

# CELL EXCHANGE #420

## FEBRUARY 23, 2021

Cells 1677-1680

The results for Cell Exchange #420 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. Thirteen labs submitted low and/or high resolution class II results

for this study. We would like to thank each of them for sharing their results and encourage other labs to do so as well so that the class II assignment can be graded. Haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

**Cell 1677.** The reported class I type for this cell from a Black donor is A\*01:01(A1)-A\*23:01(A23)-B\*42:01(B42)-B\*50:01(B50)-C\*06:02-C\*17:01. Likely associations present are A\*01:01-B\*50:01-C\*06:02 and A\*23:01-B\*42:01-C\*17:01, with respective HF = 0.00042 and 0.00489, in African American populations.

This cell was previously examined as cell 1586 (2017). In this present retyping, good agreement was achieved once again in class I allele assignments, with each reported by 100% of labs. For class II, DRB1\*03:02, DRB1\*07:01, DPB1\*01:01, and DPB1\*04:02 were each assigned by 8 labs. DRB4\*01:03 was assigned by 5 labs. No agreement was achieved for the DRB3\*01 subtype, as 2 labs assigned DRB3\*01:62, 2 labs assigned DRB3\*01:01, and lab assigned DRB3\*01:01P. DQB1\*02:02 and DQB1\*04:02 were each reported by 7 labs.

**Cell 1678.** The reported class I type for this cell from a Korean donor is A\*02:01(A2)-A\*26:02(A26)-B\*15:01(B62)-B\*44:03(B44)-C\*03:03-C\*14:03. One likely association present is A\*26:02-B\*15:01-C\*03:03, observed in Asian populations, with HF = 0.00138. The other likely association present is A\*02:01-B\*44:03-C\*14:03, with HF = 0.00006, in Caucasians.

Good agreement (> 90%) was achieved among labs in the reporting of class I allele assignments. For class II, DRB1 and DPB1 high resolution results were reported by 7 labs. All 7 reported DRB1\*08:03, DRB1\*13:02, DPB1\*02:01, and DPB1\*02:02. The DQB1 types were reported as DQB1\*06:01 and DQB1\*06:04 by 6 labs.

**Cell 1679.** The reported class I type for this cell from a Hispanic donor is A\*02:01(A2)-A\*24:02(A24)-B\*35:12(B35)-B\*35:28-C\*04:01. One likely class I association present is A\*02:01-B\*35:12-C\*04:01, observed commonly in Hispanics with HF = 0.01017. The other likely association present is A\*24:02-B\*35:28-C\*04:01, with HF = 0.00021, in African Americans. This is the first B\*35:28 cell examined in the Cell Exchange.

Good agreement was achieved among labs in the reporting of class I allele assignments, with 100% of labs reporting each. For class II, DRB1\*08:02 and DPB1\*04:02 were each assigned by 6 labs, while DQB1\*04:02 was assigned by 5 labs. This cell was reported as homozygous for class II.

**Cell 1680.** The reported class I type for this cell from a donor of mixed ethnicity (Black/Hispanic) is A\*03:01(A3)-A\*69:01(A69)-B\*35:01(B35)-B\*55:01(B55)-C\*01:02-C\*04:01. Likely class I associations presents in this cell are A\*03:01-B\*35:01-C\*04:01 and A\*69:01-B\*55:01-C\*01:02, with respective HF = 0.01009 and 0.00253 in Hispanics.

Good agreement (> 90%) was achieved among labs in the reporting of class I allele assignments. For class II, high resolution DRB1 and DPB1 typing results were reported by 6 labs, with each assigning DRB1\*03:02, DRB1\*13:02, DPB1\*01:01, and DPB1\*03:01. The DQB1 types were reported as DQB1\*04:02 and DQB1\*06:04 by 5 labs.

