

B-CELL LINE EXCHANGE #309

FEBRUARY 7, 2024

B-cell Line 617- 618

The results for B-cell Line Exchange #309 are summarized in Tables 1 - 2. Individual lab results reported for each sample are listed in Tables 3 - 6. We would like to express our appreciation to **Welsh Blood Service**,

Pontyclun for sharing the reference DRB1*13:36 cell examined in this study. We would like to also thank the labs performing NGS for sharing their findings and encourage other NGS labs to do so as well.

Ter-617. The following is the reported HLA type for this cell from a Caucasian donor.

HLA-A	HLA-B	HLA-C
*01:01 *26:01	*08:01 *41:02	*07:01 *17:03

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*03:01 *08:77	3*01:01 3*02:02	*04:01 *05:01	*02:01 *04:02	*01:03	*04:01

This cell is 28460, the reference cell for DRB1*08:77 (1). It has been previously examined in the Exchange as Ter 429 (2009), Ter 345 (2004), and Ter 181 (1996). We congratulate Schmitz for correctly identifying this cell as being previously typed. Combining data from family studies (1) and the Exchange, the haplotypes present in this cell are A*01:01-B*08:01-DRB1*03:01-DRB3*01:01-DQB1*02:01 and A*26:01-B*41:02-DRB1*08:77-DRB3*02:02-DQB1*04:02.

In this present retyping, DRB1*08:77 was assigned by 68%. Five labs assigned DRB1*08:01, 2 labs assigned DRB1*08:01P, and 1 lab assigned DRB1*08:01:01G. As the consensus for the DRB1*08 subtype was below 90%, it was not graded. DRB3*02:02, which has been associated with DRB1*08:77 (3, 4), was reported in complete consensus.

References:

- Gerritsen KEH, Groeneweg M, Meertens CMH, Voorter CEM, Tilanus MGJ Tissue Antigens (2015) 86:333-342.
- M. Eberle, U. Asu, M. Taylor, J.B. Hunter, T.C. Fuller, D. Maurer. Identification of a putative DR8 founder haplotype containing a novel DRB1 08 allele. Human Immunology, Volume 40, Supplement 1, 1994, Page 77.

Ter-618. The following is the reported HLA type for this cell from a donor of unknown ethnicity.

HLA-A	HLA-B	HLA-C
*23:01 *32:01	*41:02 *44:03	*04:01 *17:03

DRB1	DRB3/4/5	DQA1	DQB1	DPA1	DPB1
*07:01 *13:36	3*03:01 4*01:01	*01:02 *02:01	*02:02 *06:09	*01:03	*02:01 *04:01

This cell is 30638, the reference cell for DRB1*13:36. It has been examined several times in the Exchange as Ter 515 (2015), Ter 446 (2010), Ter 360 (2005), and Ter 319 (2003). One likely association present in this cell is A*32:01-B*41:02-C*17:03-DRB1*13:36-DRB3*03:01-DQA1*01:02-DQB1*06:09-DPA1*01:03-DPB1*04:01. This same association was observed in cell RD-DJ, another reference cell for DRB1*13:36. The other likely association present may then be A*23:01-B*44:03-C*04:01-DRB1*07:01-DRB4*01:01-DQA1*02:01-DQB1*02:02-DPA1*01:03-DPB1*02:01.

In this present retyping, DRB1*13:36 was assigned by 100% of labs reporting at high resolution. Good agreement ($\geq 90\%$) was also achieved for all other allele assignments.

- Chen DF, Pastucha LT, Albert ED, Seibert I, Volgger A, Yao Z, Pein CD, Tillmann HL, Manns MP, Stangel W. A novel DRB1*0801 haplotype carrying DRB3*0202 found in a German pedigree. Eur J Immunogenet. 1997 Dec;24 (6):435-7.
- W T N Swelsen, K S Hartog, C M Ranzijn, N M Lardy. The unusual DRB1*08:01 haplotype carrying DRB3*02:02 confirmed in a Dutch family. June 2013. Tissue Antigens 82(2).

