:02	*05:05:01	*03:01:01	*03:03:02	*01:03:01	*02:01:01	*04:02:01	*13:01:01	SSO SBT NGS	
5642	*09:01	*11:04					*03:01	*03:03					SSP	
8021	*09:01	*11:04	3*02:02	4*01:03	*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	SSO NGS	
8043	*09:01	*11:04			*03:02	*05:05	*03:01	*03:03					SSP SSO	
8086	*09:01	*11:04			*03:02	*05:05	*03:01	*03:03	*01:03	*02:01	*04:02	*13:01	SSO SBT	

**Table 4: Individual laboratory results for B-cell #571 - Class I**

Low resolution							High resolution						METHOD	Other Alleles
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSP SSO SBT NGS	
278	*02	*26	*18	*44	*01	*07	*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSP SSO	
725	*02	*26	*18	*44	*01	*07							SSP SSO	
731	*02	*26	*18	*44	*01	*07							SSP SSO SBT RT-PCR	
747	*02	*26	*18	*44	*01	*07	*02:01:01:48	*26:01:01:01	*18:01	*44:22	*01:02:01:01	*07:01:01	SSP SSO NGS	B*18:119 B*18:81
774	*02	*26	*18	*44	*01	*07				*44:22			SSP SSO	B*18:53 DQB1*03:297
792	*02	*26	*18	*44	*01	*07	*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO SBT	A*02:01:01:02L
793	*02	*26	*18	*44	*01	*07							SSP	
794	*02	*26	*18	*44	*01	*07	*02:01:01	*26:01:01	*18:01:01	*44:22	*01:02:01	*07:01:01	SSP SSO NGS RT-PCR	
2344							*02:01:01	*26:01:01	*18:01:01	*44:22	*01:02:01	*07:01:01	NGS	
2400	*02	*26	*18	*44	*01	*07	*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO NGS	
2847	*02	*26	*18	*44	*01	*07							SSO	
3135							*02:01P	*26:01P	*18:01P	*44:22	*01:02	*07:01P		
3224							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	NGS	
3511							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01		
3519	*02	*26	*18	*44	*01	*07	*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSP NGS RT-PCR	
3753							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO SBT	A*26:166Q B*18:144 B*18:145 B*44:105 B*18:113 B*18:177 B*18:181 B*18:186
3966	*02	*26	*18	*44	*01	*07							SSP	
4079	*02	*26	*18	*44	*01	*07							SSO	
4251	*02	*26	*18	*44	*01	*07	*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO NGS	
4337							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSP SBT NGS	
5130	*02	*26	*18	*44	*01	*07							SSO NGS	
5130							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO NGS	
5133							*02:01:01:48	*26:01:01:01	*18:01:01	*44:22	*01:02:01:01	*07:01:01:16	NGS	
5214	*02	*26	*18	*44	*01	*07							RT-PCR	
5219	*02	*26	*18	*44	*01	*07	*02:01:01	*26:01:01	*18:01:01	*44:22	*01:02:01	*07:01:01	SSO NGS	
5462	*02	*26	*18	*44	*01	*07	NT	NT	NT	NT	NT	NT	SSO	
5488							*02:01:01	*26:01:01	*18:01:01	*44:22	*01:02:01	*07:01:01	SSO SBT NGS	
8021							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO NGS	
8029	*02	*26	*18	*44	*01	*07							SSO	
8068	*02	*26	*18	*44	*01	*07							SSO	
8086							*02:01	*26:01	*18:01	*44:22	*01:02	*07:01	SSO SBT	



**Table 5a: Individual laboratory results for B-cell #572 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
278	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	*04	*14	SSP SSO	
725	*04	*13	3*PRESENT	4*PRESENT	*01	*03	*03	*06					SSP SSO	
731	*04	*13			*01	*03	*03	*06	*01	*02	*04	*14	SSP SSO SBT	
747	*04	*13	3*PRESENT	4*PRESENT	*01	*03	*03	*06	*01	*02	*04	*14	RT-PCR	
771	*04	*13			*01	*03	*03	*06					SSP SSO NGS	
774	*04	*13	3*03	4*01	*01	*03	*03	*06			*04(DP402)	*14	SSP SSO	
792	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	*04	*14	SSO SBT	
793	*04	*13	3*03	4*PRESENT	*01	*03	*03	*06			*04(DP402)	*14	SSP	
794	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	*04	*14	SSP SSO NGS	
2400	*04	*13	3*03	4*01	*01	*03	*03	*06			*04	*14	RT-PCR	
2847	*04	*13											SSO	
3519	*04	*13			*01	*03	*03	*06	*01	*02	*04(DP402)	*14	SSP NGS	
3753			3*03	4*01	*01	*03			*01	*02			RT-PCR	
3966													SSO SBT	
4079	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	*04(DP402)	*14	SSP	
4251	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	*04(DP402)	*14	SSO	
5130	*04	*13	3*03	4*01	*01	*03	*03	*06			*04	*14	SSO NGS	
5214	*04	*13	3*03	4*01	*01	*03	*03(DQ7)	*06	*01	*02	*04(DP402)	*14	SSO NGS	
5219	*04	*13			*01	*03	*03	*06					RT-PCR	
5451	*04	*13	3*03	4*01	*01	*03	*03	*06					SSO NGS	
5462	*04	*13	3*03	4*01	*01	*03	*03	*06	*01	*02	NT	NT	SSO SBT	
5488													SSO	
5642	*04	*13	3*PRESENT	4*PRESENT			*03	*06					SSO SBT NGS	
6649	*04	*13											SSP	
8029	*04	*13			*01	*03	*03	*06					SSO	
8043	*04	*13			*01	*03	*03	*06					SSO	
8068	*04	*13			*01	*03	*03	*06					SSP SSO	
													SSO	