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**Table 7: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1677**

DNA Typing - class I	<u>10 labs High; 15 labs low- A</u>		<u>10 labs High; 15 labs low- B</u>		<u>10 labs High; 14 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*01:01:01:01	10(1)	B*42:01:01	30(3)	C*06:02:01:02	20(2)
	A*01:01:01	20(2)	B*42:01	70(7)	C*06:02:01	10(1)
	A*01:01	70(7)	B*42	93(14)	C*06:02	70(7)
	A*01	93(14)	B*35	7 (1)	C*06	93(13)
	A*03	7 (1)			C*01	7 (1)
DNA Typing - class I	<u>10 labs High; 15 labs low- A</u>		<u>10 labs High; 15 labs low- B</u>		<u>10 labs High; 14 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*23:01:01:01	20(2)	B*50:01:01	30(3)	C*17:01:01:02	20(2)
	A*23:01:01	10(1)	B*50:01	70(7)	C*17:01:01	10(1)
	A*23:01	70(7)	B*50	93(14)	C*17:01P	10(1)
	A*23	93(14)	B*55	7 (1)	C*17:01	60(6)
	A*69	7 (1)			C*17	93(13)
					C*04	7(1)

DNA Typing - class II	<u>8 labs High; 10 labs low-DRB1</u>		<u>5 labs High; 6 labs low-DRB3/4/5</u>		<u>4 labs High; 9 labs Low-DQA1</u>		<u>7 labs High; 9 labs Low-DQB1</u>		<u>4 labs High; 7 labs Low-DPA1</u>		<u>8 labs High; 7 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*03:02:01	38(3)	DRB3*01:62:01	20(1)	DQA1*02:01:01	50(2)	DQB1*02:02:01	14(1)	DPA1*01:03:01	50(2)	DPB1*01:01:02	38(3)
	DRB1*03:02	62(5)	DRB3*01:62	20(1)	DQA1*02:01	50(2)	DQB1*02:02	86(6)	DPA1*01:03	50(2)	DPB1*01:01G	12(1)
	DRB1*03(DR18)	10(1)	DRB3*01:01P	20(1)	DQA1*02	89(8)	DQB1*02	89(8)	DPA1*01	100(7)	DPB1*01:01	50(4)
	DRB1*03	90(9)	DRB3*01:01	40(2)	DQA1*01	11(1)	DQB1*06	11(1)			DPB1*01	100(7)
			DRB3*01	83(5)								
			DRB3*PRESENT	17(1)								
DNA Typing - class II	<u>8 labs High; 10 labs low-DRB1</u>		<u>5 labs High; 6 labs low-DRB3/4/5</u>		<u>4 labs High; 9 labs Low-DQA1</u>		<u>7 labs High; 9 labs Low-DQB1</u>		<u>4 labs High; 7 labs Low-DPA1</u>		<u>8 labs High; 7 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*07:01:01:01	13(1)	DRB4*01:03:01	40(2)	DQA1*04:01:01	50(2)	DQB1*04:02:01	29(2)	DPA1*02:01:01	50(2)	DPB1*04:02:01:02	12(1)
	DRB1*07:01:01	25(2)	DRB4*01:03	60(3)	DQA1*04:01	50(2)	DQB1*04:02	71(5)	DPA1*02:01	50(2)	DPB1*04:02:01	25(2)
	DRB1*07:01	62(5)	DRB4*01	83(5)	DQA1*04	89(8)	DQB1*04	100(9)	DPA1*02	100(7)	DPB1*04:02G	12(1)
	DRB1*07	90(9)	DRB4*PRESENT	17(1)	DQA1*01	11(1)					DPB1*04:02	50(4)
	DRB1*13	10(1)									DPB1*04(DP402)	57(4)
											DPB1*04	29(2)
											DPB1*03	14(1)