NEXT MAILING DATE: March 6, 2024

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

Table 1: Summary of the 309th B-cell Line Exchange

Ter-617																									
DNA Typing - class II	<u>25 labs High; 20 labs low-DRB1</u>			%(n)	<u>18 labs High; 15 labs Low-DRB3/4/5</u>			%(n)	<u>18 labs High; 18 labs Low-DQA1</u>			%(n)	<u>25 labs High; 19 labs Low-DQB1</u>			%(n)	<u>15 labs High; 9 labs Low-DPA1</u>			%(n)	<u>24 labs High; 11 labs Low-DPB1</u>			%(n)	
	DRB1*03:01:01		20(5)		DRB3*01:01:02		5 (1)		DQA1*04:01:01		22(4)		DQB1*02:01:01		16(4)		DPA1*01:03:01		27(4)		DPB1*04:01:01		21(5)		
	DRB1*03:01:01G		12(3)		DRB3*01:01:02G		11(2)		DQA1*04:01		78(14)		DQB1*02:01:01G		16(4)		DPA1*01:03:01G		7 (1)		DPB1*04:01:01G		25(6)		
	DRB1*03:01P		12(3)		DRB3*01:01P		17(3)		DQA1*04		100(18)		DQB1*02:01P		4 (1)		DPA1*01:03		66(10)		DPB1*04:01P		8 (2)		
	DRB1*03:01		52(13)		DRB3*01:01		67(12)						DQB1*02:01		64(16)		DPA1*01		100(9)		DPB1*04:01		46(11)		
	DRB1*03:173		4 (1)		DRB3*01		80(12)						DQB1*02		100(19)						DPB1*04(DP401)		73(8)		
	DRB1*03(DR17)		55(11)		DRB3*PRESENT		20(3)														DPB1*04		27(3)		
	DRB1*03		45(9)																						
	DNA Typing - class I	<u>23 labs High; 21 labs low- A</u>			%(n)	<u>23 labs High; 21 labs low- B</u>			%(n)	<u>23 labs High; 20 labs low- C</u>			%(n)												
		A*01:01:01G		4 (1)		B*08:01:01		30(7)		C*07:01:01:01		4 (1)													
		A*01:01P		4 (1)		B*08:01P		9 (2)		C*07:01:01		26(6)													
A*01:01			91(21)		B*08:01		61(14)		C*07:01:01G		4 (1)														
A*01			100(21)		B*08		100(21)		C*07:01P		4 (1)														
									C*07:01		61(14)														
									C*07		100(20)														