**Table 5b: Individual laboratory results for B-cell #572 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*04:01	*13:02			*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01	SSP SSO SBT NGS	
278	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01	SSP SSO	
731	*04:01:01	*13:02:01G					*03:01:01	*06:09:01G					SSP SSO SBT RT-PCR	DQB1*06:88 DQB1*03:22 DQB1*03:276N DPB1*463:01
747	*04:01:01	*13:02:01	3*03:01:01	4*01:03:01	*01:02:01	*03:03:01:01		*06:09:01:01	*01:03:01	*02:01:01:02	*04:02:01	*14:01:01	SSP SSO NGS	DPB1*854:01
762	*04:01	*13:02	3*03:01	4*01:03		*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01	NGS	DPB1*463:01
771	*04:01	*13:02					*03:01	*06:09					SSP SSO	
														DRB1*04:171 DQB1*03:49 DQB1*03:73 DQB1*03:92 DRB1*04:175 DRB1*04:192 DQB1*03:93 DQB1*06:281 DQB1*06:282
774	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09			*04:02	*14:01	SSP SSO	
792	*04:01	*13:02					*03:01	*06:09			*04:02	*14:01	SSO SBT	
793					*01:02	*03:03					*04:02	*14:01	SSP	
794	*04:01:01	*13:02:01	3*03:01:01	4*01:03:01	*01:02	*03:03	*03:01:01	*06:09:01	NT	NT	*04:02:01	*14:01:01	SSP SSO NGS RT-PCR	
2344	*04:01:01	*13:02:01	NT	NT	NT	NT	*03:01:01	*06:09:01	NT	NT	*04:02:01G	*14:01:01	NGS	DPB1*854:01 DPB1*463:01 DPB1*854:01 DQB1*03:276N DQB1*03:297
2400	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09			*04:02	*14:01	SSO NGS	DQA1*03:02 DQA1*03:03 DPB1*854:01 DPB1*463:01
3135	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:01	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01		
3224	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02:01G	*14:01:01G	NGS	
3511	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01		
3519	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02P	*14:01	SSP NGS RT- PCR	DPB1*854:01 DPB1*463:01

**Table 5b: Individual laboratory results for B-cell #572 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DRB1*04:35 DRB1*04:38 DRB1*04:113 DRB1*04:132 DRB1*13:29 DRB1*13:36 DRB1*13:97 DQB1*03:256 DQB1*03:276N DQB1*03:292 DQB1*03:293 DQB1*03:294 DQB1*06:281 DQB1*03:22 DRB1*13:196 DPB1*854:01 DQB1*03:326 DQB1*03:342 DQB1*03:350 DQB1*03:389 DQB1*03:297 DQB1*06:282 DQB1*06:88 DPB1*463:01 DRB1*04:274
3753	*04:01	*13:02					*03:01	*06:09			*04:02	*14:01	SSO SBT	
3966	*04:01	*13:02	3*03:01	4*01:03			*03:01	*06:09					SSP	
4251	*04:01:01G	*13:02	3*03:01:01G	4*01:03	*01:02	*03:03	*03:01:01G	*06:09	*01:03	*02:01:01G	*04:02:01G	*14:01:01G	SSO NGS	
4337	*04:01	*13:02					*03:01	*06:09			*04:02	*14:01	SSP SBT NGS	
5130	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09			*04:02	*14:01	SSO NGS	DPB1*463:01 DPB1*854:01
5133	*04:01:01	*13:02:01	3*03:01:01	4*01:03:01	*01:02:01	*03:03:01:01	*03:01:01	*06:09:01:01	*01:03:01	*02:01:01:02	*04:02:01	*14:01:01	NGS	
5219	*04:01:01	*13:02:01					*03:01:01	*06:09:01			*04:02:01	*14:01:01	SSO NGS	
5451	*04:01:01	*13:02:01											SSO SBT	

**Table 5b: Individual laboratory results for B-cell #572 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DPB1*463:01 DPB1*701:01 DPB1*724:01N DPB1*726:01 DPB1*730:01 DPB1*731:01 DPB1*734:01 DPB1*735:01 DPB1*759:01 DPB1*776:01 DPB1*777:01N DPB1*809:01 DPB1*823:01 DPB1*858:01 DPB1*881:01 DPB1*885:01 DPB1*887:01 DPB1*925:01N DPB1*927:01 DPB1*933:01 DPB1*936:01Q+
5462	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*04:02	*14:01	SSO	DQB1*03:256 DQB1*03:01:02 DQB1*06:281 DPB1*463:01:01 DPB1*854:01 DQB1*06:282 DQB1*06:88
5488	*04:01:01	*13:02:01	3*03:01:01	4*01:03:01	*01:02:01	*03:03:01	*03:01:01G	*06:09	*01:03:01	*02:01:01	*04:02:01	*14:01:01	SSO SBT NGS	
5642	*04:01	*13:02					*03:01	*06:09					SSP	
8021	*04:01	*13:02	3*03:01	4*01:03	*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01	SSO NGS	
8043	*04:01	*13:02			*01:02	*03:03	*03:01	*06:09					SSP SSO	
8086	*04:01	*13:02			*01:02	*03:03	*03:01	*06:09	*01:03	*02:01	*04:02	*14:01	SSO SBT	

**Table 6: Individual laboratory results for B-cell #572 - Class I**

Center	Low resolution						High resolution						METHOD	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
230							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSP SSO SBT NGS	
278	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSP SSO	
725	*02	*03	*14	*44	*05	*08							SSP SSO	
731	*02	*03	*14	*44	*05	*08							SSP SSO SBT RT-PCR	
747	*02	*03	*14	*44	*05	*08	*02:01:01:01	*03:01:01	*14:02:01:01	*44:14	*05:01:01	*08:02:01	SSP SSO NGS	
774	*02	*03	*14	*44	*05	*08			*14:02	*44:14			SSP SSO	B*14:39
792	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO SBT	A*02:01:01:02L A*03:01:01:02N
793	*02	*03	*14	*44	*05	*08							SSP	
794	*02	*03	*14	*44	*05	*08	*02:01:01	*03:01:01	*14:02:01	*44:14	*05:01:01	*08:02:01	SSP SSO NGS RT-PCR	
2344							*02:01:01	*03:01:01	*14:02:01	*44:14	*05:01:01	*08:02:01	NGS	
2400	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO NGS	
2847	*02	*03	*14	*44	*05	*08							SSO	
3135							*02:01P	*03:01P	*14:02	*44:14	*05:01	*08:02		
3224							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	NGS	
3511							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02		
3519	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSP NGS RT-PCR	
3753							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO SBT	A*03:01:01:02N A*03:293 A*03:301 B*14:64 B*14:67 A*03:313 A*03:363
3966	*02	*03	*14	*44	*05	*08							SSP	
4079	*02	*03	*14	*44	*05	*08							SSO	
4251	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO NGS	
4337							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSP SBT NGS	
5130	*02	*03	*14	*44	*05	*08	*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO NGS	
5133							*02:01:01	*03:01:01	*14:02:01:01	*44:14	*05:01:01:02	*08:02:01:01	NGS	
5214	*02	*03	*14(B65)	*44	*05	*08							RT-PCR	
5219	*02	*03	*14	*44	*05	*08	*02:01:01	*03:01:01	*14:02:01	*44:14	*05:01:01	*08:02:01	SSO NGS	
5451													SSO SBT	
5462	*02	*03	*14	*44	*05	*08	NT	NT	NT	NT	NT	NT	SSO	
5488							*02:01:01	*03:01:01	*14:02:01	*44:14	*05:01:01	*08:02:01	SSO SBT NGS	
8021							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO NGS	
8029	*02	*03	*14	*44	*05	*08							SSO	
8068	*02	*03	*14	*44	*05	*08							SSO	
8086							*02:01	*03:01	*14:02	*44:14	*05:01	*08:02	SSO SBT	