**Table 8: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1678**

DNA Typing - class I		<u>10 labs High; 15 labs low- A</u>		<u>11 labs High; 15 labs low- B</u>		<u>11 labs High; 14 labs low- C</u>							
			%(n)		%(n)		%(n)						
	A*02:01:01:01	10(1)		B*15:01:01:01	18(2)	C*03:03:01:09	9 (1)						
	A*02:01:01	20(2)		B*15:01:01	9 (1)	C*03:03:01	18(2)						
	A*02:01	70(7)		B*15:01P	9 (1)	C*03:03	73(8)						
	A*02	100(15)		B*15:01	64(7)	C*03(Cw9)	7 (1)						
				B*15(B62)	6 (1)	C*03	86(12)						
				B*15	87(13)	C*04	7 (1)						
				B*35	6 (1)								
DNA Typing - class I		<u>10 labs High; 15 labs low- A</u>		<u>10 labs High; 15 labs low- B</u>		<u>10 labs High; 14 labs low- C</u>							
			%(n)		%(n)		%(n)						
	A*26:02:01	30(3)		B*44:03:01	30(3)	C*14:03:01:01	10(1)						
	A*26:02	70(7)		B*44:03	70(7)	C*14:03	90(9)						
	A*26	93(14)		B*44	93(14)	C*14	93(13)						
	A*24	7 (1)		B*35	7 (1)	C*04	7 (1)						
DNA Typing - class II		<u>8 labs High; 10 labs low-DRB1</u>		<u>5 labs High; 6 labs low-DRB3/4/5</u>		<u>3 labs High; 8 labs Low-DQA1</u>		<u>7 labs High; 9 labs Low-DQB1</u>		<u>4 labs High; 7 labs Low-DPA1</u>		<u>8 labs High; 7 labs Low-DPB1</u>	
			%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*08:03:02	38(3)		DRB3*03:01:01	40(2)	DQA1*01:02:01	67(2)	DQB1*06:01:01	29(2)	DPA1*01:03:01	50(2)	DPB1*02:01:02	38(3)
	DRB1*08:03	62(5)		DRB3*03:01	60(3)	DQA1*01:02	33(1)	DQB1*06:01	71(5)	DPA1*01:03	50(2)	DPB1*02:01G	12(1)
	DRB1*08	100(10)		DRB3*03	83(5)	DQA1*01	88(7)	DQB1*06	89(8)	DPA1*01	100(7)	DPB1*02:01	50(4)
				DRB3*PRESENT	17(1)	DQA1*04	12(1)	DQB1*04	11(1)			DPB1*02(DP201)	57(4)
												DPB1*02	43(3)
DNA Typing - class II		<u>8 labs High; 10 labs low-DRB1</u>		<u>3 labs High; 8 labs Low-DQA1</u>		<u>7 labs High; 9 labs Low-DQB1</u>		<u>4 labs High; 7 labs Low-DPA1</u>		<u>8 labs High; 7 labs Low-DPB1</u>			
			%(n)		%(n)		%(n)		%(n)		%(n)		
	DRB1*13:02:01	38(3)		DQA1*01:03:01	67(2)	DQB1*06:04:01	29(2)	DPA1*02:02:02	50(2)	DPB1*02:02:01	38(3)		
	DRB1*13:02	62(5)		DQA1*01:03	33(1)	DQB1*06:04	71(5)	DPA1*02:02	50(2)	DPB1*02:02G	12(1)		
	DRB1*13	90(9)		DQA1*01	88(7)	DQB1*06	89(8)	DPA1*02	86(6)	DPB1*02:02	50(4)		
	DRB1*08	10(1)		DQA1*04	12(1)	DQB1*04	11(1)	DPA1*01	14(1)	DPB1*02(DP202)	57(4)		
										DPB1*02	29(2)		
										DPB1*04	14(1)		

**Table 9: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1679**

DNA Typing - class I		<b>8 labs High; 13 labs low- A</b>		<b>9 labs High; 13 labs low- B</b>		<b>8 labs High; 12 labs low- C</b>					
			%(n)		%(n)		%(n)				
		A*02:01:01:01	12(1)	B*35:12:01:01	11(1)	C*04:01:01	25(2)				
		A*02:01:01	12(1)	B*35:12:01	11(1)	C*04:01	75(6)				
		A*02:01	75(6)	B*35:12	78(7)	C*04	92(11)				
		A*02	100(13)	B*35	92(12)	C*03	8 (1)				
				B*15	8 (1)						
DNA Typing - class II		<b>6 labs High; 8 labs low-DRB1</b>		<b>2 labs High; 7 labs Low-DQA1</b>		<b>5 labs High; 7 labs Low-DQB1</b>		<b>2 labs High; 5 labs Low-DPA1</b>		<b>6 labs High; 5 labs Low-DPB1</b>	
			%(n)		%(n)		%(n)		%(n)		%(n)
		DRB1*08:02:01	33(2)	DQA1*04:01:01	50(1)	DQB1*04:02:01	20(1)	DPA1*01:03:01	50(1)	DPB1*04:02:01:02	17(1)
		DRB1*08:02	67(4)	DQA1*04:01	50(1)	DQB1*04:02	80(4)	DPA1*01:03	50(1)	DPB1*04:02:01	17(1)
		DRB1*08	100(8)	DQA1*04	86(6)	DQB1*04	86(6)	DPA1*01	100(5)	DPB1*04:02G	17(1)
				DQA1*01	14(1)	DQB1*06	14(1)			DPB1*04:02	50(3)
										DPB1*04(DP402)	60(3)
										DPB1*04	20(1)
										DPB1*02	20(1)