Table 2: Summary of the 309th B-cell Line Exchange

Ter-618

DNA Typing - class II		DNA Typing - class I	
25 labs High; 20 labs low-DRB1 DRB1*07:01:01 DRB1*07:01:01G DRB1*07:01P DRB1*07:01 DRB1*07	%(n) 20(5) 12(3) 12(3) 56(14) 100(20)	19 labs High; 14 labs Low-DRB3/4/5 DRB3*03:01:01 DRB3*03:01:01G DRB3*03:01P DRB3*03:01 DRB3*03 DRB3*PRESENT DRB3*01	%(n) 21(4) 11(2) 5 (1) 63(12) 79(11) 14(2) 7 (1)
25 labs High; 20 labs low-DRB1 DRB1*13:36 DRB1*13	%(n) 100(25) 100(20)	19 labs High; 14 labs Low-DRB3/4/5 DRB4*01:01:01 DRB4*01:01:01G DRB4*01:01P DRB4*01:01 DRB4*01 DRB4*PRESENT	%(n) 16(3) 16(3) 10(2) 58(11) 86(12) 14(2)
18 labs High; 18 labs Low-DQA1 DQA1*01:02:01 DQA1*01:02 DQA1*01	%(n) 22(4) 78(14) 100(18)	18 labs High; 18 labs Low-DQA1 DQA1*02:01:01 DQA1*02:01 DQA1*02	%(n) 22(4) 78(14) 100(18)
25 labs High; 19 labs Low-DQB1 DQB1*02:02:01 DQB1*02:01:01G DQB1*02:01P DQB1*02:02 DQB1*02	%(n) 24(6) 12(3) 4 (1) 60(15) 100(19)	25 labs High; 19 labs Low-DQB1 DQB1*06:09:01 DQB1*06:09:01G DQB1*06:09P DQB1*06:09 DQB1*06	%(n) 24(6) 8 (2) 8 (2) 60(15) 100(19)
15 labs High; 9 labs Low-DPA1 DPA1*01:03:01 DPA1*01:03:01G DPA1*01:03 DPA1*01	%(n) 27(4) 7 (1) 66(10) 100(9)	15 labs High; 9 labs Low-DPA1 DPA1*01:03:01 DPA1*01:03:01G DPA1*01:03 DPA1*01	%(n) 27(4) 7 (1) 66(10) 100(9)
24 labs High; 11 labs Low-DPB1 DPB1*02:01:02 DPB1*02:01:02G DPB1*02:01P DPB1*02:01 DPB1*02(DP201) DPB1*02	%(n) 21(5) 21(5) 13(3) 45(11) 73(8) 27(3)	24 labs High; 11 labs Low-DPB1 DPB1*04:01:01 DPB1*04:01:01G DPB1*04:01P DPB1*04:01 DPB1*04(DP401) DPB1*04	%(n) 21(5) 25(6) 8 (2) 46(11) 73(8) 27(3)
23 labs High; 21 labs low- A A*23:01:01:01 A*23:01:01 A*23:01P A*23:01 A*23	%(n) 9 (2) 22(5) 9 (2) 60(14) 100(21)	23 labs High; 21 labs low- B B*41:02:01:01 B*41:02:01 B*41:02 B*41	%(n) 9 (2) 22(5) 69(16) 100(21)
23 labs High; 21 labs low- A A*32:01:01:01 A*32:01:01 A*32:01:01G A*32:01P A*32:01 A*32	%(n) 4 (1) 26(6) 4 (1) 4 (1) 61(14) 100(21)	23 labs High; 21 labs low- B B*44:03:01 B*44:03P B*44:03 B*44	%(n) 30(7) 9 (2) 61(14) 100(21)
23 labs High; 20 labs low- C C*04:01:01 C*04:01:01G C*04:01P C*04:01 C*04	%(n) 30(7) 4 (1) 4 (1) 61(14) 100(20)	23 labs High; 20 labs low- C C*17:03:01 C*17:01P C*17:03 C*17:01 C*17	%(n) 30(7) 9 (2) 57(13) 4 (1) 100(20)

Table 3a: Individual laboratory results for B-cell #617 - Class II

Table 1: Individual Laboratory Results for 2,000 HLA Class II														
Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
725	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04					SSO	
747	*03	*08	3*01	3*02	*04	*05	*02	*04	*01	*01	*04	*04	SSP SSO NGS	
													SSP SSO SBT	
771	*03	*08			*04	*05	*02	*04					NGS	
792	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01	*01	*04	*04	SSO NGS	
793	*03(DR17)	*08	3*PRESENT		*04	*05	*02	*04	*01	*01	*04(DP401)	*04(DP401)	SSP	
2400	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	NT	NT	*04(DP401)	*04(DP401)	SSO NGS	
2847	*03	*08											SSO	
													SSP NGS	
3519	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01		*04(DP401)		RT-PCR	
3753	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01		*04(DP401)		SSO	
3966													SSO RT-PCR	
4079	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01		*04(DP401)		SSO RT-PCR	
													SSO NGS	
5130	*03	*08	3*01	3*02	*04	*05	*02	*04			*04	*04	RT-PCR	
5214	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01	*01	*04(DP401)	*04(DP401)	SSO	
5219	*03	*08			*04	*05	*02	*04					SSO NGS	
5488			3*01	3*02									SSO NGS	
5642	*03(DR17)	*08	3*PRESENT		*04	*05	*02	*04						
6649	*03	*08					*02	*04					SSO	
8029	*03	*08			*04	*05	*02	*04					SSO NGS	
8038	*03(DR17)	*08	3*01	3*02	*04	*05	*02	*04	*01		*04(DP401)		SSO SBT	
8043	*03	*08	3*01	3*02	*04	*05	*02	*04					SSO NGS	
8068	*03	*08			*04	*05	*02	*04					SSO	
8123	*03(DR17)	*08	3*PRESENT		*04	*05	*02	*04	*01	*01	*04(DP401)	*04(DP401)	RT-PCR	