## CELL EXCHANGE #415

The results for Cell Exchange #415 are summarized in Table 7 - 11. Molecular typing results for individual laboratories are listed in Tables 12 -19 for each sample and individual serological results for each sample are listed in Table 20. Eleven labs submitted low and/or high resolution class II results for

this study. We would like to thank each of them for sharing their findings and encourage other labs to do so as well. Once the criteria for grading is met (minimum 10 labs reporting for each resolution type), we will begin to grade individual class II results.

**Cell 1657.** The reported class I type for this sample from a Hispanic donor was A\*25:01-A\*68:01-B\*40:02-B\*44:03-C\*03:04-C\*16:01. Each allele was assigned by  $\geq 90\%$  of labs reporting by high resolution, with 3 labs assigning A\*25:01:01:01, A\*68:01:02:01, B\*40:02:01, B\*44:03:01, C\*03:04:01, and C\*16:01:01. A25 (100%), A28(A68) (83%), B40(B61) (83%) and B44 (100%) were reported by serology.

The class II type was reported as DRB1\*04:11-DRB1\*15:01-DRB4\*01:03-DRB5\*01:01-DQA1\*01:02-DQA1\*03:01-DQB1\*03:02-DQB1\*06:02-DPA1\*01:03-DPB1\*04:02. Likely association present in this cell were A\*25:01-B\*44:03-DRB1\*15:01 and A\*68:01-B\*40:02-DRB1\*04:11, with respective HF = 0.00050 and 0.00039, in Hispanics.

**Cell 1658.** The reported class I type for this sample from a Hispanic donor was A\*26:01-A\*30:01-B\*13:02-B\*38:01-C\*06:02-C\*12:03. Each allele was assigned by  $\geq 90\%$  of labs reporting by high resolution, with 3 labs reporting A\*26:01:01:01, A\*30:01:01:01, B\*13:02:01:01, B\*38:01:01:01, C\*06:02:01:01, and C\*12:03:01. A26 (100%), A30 (85%), B13 (100%), and B38 (100%) were the assigned serological types.

The class II type was reported as DRB1\*07:01-DRB4\*01:01-DRB4\*01:03-DQA1\*02:01-DQB1\*02:02-DPA1\*02:01-DPB1\*11:01-DPB1\*17:01. One likely association present in this cell was A\*30:01-B\*13:02-DRB1\*07:01, observed commonly in Hispanics, with HF = 0.00428. The other likely association present was A\*26:01-B\*38:01-DRB1\*07:01, with respective HF = 0.000022, in Caucasians.

**Cell 1659.** The reported class I type for this cell from a donor of mixed heritage was A\*66:01-A\*68:02-B\*14:02-B\*53:01-C\*06:02-C\*08:02. Each were assigned by  $\geq 90\%$  of labs reporting by high resolution. This cell was previous examined as Cell 1551 (2015). In this present retyping, A\*66:01:01, B\*14:02:01, B\*53:01:01, and C\*08:02:01 were each reported by 3 labs. A10 (100%), A28(A68) (100%), B14(B65) (100%), and B53 (75%) were reported by serology.

The class II type was reported as DRB1\*13:02-DRB1\*13:03-DRB3\*01:01-DRB3\*03:01-DQA1\*01:02-DQA1\*05:05-DQB1\*03:01-DQB1\*06:04-DPA1\*01:03-DPA1\*02:01-DPB1\*04:01-DPB1\*17:01:01G/\*131:01. One likely association in this cell was A\*66:01-B\*53:01-C\*06:02, observed exclusively in African Americans, with HF = 0.00035. The other likely association present was A\*68:02-B\*14:02-C\*08:02, observed in Hispanics, with HF = 0.00538.

**Cell 1660.** The reported class I type for this cell from a Filipino donor was A\*23:01-A\*34:01-B\*51:01-B\*57:02-C\*04:01-C\*18. Good agreement ( $\geq 90\%$ ) was achieved for each allele except C\*18, in which 12 labs reported C\*18:02, 1 lab reported C\*18:01:01G, and 1 lab reported C\*18:01. A23 (100%), A34 (80%), B51 (80%), and B57 (80%) were the assigned serological types.

The class II type was reported as DRB1\*04:05-DRB4\*01:03-DQA1\*03:03-DQB1\*03:02-DQB1\*04:01-DPA1\*02:01-DPA1\*02:02-DPB1\*01:01. One likely association present in this cell was A\*34:01-B\*51:01-C\*04:01, with respective HF = 0.00114, in Asians. The other likely association present was A\*23:01-B\*57:02-C\*18, observed in cell 1019 (same as cell 977), from a Black donor.

***NEXT MAILING DATE: June 24, 2020***

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**Table 7: Summary of the 415<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1657**