**Table 10: Summary of the 420<sup>th</sup> Cell Exchange - DNA Typing**

**Cell 1680**

DNA Typing - class I	<u>8 labs High; 12 labs low- A</u>		<u>8 labs High; 12 labs low- B</u>		<u>8 labs High; 11 labs low- C</u>	
		%(n)		%(n)		%(n)
	A*03:01:01:07	12(1)	B*35:01:01	25(2)	C*01:02:01:01	12(1)
	A*03:01:01	12(1)	B*35:01	75(6)	C*01:02:01	12(1)
	A*03:01	75(6)	B*35	100(12)	C*01:02	75(6)
	A*03	100(12)			C*01	100(11)
<u>8 labs High; 12 labs low- A</u>		<u>8 labs High; 12 labs low- B</u>		<u>8 labs High; 11 labs low- C</u>		
	%(n)		%(n)		%(n)	
A*69:01:01:01	25(2)	B*55:01:01:01	12(1)	C*04:01:01:14	12(1)	
A*69:01	75(6)	B*55:01:01	12(1)	C*04:01:01	12(1)	
A*69	100(12)	B*55:01	75(6)	C*04:01	75(6)	
		B*55	100(12)	C*04	100(11)	

DNA Typing - class II	<u>6 labs High; 8 labs low-DRB1</u>		<u>3 labs High; 4 labs low-DRB3/4/5</u>		<u>2 labs High; 7 labs Low-DQA1</u>		<u>5 labs High; 7 labs Low-DQB1</u>		<u>2 labs High; 5 labs Low-DPA1</u>		<u>6 labs High; 5 labs Low-DPB1</u>	
		%(n)		%(n)		%(n)		%(n)		%(n)		%(n)
	DRB1*03:02:01	33(2)	DRB3*01:62:01	33(1)	DQA1*01:02:01	50(1)	DQB1*04:02:01	20(1)	DPA1*01:03:01	50(1)	DPB1*01:01:01	17(1)
	DRB1*03:02	67(4)	DRB3*01:01P	33(1)	DQA1*01:02	50(1)	DQB1*04:02	80(4)	DPA1*01:03	50(1)	DPB1*01:01G	17(1)
	DRB1*03(DR18)	12(1)	DRB3*01:01	33(1)	DQA1*01	86(6)	DQB1*04	100(7)	DPA1*01	100(5)	DPB1*01:01P	17(1)
	DRB1*03	88(7)	DRB3*01	100(4)	DQA1*02	14(1)					DPB1*01:01	50(3)
											DPB1*01	100(5)
<u>6 labs High; 8 labs low-DRB1</u>		<u>3 labs High; 4 labs low-DRB3/4/5</u>		<u>2 labs High; 7 labs Low-DQA1</u>		<u>5 labs High; 7 labs Low-DQB1</u>		<u>2 labs High; 5 labs Low-DPA1</u>		<u>6 labs High; 5 labs Low-DPB1</u>		
	%(n)		%(n)		%(n)		%(n)		%(n)		%(n)	
DRB1*13:02:01	33(2)	DRB3*03:01:01	33(1)	DQA1*04:01:01	50(1)	DQB1*06:04:01	20(1)	DPA1*02:02:02	50(1)	DPB1*03:01:01	17(1)	
DRB1*13:02	68(4)	DRB3*03:01	67(2)	DQA1*04:01	50(1)	DQB1*06:04	80(4)	DPA1*02:02	50(1)	DPB1*03:01G	33(2)	
DRB1*13	88(7)	DRB3*03	100(4)	DQA1*04	86(6)	DQB1*06	86(6)	DPA1*02	100(5)	DPB1*03:01P	17(1)	
DRB1*07	12(1)			DQA1*02	14(1)	DQB1*02	14(1)			DPB1*03:01	33(2)	
										DPB1*03	80(4)	
										DPB1*04	20(1)	