Table 3b: Individual laboratory results for B-cell #617 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	*01:03	*01:03	*04:01	*04:01	NGS	
														DRB3*01:62 DRB3*01:91 DRB3*02:133 DQB1*02:163N
747	*03:01:01	*08:77	3*01:01	3*02:02	*04:01:01	*05:01:01	*02:01	*04:02	*01:03:01	*01:03:01	*04:01:01	*04:01:01	SSP SSO NGS	DRB3*01:91 DRB3*02:133
762	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	*01:03		*04:01		NGS	DRB3*01:91 DRB3*02:133
771	*03:01	*08:77					*02:01	*04:02			*04:01	*04:01	SSP SSO SBT NGS	
														DRB3*01:91 DRB3*02:133 DRB1*03:147
792	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	*01:03	*01:03	*04:01	*04:01	SSO NGS	
793											*04:01	*04:01	SSP	
2344	*03:01:01G	*08:01:01G					*02:01:01G	*04:02:01G			*04:01:01G	*04:01:01G	NGS	
2400	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	NT	NT	*04:01:01G	*04:01:01G	SSO NGS	DQB1*02:163N
3135	*03:01P	*08:01P	3*01:01	3*02:02	*04:01	*05:01	*02:01P	*04:02P	*01:03		*04:01P			
3511	*03:01	*08:77	3*01:01	3*02:02P	*04:01	*05:01	*02:01	*04:02	*01:03		*04:01		NGS	
														DRB3*01:01 DRB3*02:02 DRB3*02:133 DPB1*04:01 DRB1*03:01 DRB1*03:147
3519	*03:01P	*08:77	3*01:01P	3*02:02P	*04:01	*05:01	*02:01	*04:02	*01:03		*04:01P		SSP NGS RT-PCR	
3966	*03:01	*08:01	3*01:01	3*02:02			*02:01	*04:02					SSO RT-PCR	
4251	*03:01:01G	*08:77	3*01:01:02G	3*02:02:01G	*04:01	*05:01	*02:01:01G	*04:02:01G	*01:03:01G	*01:03:01G	*04:01:01G	*04:01:01G	NGS	
4337	*03:01	*08:01					*02:01	*04:02			*04:01	*04:01	SSP SBT NGS	
													SSO NGS RT-PCR	DRB1*03:147
5130	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02			*04:01:01G	*04:01:01G		DRB3*01:91 DRB3*02:133
5133	*03:01:01	*08:77	3*01:01:02	3*02:02:01	*04:01:01	*05:01:01	*02:01:01	*04:02:01	*01:03:01		*04:01:01		NGS	
5219	*03:01:01	*08:01:01					*02:01:01	*04:02:01			*04:01:01	*04:01:01	SSO NGS	
5451	*03:01:01	*08:77	3*01:01	3*02:02P	*04:01:01	*05:01:01	*02:01:01	*04:02:01	*01:03:01		*04:01:01		SBT NGS	
														DRB3*01:91 DRB3*02:133
5462	*03:01	*08:77	3*01:01P	3*02:02P	*04:01	*05:01	*02:01	*04:02	*01:03		*04:01		NGS	
5488	*03:01:01	*08:77			*04:01:01	*05:01:01	*02:01:01	*04:02:01	*01:03:01		*04:01:01		SSO NGS	
5642	*03:173	*08:01			*04:01	*05:01	*02:01	*04:02						
														DRB3*01:91 DRB3*02:133 DRB1*08:105 DRB3*01:62 DPB1*939:01
8001	*03:01	*08:01	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	*01:03		*04:01		NGS	
8029	*03:01:01G	*08:77					*02:01:01G	*04:02:01G			*04:01:01G	*04:01:01G	SSO NGS	

Table 3b: Individual laboratory results for B-cell #617 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DRB3*02:10 DRB3*01:15 DRB3*02:21 DRB3*01:21 DRB3*01:28 DRB3*02:70 DRB3*01:30 DRB3*02:25 DRB3*01:32 DRB3*02:22:01 DRB3*01:36 DRB3*02:134 DRB3*01:67 DRB3*02:42 DRB3*01:76 DRB3*02:09 DRB3*01:09 DRB3*01:41 DRB3*01:56 DRB3*02:05:01 DRB3*01:75 DRB3*02:07 DQB1*02:01:27 DPB1*1226:01
8038	*03:01P	*08:01P	3*01:01P	3*02:02:01G	NT	NT	*02:01:01G	*04:02:01G	NT			*04:01:01G	SSO SBT	
8043	*03:01	*08:77	3*01:01:02G	3*02:02:01	*04:01	*05:01	*02:01	*04:02	*01:03			*04:01	SSO NGS	
8122	*03:01	*08:77	3*01:01	3*02:02	*04:01	*05:01	*02:01	*04:02	*01:03			*04:01	NGS	