DNA Typing - class I		<b>13 labs High; 19 labs low- A</b>		<b>14 labs High; 19 labs low- B</b>		<b>13 labs High; 18 labs low- C</b>							
			%(n)		%(n)		%(n)						
	A*25:01:01:01	23(3)		B*40:02:01:01	7 (1)	C*03:04:01:02	8 (1)						
	A*25:01:01G	15(2)		B*40:02:01	14(2)	C*03:04:01	15(2)						
	A*25:01	62(8)		B*40:02:01G	7 (1)	C*03:04:01G	8 (1)						
	A*25	100(19)		B*40:02	71(10)	C*03:04	69(9)						
				B*40(B61)	5 (1)	C*03(Cw10)	6 (1)						
				B*40	95(18)	C*03	94(17)						
DNA Typing - class I		<b>13 labs High; 19 labs low-A</b>		<b>14 labs High; 19 labs low- B</b>		<b>14 labs High; 18 labs low- C</b>							
			%(n)		%(n)		%(n)						
	A*68:01:02:01	23(3)		B*44:03:01:01	7 (1)	C*16:01:01:01	14(2)						
	A*68:01:02G	8 (1)		B*44:03:01	14(2)	C*16:01:01	7 (1)						
	A*68:01P	8 (1)		B*44:03:01G	7 (1)	C*16:01:01G	7 (1)						
	A*68:01	61(8)		B*44:03	71(10)	C*16:01	71(10)						
	A*68	100(19)		B*44	100(19)	C*16	94(17)						
						C*14	6 (1)						
DNA Typing - class II		<b>7 labs High; 9 labs low-DRB1</b>		<b>5 labs High; 6 labs low-DRB3/4/5</b>		<b>5 labs High; 7 labs Low-DQA1</b>		<b>6 labs High; 8 labs Low-DQB1</b>		<b>4 labs High; 5 labs Low-DPA1</b>		<b>5 labs High; 5 labs Low-DPB1</b>	
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*04:11:01	29(2)		DRB4*01:03:01	20(1)	DQA1*01:02:01	20(1)	DQB1*03:02:01:01	17(1)	DPA1*01:03:01	25(1)	DPB1*04:02:01	40(2)
	DRB1*04:11	71(5)		DRB4*01:03	80(4)	DQA1*01:02	80(4)	DQB1*03:02:01	17(1)	DPA1*01:03	75(3)	DPB1*04:02	60(3)
	DRB1*04	100(9)		DRB4*01	83(5)	DQA1*01	100(7)	DQB1*03:02	66(4)	DPA1*01	100(5)	DPB1*04(DP402)	60(3)
				DRB4*PRESENT	17(1)			DQB1*03	100(8)			DPB1*04	40(2)
DNA Typing - class II		<b>6 labs High; 9 labs low-DRB1</b>		<b>5 labs High; 6 labs low-DRB3/4/5</b>		<b>5 labs High; 7 labs Low-DQA1</b>		<b>5 labs High; 8 labs Low-DQB1</b>					
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*15:01:01:03	17(1)		DRB5*01:01:01	20(1)	DQA1*03:01:01	20(1)	DQB1*06:02:01:01	20(5)				
	DRB1*15:01:01	17(1)		DRB5*01:01	80(4)	DQA1*03:01	80(4)	DQB1*06:02:01	20(1)				
	DRB1*15:01	66(4)		DRB5*01	83(5)	DQA1*03	100(7)	DQB1*06:02	60(3)				
	DRB1*15	100(9)		DRB5*PRESENT	17(1)			DQB1*06	100(8)				

**Table 8: Summary of the 415<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1658**

DNA Typing - class I	<u>15 labs High; 18 labs low- A</u>		<u>16 labs High; 18 labs low- B</u>		<u>15 labs High; 17 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*26:01:01:01	20(3)	B*13:02:01:01	19(3)	C*06:02:01:01	20(3)
	A*26:01:01G	13(2)	B*13:02:01	6 (1)	C*06:02:01G	7 (1)
	A*26:01	67(10)	B*13:02:01G	6 (1)	C*06:02	73(11)
	A*26	100(18)	B*13:02P	6 (1)	C*06	100(17)
			B*13:02	63(10)		
			B*13	100(18)		
DNA Typing - class I	<u>16 labs High; 18 labs low- A</u>		<u>15 labs High; 18 labs low- B</u>		<u>16 labs High; 17 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*30:01:01:01	19(3)	B*38:01:01:01	20(3)	C*12:03:01:01	13(2)
	A*30:01:01	6 (1)	B*38:01:01	7 (1)	C*12:03:01	6 (1)
	A*30:01:01G	6 (1)	B*38:01:01G	7 (1)	C*12:03:01G	6 (1)
	A*30:01	69(11)	B*38:01	66(10)	C*12:03	75(12)
	A*30	100(18)	B*38	100(18)	C*12	100(17)

DNA Typing - class II	<u>8 labs High; 8 labs low-DRB1</u>		<u>6 labs High; 6 labs low-DRB3/4/5</u>		<u>6 labs High; 7 labs Low-DQA1</u>		<u>8 labs High; 7 labs Low-DQB1</u>		<u>5 labs High; 5 labs Low-DPA1</u>		<u>8 labs High; 4 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*07:01:01:01	12(1)	DRB4*01:01:01:01	17(1)	DQA1*02:01:01	17(1)	DQB1*02:02:01	25(2)	DPA1*02:01:01:03	20(1)	DPB1*11:01:01	25(2)
	DRB1*07:01:01	12(1)	DRB4*01:01	83(5)	DQA1*02:01	83(5)	DQB1*02:02	75(6)	DPA1*02:01	80(4)	DPB1*11:01	75(6)
	DRB1*07:01	75(6)	DRB4*01	83(5)	DQA1*02	100(7)	DQB1*02	100(7)	DPA1*02	100(5)	DPB1*11	100(4)
	DRB1*07	100(8)	DRB4*PRESENT	17(1)								
DNA Typing - class II	<u>6 labs High; 6 labs low-DRB3/4/5</u>		<u>6 labs High; 6 labs low-DRB3/4/5</u>		<u>8 labs High; 4 labs Low-DPB1</u>							
		%(n)		%(n)		%(n)						
	DRB4*01:03:01	17(1)	DRB4*01:03:01	17(1)	DPB1*17:01:01	25(2)						
	DRB4*01:03	83(5)	DRB4*01:03	83(5)	DPB1*17:01	75(6)						
	DRB4*01	83(5)	DRB4*01	83(5)	DPB1*17	100(4)						
	DRB4*PRESENT	17(1)	DRB4*PRESENT	17(1)								



**Table 9: Summary of the 415<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1659**

DNA Typing - class I	<u>12 labs High; 18 labs low- A</u>	%(n)	<u>14 labs High; 18 labs low- B</u>	%(n)	<u>12 labs High; 17 labs low- C</u>	%(n)
	A*66:01:01:01	17(2)		B*14:02:01:01	14(2)	C*06:02:01:01
A*66:01:01	8 (1)		B*14:02:01	7 (1)	C*06:02:01G	16(2)
A*66:01	75(9)		B*14:02:01G	7 (1)	C*06:02	67(8)
A*66	100(18)		B*14:02	71(10)	C*06	100(17)
			B*14(B65)	6 (1)		
			B*14	94(17)		
<u>13 labs High; 18 labs low- A</u>	%(n)		<u>14 labs High; 18 labs low- B</u>	%(n)	<u>12 labs High; 17 labs low- C</u>	%(n)
A*68:02:01:01	15(2)		B*53:01:01:01	14(2)	C*08:02:01	25(3)
A*68:02:01G	15(2)		B*53:01:01	7 (1)	C*08:02:01G	8 (1)
A*68:02	69(9)		B*53:01:01G	7 (1)	C*08:02	67(8)
A*68	100(18)		B*53:01P	7 (1)	C*08	100(17)
			B*53:01	64(9)		
			B*53	100(18)		