**Table 11. Summary of the 420<sup>th</sup> Cell Exchange (Cell #1677- 1680)**

Serological typing							
(Black) <b>Cell 1677</b> (9 Samples Typed)		(Korean) <b>Cell 1678</b> (9 Samples Typed)		(Hispanic) <b>Cell 1679</b> (7 Samples Typed)		(Mixed) <b>Cell 1680</b> (7 Samples Typed)	
A1	100.0%	A2	100.0%	A2	100.0%	A3	85.7%
	[100.0%]		[100.0%]		[100.0%]		
A23	100.0%	A26	100.0%	A24	85.7%	A69	71.4%
	[100.0%]		[100.0%]	A9	14.3%		[71.4%]
					[100.0%]		
B42	88.9%	B62	100.0%	B35	100.0%	B35	100.0%
			[100.0%]				
B50	100.0%	B44	100.0%	Cw4	28.6%	B55	71.4%
	[100.0%]		[100.0%]		[28.6%]		[71.4%]
						Cw1	28.6%
Cw6	33.3%	CW3	22.20%	Bw6	85.7%	Cw4	14.3%
	[33.3%]		[22.2%]				[14.3%]
Cw17	11.1%	Bw4	88.9%			Bw6	71.4%
Bw6	88.9%	Bw6	88.9%				
Others Found		Others Found		Others Found		Others Found	
Bw4	33.3%	Cw6	11.1%	B70	28.6%	B70	14.3%
Cw7	11.1%					A26	14.3%
B7	11.1%					A66	14.3%
B55	11.1%					Cw3	14.3%
						A74	14.3%
						Cw5	14.3%

**Table 12. Individual laboratory results for Cell #1677 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSP SSO	
725	*01	*23	*42	*50	*06	*17							SSO	
745							*01:01:01	*23:01:01:01	*42:01:01	*50:01:01	*06:02:01:02	*17:01:01:02	SSP SBT NGS	
747	*01	*23	*42	*50	*06	*17	*01:01:01	*23:01:01	*42:01:01	*50:01:01	*06:02:01	*17:01:01	SSP SSO NGS	
762							*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	NGS	
771	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSO NGS	
774	*01	*23	*42	*50	*06	*17							SSP SSO	
3186	*01	*23	*42	*50	*06	*17								
3545	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSO SBT	C*17:02 C*17:03
3808	*01	*23	*42	*50	*06	*17								
4079	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	SSP NGS	
4251							*01:01	*23:01	*42:01	*50:01	*06:02	*17:01	NGS	
5133							*01:01:01:01	*23:01:01:01	*42:01:01	*50:01:01	*06:02:01:02	*17:01:01:02	NGS	
5214	*01	*23	*42	*50	*06	*17								
5462	*01	*23	*42	*50	*06	*17	*01:01	*23:01	*42:01	*50:01	*06:02	*17:01P	SSO NGS	C*17:51 C*17:43
5642	*01	*23	*42	*50	*06	*17							SSP	
6649	*01	*23	*42	*50									SSO	
8001	*01	*23	*42	*50	*06	*17							SSP SSO	
8103	*03	*69	*35	*55	*01	*04							SSO	

**Table 13a: Individual laboratory results for Cell #1677 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*03	*07	3*PRESENT	4*PRESENT	*02	*04	*02	*04	*01	*02	*01	*04	SSP SSO NGS	
771	*03	*07			*02	*04	*02	*04			*01	*04	SSO NGS	
3186	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
3545	*03	*07											SSO SBT	
3808	*03	*07	NT	NT	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
4079	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)	SSP NGS	
5214	*03(DR18)	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	*01	*04(DP402)		
5462	*03	*07	3*01	4*01	*02	*04	*02	*04	*01	*02	NT	NT	SSO NGS	
8001	*03	*07	3*01	4*01	*02	*04	*02	*04					SSP SSO	
8103	*03	*13			*01	*01	*06	*04	*01	*02	*01	*03	SSO	