Table 4: Individual laboratory results for B-cell #617 - Class I

	Low resolution						High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
725	*01	*26	*08	*41	*07	*17							SSO	
747	*01	*26	*08	*41	*07	*17	*01:01	*26:01:01	*08:01:01	*41:02:01	*07:01:01	*17:03:01	SSP SSO NGS	
762							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
													SSP SSO SBT	
771	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
792	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	SSO NGS	
793	*01	*26	*08	*41	*07	*17							SSP	
2344							*01:01	*26:01:01	*08:01:01	*41:02:01	*07:01:01	*17:03:01	NGS	
2400	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	SSO NGS	
2847	*01	*26	*08	*41	*07	*17							SSO	
3135							*01:01P	*26:01P	*08:01P	*41:02	07:01P	*17:01P		
3511							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
													SSP NGS	
3519	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	RT-PCR	
3753	*01	*26	*08	*41	*07	*17							SSO	
3966	*01	*26	*08	*41	*07	*17							SSO RT-PCR	
4079	*01	*26	*08	*41	*07	*17							SSO RT-PCR	
4251							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
4337							*01:01	*26:01	*08:01	*41:02	*07:01	*17:01	SSP SBT NGS	
													SSO NGS	
5130	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	RT-PCR	
5133							*01:01	*26:01:01:01	*08:01:01	*41:02:01:01	*07:01:01:01	*17:03:01:01	NGS	
5214	*01	*26	*08	*41	*07	*17							SSO	
5219	*01	*26	*08	*41	*07	*17	*01:01	*26:01:01	*08:01:01	*41:02:01	*07:01:01	*17:03:01	SSO NGS	
5451							*01:01	*26:01:01	*08:01:01	*41:02:01	*07:01:01	*17:03:01	SBT NGS	
5462							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
5488							*01:01	*26:01:01	*08:01:01	*41:02:01	*07:01:01	*17:03:01	SSO NGS	
5642	*01	*26	*08	*41	*07	*17								
6649	*01	*26	*08	*41									SSO	
8001							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
8029	*01	*26	*08	*41	*07	*17	*01:01	*26:01:01:01	*08:01:01	*41:02:01:01	*07:01:01	*17:03:01:01	SSO NGS	
														A*26:164 A*26:166Q A*26:167 A*26:187 A*26:163 C*07:848 C*07:877
8038	*01	*26	*08	*41	*07	*17	*01:01:01G	*26:01:01G	*08:01P	*41:02	*07:01:01G	*17:01P	SSO SBT	
8043	*01	*26	*08	*41	*07	*17	*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	SSO NGS	
8068	*01	*26	*08	*41	*07	*17							SSO	
8122							*01:01	*26:01	*08:01	*41:02	*07:01	*17:03	NGS	
8123	*01	*26	*08	*41	*07	*17							RT-PCR	