DNA Typing - class II	<u>6 labs High; 8 labs low-DRB1</u>	%(n)	<u>4 labs High; 5 labs low-DRB3/4/5</u>	%(n)	<u>4 labs High; 6 labs Low-DQA1</u>	%(n)	<u>5 labs High; 7 labs Low-DQB1</u>	%(n)	<u>3 labs High; 4 labs Low-DPA1</u>	%(n)	<u>4 labs High; 3 labs Low-DPB1</u>	%(n)
	DRB1*13:02:01	17(1)		DRB3*01:01P	25(1)	DQA1*01:02	100(4)	DQB1*03:01:01	20(1)	DPA1*01:03	100(3)	DPB1*04:01:01
DRB1*13:02	83(5)		DRB3*01:01	75(3)	DQA1*01	100(6)	DQB1*03:01	80(4)	DPA1*01	100(4)	DPB1*04:01	75(3)
DRB1*13	100(8)		DRB3*01	100(5)			DQB1*03	100(7)			DPB1*04(DP401)	67(2)
											DPB1*04	33(1)
<u>6 labs High-DRB1</u>	%(n)		<u>4 labs High; 5 labs low-DRB3/4/5</u>	%(n)	<u>4 labs High; 6 labs Low-DQA1</u>	%(n)	<u>5 labs High; 7 labs Low-DQB1</u>	%(n)	<u>3 labs High; 4 labs Low-DPA1</u>	%(n)	<u>5 labs High; 3 labs Low-DPB1</u>	%(n)
DRB1*13:03:01	17(1)		DRB3*03:01	100(4)	DQA1*05:05	100(4)	DQB1*06:04:01	20(1)	DPA1*02:01	100(3)	DPB1*17:01:01G	20(1)
DRB1*13:03	83(5)		DRB3*03	100(5)	DQA1*05	100(6)	DQB1*06:04	80(4)	DPA1*02	100(4)	DPB1*17:01P	20(1)
							DQB1*06	100(7)			DPB1*131:01	60(3)
											DPB1*17	67(2)
											DPB1*131	33(1)

**Table 10: Summary of the 415<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1660**

DNA Typing - class I	<u>14 labs High; 17 labs low- A</u>		<u>15 labs High; 17 labs low- B</u>		<u>14 labs High; 16 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*23:01:01:01	14(2)	B*51:01:02:01	13(2)	C*04:01:01	14(2)
	A*23:01:01G	14(2)	B*51:01:02	13(2)	C*04:01:01G	7 (1)
	A*23:01	71(10)	B*51:01	73(11)	C*04:01P	7 (1)
	A*23	100(17)	B*51	100(17)	C*04:01	71(10)
					C*04	100(16)
<u>14 labs High; 17 labs low- A</u>		<u>16 labs High; 17 labs low- B</u>		<u>14 labs High; 16 labs low- C</u>		
	%(n)		%(n)		%(n)	
A*34:01:01:01	14(2)	B*57:02:01	25(4)	C*18:02:01:01	14(2)	
A*34:01:01	14(2)	B*57:02	75(12)	C*18:01:01G	7 (1)	
A*34:01:01G	7 (1)	B*57	100(17)	C*18:02	71(10)	
A*34:01	64(9)			C*18:01	7 (1)	
A*34	94(16)			C*18	100(16)	
A*24	6 (1)					

DNA Typing - class II	<u>7 labs High; 7 labs low-DRB1</u>		<u>5 labs High; 5 labs low-DRB3/4/5</u>		<u>5 labs High; 7 labs Low-DQA1</u>		<u>6 labs High; 6 labs Low-DQB1</u>		<u>3 labs High; 4 labs Low-DPA1</u>		<u>7 labs High; 3 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*04:05:01	14(1)	DRB4*01:03	100(5)	DQA1*03:03	80(4)	DQB1*03:02:01	17(1)	DPA1*02:01	100(3)	DPB1*01:01:01	14(1)
	DRB1*04:05	86(6)	DRB4*01	100(5)	DQA1*03:02	20(1)	DQB1*03:02	83(5)	DPA1*02	100(4)	DPB1*01:01	86(6)
	DRB1*04	100(7)			DQA1*03	100(7)	DQB1*03	100(6)			DPB1*01	100(3)
<u>7 labs High; 6 labs Low-DQB1</u>		<u>3 labs High; 4 labs Low-DPA1</u>										
	%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DQB1*04:01:01	17(1)	DPA1*02:02	100(3)									
DQB1*04:01	83(6)	DPA1*02	100(4)									
DQB1*04	100(6)											

**Table 11. Summary of the 415<sup>th</sup> Cell Exchange (Cell #1657- 1660)**

**Serological typing**

(Hispanic) <b>Cell 1657</b> (6 Samples Typed)	
A25	100.0%
	[100.0%]
A68	66.7%
A28	16.7%
	[83.3%]
B61	33.3%
B40	50.0%
	[83.3%]
B44	100.0%
	[100.0%]
Cw3	33.3%
	[33.3%]
Bw4	100.0%
Bw6	100.0%
Others Found	
B48	16.7%
A26	16.7%
A31	16.7%

(Hispanic) <b>Cell 1658</b> (7 Samples Typed)	
A26	100.0%
	[100.0%]
A30	85.7%
	[85.7%]
B13	100.0%
B38	100.0%
	[100.0%]
Cw6	28.6%
	[28.6%]
Bw4	100.0%
Others Found	
A10	14.3%
A31	14.3%
Bw6	14.3%

(Mixed) <b>Cell 1659</b> (4 Samples Typed)	
A66	25.0%
A26	25.0%
A10	50.0%
	[100.0%]
A68	50.0%
A28	50.0%
	[100.0%]
B65	50.0%
B14	50.0%
	[100.0%]
B53	75.0%
Cw8	25.0%
	[25%]
Bw4	75.0%
Bw6	100.0%
Others Found	
Cw3	25.0%
Cw5	25.0%

(Filipino) <b>Cell 1660</b> (5 Samples Typed)	
A23	100.0%
	[100.0%]
A34	80.0%
	[80.0%]
B51	80.0%
B5	20.0%
	[100.0%]
B57	80.0%
B17	20.0%
	[100.0%]
Cw4	40.0%
	[40.0%]
Bw4	100.0%
Others Found	
A43	20.0%