**Table 13b: Individual laboratory results for Cell #1677 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*03:02:01	*07:01:01:01					*02:02	*04:02			*01:01:02	*04:02:01:02	SSP SBT NGS	DQB1*02:156
747	*03:02:01	*07:01:01	3*01:62	4*01:03:01	*02:01:01	*04:01:01	*02:02	*04:02:01	*01:03:01	02:01:01	*01:01:02	*04:02:01	SSP SSO NGS	DQB1*02:156 DQB1*02:163N
771	*03:02	*07:01					*02:02	*04:02			*01:01	*04:02	SSO NGS	
3545	*03:02	*07:01											SSO SBT	
4079	*03:02	*07:01	3*01:01	4*01:03	*02:01	*04:01	*02:02	*04:02	*01:03	02:01	*01:01	*04:02	SSP NGS	
5133	*03:02:01	*07:01:01	3*01:62:01	4*01:03:01	*02:01:01	*04:01:01	*02:02:01	*04:02:01	*01:03:01	02:01:01	*01:01:02	*04:02:01	NGS	
5214											*01:01G	*04:02G		
5462	*03:02	*07:01	3*01:01P	4*01:03	*02:01	*04:01	*02:02	*04:02	*01:03	02:01	*01:01	*04:02	SSO NGS	DRB3*01:62
8001	*03:02	*07:01	3*01:01	4*01:03			*02:02	*04:02			*01:01	*04:02	SSP SSO	



**Table 14. Individual laboratory results for Cell #1678 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSP SSO	
725	*02	*26	*15	*44	*03	*14							SSO	
745							*02:01:01	*26:02:01	*15:01:01:01	*44:03:01	*03:03:01	*14:03	SSP SBT NGS	DQB1*06:285 DQB1*06:307 DQB1*06:309
747	*02	*26	*15	*44	*03	*14	*02:01:01	*26:02:01	*15:01:01	*44:03:01	*03:03:01	*14:03	SSP SSO NGS	DQB1*06:01:15
762							*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	NGS	
771	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSO NGS	
774	*02	*26	*15	*44	*03	*14							SSP SSO	
3186	*02	*26	*15	*44	*03	*14								
3545	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSO SBT	
3808	*02	*26	*15	*44	*03	*14								
4079	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	SSP NGS	
4251							*02:01	*26:02	*15:01	*44:03	*03:03	*14:03	NGS	
5133							*02:01:01:01	*26:02:01	*15:01:01:01	*44:03:01	*03:03:01:09	*14:03:01:01	NGS	
5214	*02	*26	*15(B62)	*44	*03(Cw9)	*14								
5462	*02	*26	*15	*44	*03	*14	*02:01	*26:02	*15:01P	*44:03	*03:03	*14:03	SSO NGS	
5642	*02	*26	*15	*44	*03	*14							SSP	
6649	*02	*26	*15	*44									SSO	
8001	*02	*26	*15	*44	*03	*14			*15:01		*03:03		SSP SSO	
8103	*02	*24	*35	*35	*04	*04							SSO	

**Table 15a: Individual laboratory results for Cell #1678 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	*08	*13	3*PRESENT		*01	*01	*06	*06	*01	*02	*02	*02	SSP SSO NGS	
771	*08	*13			*01		*06	*06			*02	*02	SSO NGS	
3186	*08	*13	3*03	NP	*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
3545	*08	*13												SSO SBT
3808	*08	*13	NT	NT	*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
4079	*08	*13	3*03				*06	*06	*01	*02	*02(DP201)	*02(DP202)	SSP NGS	
5214	*08	*13	3*03		*01	*01	*06	*06	*01	*02	*02(DP201)	*02(DP202)		
5462	*08	*13	3*03	NP	*01	*01	*06	*06	*01	*02	NT	NT	SSO NGS	
8001	*08	*13	3*03		*01	*01	*06	*06					SSP SSO	
8103	*08	*08			*04	*04	*04	*04	*01	*01	*04	*04	SSO	