Table 5a: Individual laboratory results for B-cell #618 - Class II

Low resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
725	*07	*13	3*01	4*01	*01	*02	*02	*06					SSO	
747	*07	*13	3*03	4*01	*01	*02	*02	*06	*01	*01	*02	*04	SSP SSO NGS	
771	*07	*13			*01	*02	*02	*06					SSP SSO SBT NGS	
792	*07	*13	3*03	4*01	*01	*02	*02	*06	*01	*01	*02	*04	SSO NGS	
793	*07	*13	3*PRESENT	4*PRESENT	*01	*02	*02	*06	*01	*01	*02(DP201)	*04(DP401)	SSP	
2400	*07	*13	3*03	4*01	*01	*02	*02	*06	NT	NT	*02(DP201)	*04(DP401)	SSO NGS	
2847	*07	*13											SSO	
3519	*07	*13	3*03	4*01	*01	*02	*02	*06	*01		*02(DP201)	*04(DP401)	SSP NGS RT-PCR	
3753	*07	*13	3*03	4*01	*01	*02	*02	*06	*01		*02(DP201)	*04(DP401)	SSO	
3966													SSO RT-PCR	
4079	*07	*13	3*03	4*01	*01	*02	*02	*06	*01		*02(DP201)	*04(DP401)	SSO RT-PCR	
5130	*07	*13	3*03	4*01	*01	*02	*02	*06			*02	*04	SSO NGS RT-PCR	
5214	*07	*13	3*03	4*01	*01	*02	*02	*06	*01	*01	*02(DP201)	*04(DP401)	SSO	
5219	*07	*13			*01	*02	*02	*06					SSO NGS	
5488													SSO NGS	
5642	*07	*13	3*PRESENT	4*PRESENT	*01	*02	*02	*06						
6649	*07	*13					*02	*06					SSO	
8029	*07	*13			*01	*02	*02	*06					SSO NGS	
8038	*07	*13	3*03	4*01	*01	*02	*02	*06	*01		*02(DP201)	*04(DP401)	SSO SBT	
8043	*07	*13	3*03	4*01	*01	*02	*02	*06					SSO NGS	
8068	*07	*13			*01	*02	*02	*06					SSO	
8123	*07	*13	3*03	4*01	*01	*02	*02	*06	*01	*01	*02(DP201)	*04(DP401)	RT-PCR	

Table 5b: Individual laboratory results for B-cell #618 - Class II

	High resolution													
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
230	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03	*01:03	*02:01	*04:01	NGS	
747	*07:01:01	*13:36	3*03:01:01	4*01:01:01	*01:02:01	*02:01:01	*02:02:01	*06:09:01	*01:03:01	*01:03:01	*02:01:02	*04:01:01	SSP SSO NGS	DQB1*02:156
762	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	NGS	
													SSP SSO SBT	
771	*07:01	*13:36					*02:02	*06:09			*02:01	*04:01	NGS	
792	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03	*01:03	*02:01	*04:01	SSO NGS	
793											*02:01	*04:01	SSP	
2344	*07:01:01G	*13:36					*02:01:01G	*06:09:01G			*02:01:02G	*04:01:01G	NGS	
2400	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	NT	NT	*02:01:02G	*04:01:01G	SSO NGS	DQB1*02:156
3135	*07:01P	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:01P	*06:09P	*01:03		*02:01P	*04:01P		
3511	*07:01	*13:36	3*03:01	4*01:01P	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	NGS	
													SSP NGS	DRB1*07:01
3519	*07:01P	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01P	*04:01P	RT-PCR	DPB1*02:01
3966	*07:01	*13:36	3*03:01	4*01:01			*02:02	*06:09					SSO RT-PCR	DPB1*04:01
4251	*07:01:01G	*13:36	3*03:01:01G	4*01:01:01G	*01:02	*02:01	*02:01:01G	*06:09:01G	*01:03:01G	*01:03:01G	*02:01:02G	*04:01:01G	NGS	DRB4*01:03
4337	*07:01	*13:36					*02:02	*06:09			*02:01	*04:01	SSP SBT NGS	
													SSO NGS	
5130	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09			*02:01:02G	*04:01:01G	RT-PCR	
5133	*07:01:01	*13:36	3*03:01:01	4*01:01:01	*01:02:01	*02:01:01	*02:02:01	*06:09:01	*01:03:01		*02:01:02	*04:01:01	NGS	DRB4*03:01N
5219	*07:01:01	*13:36					*02:02:01	*06:09:01			*02:01:02	*04:01:01	SSO NGS	
5451	*07:01:01	*13:36	3*03:01:01	4*01:01P	*01:02:01	*02:01:01	*02:02:01	*06:09:01	*01:03:01		*02:01:02	*04:01:01	SBT NGS	
5462	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	NGS	
5488	*07:01:01	*13:36	3*03:01:01	4*01:01:01	*01:02:01	*02:01:01	*02:02:01	*06:09:01	*01:03:01		*02:01:02	*04:01:01	SSO NGS	
5642	*07:01	*13:36			*01:02	*02:01	*02:02	*06:09						
8001	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	NGS	DPB1*939:01
8029	*07:01:01G	*13:36					*02:01:01G	*06:09:01			*02:01:02G	*04:01:01G	SSO NGS	