**Table 12. Individual laboratory results for Cell #1657 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSP SSO	
725	*25	*68	*40	*44	*03	*16							SSO	
731	*25	*68	*40	*44	*03	*16	*25:01:01G	*68:01:02G	*40:02	*44:03	*03:04	*16:01	SSP SSO SBT	
745							*25:01:01:01	*68:01:02:01	*40:02:01	*44:03:01	*03:04:01	*16:01:01:01	SSP SBT NGS	
747	*25	*68	*40	*44	*03	*16	*25:01:01:01	*68:01:02:01	*40:02:01:01	*44:03:01:01	*03:04:01:02	*16:01:01	SSP SSO NGS	
762							*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	NGS	
771	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSO SBT	
774	*25	*68	*40	*44	*03	*14							SSP SSO	
3186	*25	*68	*40	*44	*03	*16							SSO	
														A*68:152 B*44:298 B*44:302 B*44:309N C*03:358 C*03:359 C*03:376 C*03:387 C*16:146 B*40:303 B*40:356 C*16:111 C*16:112 C*16:118 A*25:60 A*25:62 C*03:455 C*03:456 C*03:466 C*03:467 C*03:484 C*16:154 C*16:157 C*16:160 B*40:384 B*40:405 B*40:442 B*44:474 B*44:476 C*03:408 C*03:417 C*03:423 C*03:470N B*44:466N
3545	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSO SBT	
3632	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSP SSO	
3808	*25	*68	*40	*44	*03	*16			*40:02	*44:03		*16:01	SSO	
4079							NT	NT	NT	NT	NT	NT	SSP NGS	
4251	*25	*68	*40	*44	*03	*16	*25:01:01G	*68:01P	*40:02:01G	*44:03:01G	*03:04:01G	*16:01:01G	SSO SBT	
5133							*25:01:01:01	*68:01:02:01	*40:02:01	*44:03:01	*03:04:01	*16:01:01:01	NGS	
5214	*25	*68	*40(B61)	*44	*03(Cw10)	*16							RT-PCR	
5462	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSO NGS	
5642	*25	*68	*40	*44	*03	*16								
6649	*25	*68	*40	*44									SSO	
8001	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSP SSO NGS	
8043	*25	*68	*40	*44	*03	*16	*25:01	*68:01	*40:02	*44:03	*03:04	*16:01	SSP SSO	
8103	*25	*68	*40	*44	*03	*16							SSP SSO	
													SSP SSO SBT	
8119	*25	*68	*40	*44	*03	*16							NGS RT-PCR	

**Table 13a: Individual laboratory results for Cell #1657 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*04	*15	4*PRESENT	5*PRESENT	*01	*03	*03	*06	*01	*01	*04	*04	SSP SSO NGS	
3186	*04	*15	4*01	5*01	*01	*03	*03	*06	*01	*01	*04(DP402)	04(DP402)	SSO	
3545	*04	*15											SSO SBT	
3632	*04	*15	4*01	5*01	*01	*03	*03	*06	*01		*04		SSP SSO	
3808	*04	*15			*01	*03	*03	*06	*01	*01	*04(DP402)	04(DP402)	SSO	
5462	*04	*15	4*01	5*01	*01	*03	*03	*06	*01		NT		SSO NGS	
8001	*04	*15	4*01	5*01	*01	*03	*03	*06					SSP SSO NGS	
8103	*04	*15	4*01	5*01	*01	*03	*03	*06					SSP SSO	
8119	*04	*15					*03	*06			*04(DP402)		SSP SSO SBT N	

**Table 13b: Individual laboratory results for Cell #1657 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*04:11:01	*15:01:01					*03:02:01	*06:02:01			*04:02:01		SSP SBT NGS	
747	*04:11:01	*15:01:01:03	4*01:03:01	5*01:01:01	*01:02:01	*03:01:01	*03:02:01:01	*06:02:01:01	*01:03:01	*01:03:01	*04:02:01	*04:02:01	SSP SSO NGS	DQB1*03:289
3545	*04:11	*15:01											SSO SBT	DRB1*15:171
3632	*04:11	*15:01	4*01:03	5*01:01	*01:02	*03:01	*03:02	*06:02	*01:03		*04:02		SSP SSO	DPB1*02:01P
3808	*04:11				*01:02	*03:01	*03:02		*01:03	*01:03			SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5462	*04:11	*15:01	4*01:03	5*01:01	*01:02	*03:01	*03:02	*06:02	*01:03		*04:02		SSO NGS	
8001	*04:11	*15:01	4*01:03	5*01:01	*01:02	*03:01	*03:02	*06:02			*04:02		SSP SSO NGS	
													SSP SSO SBT	
8119			4*01:03	5*01:01									NGS RT-PCR	

**Table 14. Individual laboratory results for Cell #1658- Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSP SSO	
725	*26	*30	*13	*38	*06	*12							SSO	
731	*26	*30	*13	*38	*06	*12	*26:01:01G	*30:01:01	*13:02:01	*38:01:01	*06:02	*12:03	SSP SSO SBT	
745							*26:01:01:01	*30:01:01:01	*13:02:01:01	*38:01:01:01	*06:02:01:01	*12:03:01:01	SSP SBT NGS	
747	*26	*30	*13	*38	*06	*12	*26:01:01:01	*30:01:01:01	*13:02:01:01	*38:01:01:01	*06:02:01:01	*12:03:01	SSP SSO NGS	DQB1*02:156
762							*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	NGS	
771	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSO SBT	
774	*26	*30	*13	*38	*06	*12							SSP SSO	
3186	*26	*30	*13	*38	*06	*12							SSO	
														C*06:214 C*06:227 C*06:228 C*06:236 C*06:239 C*06:244 A*26:117 C*06:83 C*06:213 C*12:143 C*12:167 C*12:220 C*12:245 C*12:262 A*26:166Q A*26:167 A*26:168 A*26:183 B*13:125 B*13:136 B*38:86 C*06:255 C*06:261 C*06:266 C*06:273 C*06:274 C*12:289 C*12:290 C*12:292 A*26:163 A*26:164 A*26:187 A*30:135 A*30:141 A*30:147 A*30:148 B*13:114 B*13:116N B*13:117 B*13:123Q C*06:276 C*06:277 C*06:278 C*06:279 C*12:277 C*12:278 C*12:284
3545	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSO SBT	
3632	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSP SSO	
3808	*26	*30	*13	*38	*06	*12		*30:01	*13:02			*12:03	SSO	
4079							*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSP NGS	
4251	*26	*30	*13	*38	*06	*12	*26:01:01G	*30:01:01G	*13:02:01G	*38:01:01G	*06:02:01G	*12:03:01G	SSO SBT	
5133							*26:01:01:01	*30:01:01:01	*13:02:01:01	*38:01:01:01	*06:02:01:01	*12:03:01:01	NGS	
5214	*26	*30	*13	*38	*06	*12							RT-PCR	
5462	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02P	*38:01	*06:02	*12:03	SSO NGS	B*13:123Q
5642	*26	*30	*13	*38	*06	*12								
6649	*26	*30	*13	*38									SSO	
8001	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSP SSO NGS	
8043	*26	*30	*13	*38	*06	*12	*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	SSP SSO	
8103	*26	*30	*13	*38	*06	*12							SSP SSO	
													SSP SSO SBT	
8119							*26:01	*30:01	*13:02	*38:01	*06:02	*12:03	NGS RT-PCR	