**Table 15b: Individual laboratory results for Cell #1678 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*08:03:02	*13:02:01					*06:01	*06:04			*02:01:02	*02:02:01	SSP SBT NGS	DQB1*06:285
747	*08:03:02	*13:02:01	3*03:01:01		*01:02:01	*01:03:01	*06:01:01	*06:04:01	*01:03:01	*02:02:02	*02:01:02	*02:02:01	SSP SSO NGS	DQB1*06:307
771	*08:03	*13:02					*06:01	*06:04			*02:01	*02:02	SSO NGS	DQB1*06:309
3545	*08:03	*13:02											SSO SBT	
4079	*08:03	*13:02	3*03:01				*06:01	*06:04	*01:03	*02:02	*02:01	*02:02	SSP NGS	
5133	*08:03:02	*13:02:01	3*03:01:01		*01:02:01	*01:03:01	*06:01:01	*06:04:01	*01:03:01	*02:02:02	*02:01:02	*02:02:01	NGS	
5214											*02:01G	*02:02G		
5462	*08:03	*13:02	3*03:01	NP	*01:02	*01:03	*06:01	*06:04	*01:03	*02:02	*02:01	*02:02	SSO NGS	
8001	*08:03	*13:02	3*03:01				*06:01	*06:04			*02:01	*02:02	SSP SSO	

**Table 16. Individual laboratory results for Cell #1679 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*24	*35	*35	*04	*04	*02:01	*24:02	*35:12	*35:28	*04:01	04:01	SSP SSO	
725	*02	*24	*35		*04								SSO	
745							*02:01:01	*24:02:01	*35:12:01	*35:28	*04:01:01	04:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*02:01	*24:02	*35:12	*35:28	*04:01		NGS	
771	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO NGS	
774	*02	*24	*35	*35	*04				*35:12	*35:28			SSP SSO	B*35:149 B*35:201
3186	*02	*24	*35	*35	*04	*04								
3545	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO SBT	
3808	*02	*24	*35	*35	*04	*04								
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*02	*24	*35	*35	*04									
4251							*02:01	*24:02	*35:12	*35:28	*04:01	04:01	NGS	
5133							*02:01:01:01	*24:02:01:01	*35:12:01:01	*35:28:01:01	*04:01:01		NGS	
5462	*02	*24	*35	*35	*04		*02:01	*24:02	*35:12	*35:28	*04:01		SSO NGS	
5642	*02	*24	*35	*35	*04	*04							SSP	
6649	*02	*24	*35										SSO	
8001	*02	*24	*35	*35	*04								SSP SSO	
8103	*02	*26	*15	*44	*03	*14							SSO	

**Table 17a: Individual laboratory results for Cell #1679 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*08				*04		*04					*04	SSO NGS	
3186	*08	*08	NP	NP	*04	*04	*04	*04	*01	*01	*04(DP402)	*04(DP402)		
3545	*08												SSO SBT	
3808	*08	*08	NT	NT	*04	*04	*04	*04	*01	*01	*04(DP402)	*04(DP402)		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*08				*04		*04		*01		*04(DP402)			
5462	*08		NP		*04		*04		*01		NT		SSO NGS	
8001	*08				*04		*04						SSP SSO	
8103	*08	*13			*01	*01	*06	*06	*01	*02	*02	*02	SSO	

**Table 17b: Individual laboratory results for Cell #1679 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*08:02:01	*08:02:01					*04:02	*04:02			*04:02:01:02	*04:02:01:02	SSP SBT NGS	
747	NT												SSP SSO NGS	
771	*08:02						*04:02				*04:02		SSO NGS	
3545	*08:02												SSO SBT	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5133	*08:02:01				*04:01:01		*04:02:01		*01:03:01		*04:02:01		NGS	
5214											*04:02G			
5462	*08:02		NP		*04:01		*04:02		*01:03		*04:02		SSO NGS	
8001	*08:02						*04:02				*04:02		SSP SSO	

**Table 18. Individual laboratory results for Cell #1680 - Class I**

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSP SSO	
725	*03	*69	*35	*55	*01	*04							SSO	
745							*03:01:01	*69:01:01:01	*35:01:01	*55:01:01	*01:02:01	*04:01:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	NGS	
771	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO NGS	
774	*03	*69	*35	*55	*01	*04							SSP SSO	
3186	*03	*69	*35	*55	*01	*04								
3545	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO SBT	
3808	*03	*69	*35	*55	*01	*04								
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
4251							*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	NGS	
5133							*03:01:01:07	*69:01:01:01	*35:01:01	*55:01:01:01	*01:02:01:01	*04:01:01:14	NGS	
5214	*03	*69	*35	*55	*01	*04								
5462	*03	*69	*35	*55	*01	*04	*03:01	*69:01	*35:01	*55:01	*01:02	*04:01	SSO NGS	
5642	*03	*69	*35	*55	*01	*04							SSP	
6649	*03	*69	*35	*55									SSO	
8001	*03	*69	*35	*55	*01	*04							SSP SSO	
8103	NT												SSO	