Table 5b: Individual laboratory results for B-cell #618 - Class II

High resolution														
Center	DRB1		DRB3/4/5		DQA1		DQB1		DPA1		DPB1		METHOD	Other Alleles
														DQB1*02:02:06 DQB1*02:02:09 DQB1*02:110 DQB1*02:131 DQB1*02:156 DQB1*02:165 DQB1*02:175 DQB1*02:187 DQB1*02:199 DQB1*02:203 DQB1*06:88 DPB1*1226:01 DPB1*23:01:01 DPB1*81:01:01 DPB1*33:01:01 DPB1*665:01:01 DPB1*105:01 DPB1*1072:01 DPB1*51:01:01 DPB1*71:01:01 DPB1*642:01 DPB1*796:01
8038	*07:01P	*13:36	3*03:01P	4*01:01:01G	NT	NT	*02:02:01	*06:09P	NT		*02:01P	*04:01:01G	SSO SBT	
8043	*07:01	*13:36	3*03:01:01G	4*01:01:01G	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	SSO NGS	
8122	*07:01	*13:36	3*03:01	4*01:01	*01:02	*02:01	*02:02	*06:09	*01:03		*02:01	*04:01	NGS	

Table 6: Individual laboratory results for B-cell #618 - Class I

Low resolution							High resolution							
Center	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C		METHOD	Other Alleles
230							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
725	*23	*32	*41	*44	*04	*17							SSO	
747	*23	*32	*41	*44	*04	*17	*23:01:01	*32:01:01	*41:02:01	*44:03:01	*04:01:01	*17:03:01	SSP SSO NGS	
762							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
771	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	SSP SSO SBT NGS	
792	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	SSO NGS	
793	*23	*32	*41	*44	*04	*17							SSP	
2344							*23:01:01	*32:01:01	*41:02:01	*44:03:01	*04:01:01	*17:03:01	NGS	
2400	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	SSO NGS	
2847	*23	*32	*41	*44	*04	*17							SSO	
3135							*23:01P	*32:01P	*41:02	*44:03P	*04:01:01G	*17:01P		
3511							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
3519	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	SSP NGS RT-PCR	
3753	*23	*32	*41	*44	*04	*17							SSO	
3966	*23	*32	*41	*44	*04	*17							SSO RT-PCR	
4079	*23	*32	*41	*44	*04	*17							SSO RT-PCR	
4251							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
4337							*23:01	*32:01	*41:02	*44:03	*04:01	*17:01	SSP SBT NGS	
													SSO NGS	
5130	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	RT-PCR	
5133							*23:01:01:01	*32:01:01:01	*41:02:01:01	*44:03:01	*04:01:01	*17:03:01	NGS	
5214	*23	*32	*41	*44	*04	*17							SSO	
5219	*23	*32	*41	*44	*04	*17	*23:01:01	*32:01:01	*41:02:01	*44:03:01	*04:01:01	*17:03:01	SSO NGS	
5451							*23:01:01	*32:01:01	*41:02:01	*44:03:01	*04:01:01	*17:03:01	SBT NGS	
5462							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
5488							*23:01:01	*32:01:01	*41:02:01	*44:03:01	*04:01:01	*17:03:01	SSO NGS	
5642	*23	*32	*41	*44	*04	*17								
6649	*23	*32	*41	*44									SSO	
8001							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
8029	*23	*32	*41	*44	*04	*17	*23:01:01:01	*32:01:01	*41:02:01:01	*44:03:01	*04:01:01	*17:03:01	SSO NGS	
8038	*23	*32	*41	*44	*04	*17	*23:01P	*32:01:01G	*41:02	*44:03P	*04:01P	*17:01P	SSO SBT	C*04:01:110 C*04:423
8043	*23	*32	*41	*44	*04	*17	*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	SSO NGS	
8068	*23	*32	*41	*44	*04	*17							SSO	
8122							*23:01	*32:01	*41:02	*44:03	*04:01	*17:03	NGS	
8123	*23	*32	*41	*44	*04	*17							RT-PCR	