**Table 15a: Individual laboratory results for Cell #1658 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*07	*07	4*PRESENT	4*PRESENT	*02		*02		*02		*11	*17	SSP SSO NGS	
3186	*07	*07	4*01	4*01	*02	*02	*02	*02	*02	*02	*11	*17	SSO	
3545	*07												SSO SBT	
3632	*07		4*01	4*01	*02		*02		*02		*11	*17	SSP SSO	
3808	*07	*07			*02	*02	*02	*02	*02	*02	*11	*17	SSO	
5462	*07		4*01	4*01	*02		*02		*02	*02	NT	NT	SSO NGS	
8001	*07		4*01	4*01	*02		*02						SSP SSO NGS	
8103	*07	*07	4*01	4*01	*02	*02	*02	*02					SSP SSO	

**Table 15b: Individual laboratory results for Cell #1658- Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*07:01:01						*02:02:01				*11:01:01	*17:01:01	SSP SBT NGS	
747	*07:01:01:01		4*01:01:01:0	4*01:03:01	*02:01:01		*02:02:01		*02:01:01:03		*11:01:01	*17:01:01	SSP SSO NGS	DQB1*02:156
3545	*07:01												SSO SBT	DRB1*07:93
3632	*07:01		4*01:01	4*01:03	*02:01		*02:02		*02:01		*11:01	*17:01	SSP SSO	
3808					*02:01	*02:01	*02:02	*02:02	*02:01	*02:01	*11:01	*17:01	SSO	
4079	*07:01		4*01:01	4*01:03	*02:01		*02:02		*02:01		*11:01	*17:01	SSP NGS	
5462	*07:01		4*01:01	4*01:03	*02:01		*02:02		*02:01	*02:01	*11:01	*17:01	SSO NGS	
8001	*07:01		4*01:01	4*01:03	*02:01		*02:02				*11:01	*17:01	SSP SSO NGS	
													SSP SSO SBT	
8119	*07:01		4*01:01	4*01:03			*02:02				*11:01	*17:01	NGS RT-PCR	

**Table 16. Individual laboratory results for Cell #1659- Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSP SSO	
725	*66	*68	*14	*53	*06	*08							SSO	
731	*66	*68	*14	*53	*06	*08	*66:01:01	*68:02:01G	*14:02:01	*53:01:01	*06:02:01G	*08:02:01	SSP SSO SBT	
745							*66:01:01:01	*68:02:01:01	*14:02:01:01	*53:01:01:01	*06:02:01:01	*08:02:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	NGS	
771	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSO SBT	
774	*66	*68	*14	*53	*06	*08			*14:02	*53:01			SSP SSO	B*14:39 B*53:32 B*53:37 B*14:64
3186	*66	*68	*14	*53	*06	*08							SSO	B*14:67 B*53:37 B*53:51 B*53:54
														C*06:83 C*06:213 A*68:163 C*06:214 C*06:227 C*06:228 C*06:236 C*06:239 C*06:244 B*14:67 B*53:51 B*53:54 C*06:255 C*06:261 C*06:266 C*08:200 A*68:198 A*68:216N B*14:64 C*06:273 C*06:274 C*06:276 C*06:277 C*06:278 C*06:279 C*08:179 C*08:195
3545	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSO SBT	
3632	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSP SSO	
3808	*66	*68	*14	*53	*06	*08		*68:02	*14:02	*53:01			SSO	
4079	NT												SSP NGS	
4251	*66	*68	*14	*53	*06	*08	*66:01	*68:02:01G	*14:02:01G	*53:01:01G	*06:02:01G	*08:02:01G	SSO SBT	
5133							*66:01:01:01	*68:02:01:01	*14:02:01:01	*53:01:01:01	*06:02:01:01	*08:02:01	NGS	
5214	*66	*68	*14(B65)	*53	*06	*08							RT-PCR	
5462	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01P	*06:02	*08:02	SSO NGS	B*53:54
5642	*66	*68	*14	*53	*06	*08								
6649	*66	*68	*14	*53									SSO	
8001	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSP SSO NGS	
8043	*66	*68	*14	*53	*06	*08	*66:01	*68:02	*14:02	*53:01	*06:02	*08:02	SSP SSO	
8103	*66	*68	*14	*53	*06	*08							SSP SSO	
													SSP SSO SBT	
8119	*66	*68	*14	*53	*06	*08							NGS RT-PCR	



**Table 17a: Individual laboratory results for Cell #1659 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
3186	*13	*13	3*01	3*03	*01	*05	*03	*06	*01	*02	*04(DP401)	*131	SSO	
3545	*13	*13											SSO SBT	
3632	*13	*13	3*01	3*03	*01	*05	*03	*06	*01	*02	*04	*17	SSP SSO	
3808	*13	*13			*01	*05	*03	*06	*01	*02	*04(DP401)	*17	SSO	
5462	*13	*13	3*01	3*03	*01	*05	*03	*06	*01	*02	NT	NT	SSO NGS	
8001	*13	*13	3*01	3*03	*01	*05	*03	*06					SSP SSO NGS	
8103	*13	*13	3*01	3*03	*01	*05	*03	*06					SSP SSO	
													SSP SSO SBT	
8119	*13						*03	*06					NGS RT-PCR	