**Table 19a: Individual laboratory results for Cell #1680 - Class II**

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
747	NT												SSP SSO NGS	
771	*03	*13			*01	*04	*04	*06			*01	*03	SSO NGS	
3186	*03	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	*01	*03		
3545	*03	*13											SSO SBT	
3808	*03	*13	NT	NT	*01	*04	*04	*06	*01	*02	*01	*03		
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5214	*03(DR18)	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	*01	*03		
5462	*03	*13	3*01	3*03	*01	*04	*04	*06	*01	*02	NT	NT	SSO NGS	
6649													SSO	
8001	*03	*13	3*01	3*03	*01	*04	*04	*06					SSP SSO	
8103	*03	*07			*02	*04	*04	*02	*01	*02	*01	*04	SSO	

**Table 19b: Individual laboratory results for Cell #1680 - Class II**

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
745	*03:02:01	*13:02:01					*04:02	*06:04			*01:01	*03:01	SSP SBT NGS	DPB1*417:01 DPB1*1049:01
747	NT												SSP SSO NGS	
771	*03:02	*13:02					*04:02	*06:04			*01:01	*03:01	SSO NGS	
3545	*03:02	*13:02											SSO SBT	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP NGS	
5133	*03:02:01	*13:02:01	3*01:62:01	3*03:01:01	*01:02:01	*04:01:01	*04:02:01	*06:04:01	*01:03:01	*02:02:02	*01:01:01	*03:01:01	NGS	DPB1*1049:01 DPB1*417:01
5214											*01:01G	*03:01G		
5462	*03:02	*13:02	3*01:01P	3*03:01	*01:02	*04:01	*04:02	*06:04	*01:03	*02:02	*01:01P	*03:01P	SSO NGS	DPB1*1049:01 DPB1*417:01 DRB3*01:62
8001	*03:02	*13:02	3*01:01	3*03:01			*04:02	*06:04			*01:01	*03:01:01G	SSP SSO	

**Table 20. Individual laboratory results for Cell #1677-1680 by serology**

Investigator	Days Old	Viab %	Cell No 1677 (Black)								Cell No 1678 (Korean)								Cell No 1679 (Hispanic)								Cell No 1680 (Mixed)								
			A1	A23	B42	B50	Cw6	Cw17	Bw6	OTHERS	Viab %	A2	A26	B62	B44	Cw3	Cw14	Bw4	Bw6	OTHERS	Viab %	A2	A24	B35	Cw4	Bw6	OTHERS	Viab %	A3	A69	B35	B55	Cw1	Cw4	Bw6
Cecka, J. Mic	3	>95	+	+	+	+		+		>95%	+	+	+	+			+	+		>95%	+	+	+		+		>95%	+	+	+	+				+
Fort, Marylis	3	90	+	+	+	+			+	Bw4	97	+	+	+	+			+	+	NT						NT									
Gillis, David		60	+	+	+	+	+	+	+		60	+	+	+	+			+	+	Cw6	60	+	+	+	+	+	50	+	+	+	+	+	+		
Meyer, Pieter		90	+	+	+	+	+			B55	90	+	+	+	+	+				90	+	A9	+			B70	90	A26	A74	+			Cw3		
Permpikul, Ve	6	90	+	+	+	+			+		90	+	+	+	+			+	+		90	+	+	+		+	90	+	+	+	+				+
Shai, Isaac	8	88	+	+	B7	+	+		+	Cw7	90	+	+	+	+	+			+	90	+	+	+	+	+	B70	84	+	A66	+	B70	+	Cw5	+	
Stylianou, Ca	7	90	+	+	+	+			+	Bw4	95	+	+	+	+			+	+		85	+	+	+		+	80	+	+	+	+				+
Villard, Jean	6	98	+	+	+	+			+	Bw4	98	+	+	+	+			+	+																
Walsh, Lisa	3	98	+	+	+	+			+		98	+	+	+	+			+	+		100	+	+	+		+	98	+	+	+	+				+