**Table 17b: Individual laboratory results for Cell #1659- Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*13:02:01	*13:03:01					*03:01:01	*06:04:01			*04:01:01	*131:01	SSP SBT NGS	
3545	*13:02	*13:03											SSO SBT	
3632	*13:02	*13:03	3*01:01	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*02:01	*04:01	*17:01P	SSP SSO	
3808	*13:02	*13:03			*01:02	*05:05	*03:01	*06:04	*01:03	*02:01		*17:01:01G	SSO	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5462	*13:02	*13:03	3*01:01P	3*03:01	*01:02	*05:05	*03:01	*06:04	*01:03	*02:01	*04:01	*131:01	SSO NGS	DRB3*01:62
8001	*13:02	*13:03	3*01:01	3*03:01	*01:02	*05:05	*03:01	*06:04			*04:01	*131:01	SSP SSO NGS	DPB1*939:01N
													SSP SSO SBT	
8119			3*01:01	3*03:01									NGS RT-PCR	

**Table 18. Individual laboratory results for Cell #1660- Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSP SSO	
725	*23	*34	*51	*57	*04	*18							SSO	
731	*23	*34	*51	*57	*04	*18	*23:01:01G	*34:01:01	*51:01:02	*57:02:01	*04:01:01G	*18:02	SSP SSO SBT	
745							*23:01:01:01	*34:01:01:01	*51:01:02:01	*57:02:01	*04:01:01	*18:02:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	NGS	
771	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSO SBT	
774	*23	*34	*51	*57	*04	*18			*51:01	*57:02			SSP SSO	
3186	*23	*34	*51	*57	*04	*18							SSO	
														C*04:30 C*04:82 C*04:226 C*04:275 C*04:330 C*04:339 C*04:348 C*04:358 A*23:17 C*04:277 C*04:298 C*04:306 C*04:308 C*04:320 C*04:321 C*04:322 C*04:327 C*18:02 A*23:91N A*23:93 A*34:18 C*04:375 C*04:395 C*04:397 C*04:398 C*18:11 C*04:380 C*04:388 C*04:390 C*04:391 C*04:394
3545	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:01	SSO SBT	
3632	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSP SSO	
3808	*23	*34	*51	*57	*04	*18				*57:02			SSO	
4079							*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSP NGS	
4251	*23	*34	*51	*57	*04	*18	*23:01:01G	*34:01:01G	*51:01	*57:02	*04:01P	*18:01:01G	SSO SBT	
5133							*23:01:01:01	*34:01:01:01	*51:01:02:01	*57:02:01	*04:01:01	*18:02:01:01	NGS	
5214	*23	*24	*51	*57	*04	*18							RT-PCR	
5462	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSO NGS	
5642	*23	*34	*51	*57	*04	*18								
6649	*23	*34	*51	*57									SSO	
8001	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSP SSO NGS	
8043	*23	*34	*51	*57	*04	*18	*23:01	*34:01	*51:01	*57:02	*04:01	*18:02	SSP SSO	
8103	*23	*34	*51	*57	*04	*18							SSP SSO	
													SSP SSO SBT	
8119							*23:01	*34:01:01	*51:01:02	*57:02:01	*04:01	*18:02	NGS RT-PCR	

**Table 19a: Individual laboratory results for Cell #1660 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
3186	*04	*04	4*01	4*01	*03	*03	*03	*04	*02	*02	*01	*01	SSO	
3545	*04												SSO SBT	
3632	*04		4*01		*03		*03	*04	*02	*02	*01		SSP SSO	
3808	*04	*04			*03	*03	*03	*04	*02	*02	*01	*01	SSO	
5462	*04		4*01		*03		*03	*04	*02	*02	NT	NT	SSO NGS	
8001	*04		4*01		*03		*03	*04					SSP SSO NGS	
8103	*04	*04	4*01	4*01	*03	*03	*03	*04					SSP SSO	
													SSP SSO SBT	
8119					*03								NGS RT-PCR	

**Table 19b: Individual laboratory results for Cell #1660 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*04:05:01						*03:02:01	*04:01:01			*01:01:01	*01:01:02	SSP SBT NGS	
3632	*04:05		4*01:03		*03:03		*03:02	*04:01	*02:01	*02:02	*01:01		SSP SSO	
3808	*04:05	*04:05					*03:02	*04:01			*01:01	*01:01	SSO	
4079	*04:05		4*01:03		*03:03		*03:02	*04:01	*02:01	*02:02	*01:01		SSP NGS	
5462	*04:05		4*01:03		*03:03		*03:02	*04:01	*02:01	*02:02	*01:01	*01:01	SSO NGS	
8001	*04:05		4*01:03		*03:03		*03:02	*04:01			*01:01		SSP SSO NGS	
													SSP SSO SBT	
8119	*04:05		4*01:03		*03:02			*04:01			*01:01		NGS RT-PCR	

**Table 20. Individual laboratory results for Cell #1657-1660 by serology**

Investigator	Days Old	Viab %	Cell No 1657 (Hispanic)								Cell No 1658 (Hispanic)							Cell No 1659 (Mixed)							Cell No 1660 (Filipino)											
			A25	A68	B61	B44	Cw3	Bw4	Bw6	OTHERS	Viab %	A26	A30	B13	B38	Cw6	Bw4	OTHERS	Viab %	A66	A68	B65	B53	Cw6	Cw8	Bw4	Bw6	OTHERS	Viab %	A23	A34	B51	B57	Cw4	Bw4	OTHERS
Cecka, J. Mic	3	>95	+	+	+	+		+	+		>95	+	+	+	+	+		>95	+	+	+	+				+	+		>95	+	+	+	+		+	
Fort, Marylis	3	NT									97	+	+	+	+	+		NT										95	+	+	+	+		+		
Loewenthal ,	6	NT									NT							NT										NT								
Meyer, Pieter		80	+	A28	B40	+	+	+	+		80	+	A10	+	+	+	+	80	A10	A28	B14			+		+	75	+	+	B5	B17	+	+			
Permpikul, Ve	7	0									0							0									0									
Shai, Isaac	8	84	+	A26	B48	+	+	+	+	A31	82	+	+	+	+	+	A31,Bw6	82	A26	A28	B14	+	Cw3	Cw5	+	+	84	+	A43	+	+	+	+			
Stylianou, Ca			+	+	+	+		+	+			+	+	+	+	+			A10	+	+	+			+	+		+	+	+	+	+	+			
Villard, Jean	6	90	+	+	B40	+		+	+		90	+	+	+	+	+		NT									NT									
Walsh, Lisa	3	98	+	+	B40	+		+	+		98	+	+	+	+	+		0									0									