

CELL EXCHANGE #409

APRIL 8, 2019

Cells	1633-1636
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The results for Cell Exchange #409 are summarized in Table 7 and Table 8. Molecular typing results for individual laboratories are listed in Tables 9 -12 for each sample and individual serological results for each sample are listed

in Table 13. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

Cell 1633. The reported consensus type for this cell from a Caucasian donor is A*03:01(A3)-A*30:02(A30)-B*18:01(B18)-B*37:01(B37)-C*05:01-C*06:02. Likely associations present in this cell are A*03:01-B*37:01-C*06:02 and A*30:02-B*18:01-C*05:01, observed in Caucasians, with respected HF = 0.00126 and 0.00564. A*03:01, A*30:02, B*18:01, B*37:01, C*05:01, and C*06:02 were each reported in complete consensus by labs reporting at high resolution. A*03:01:01:01, A*30:02:01:01, B*18:01:01, C*05:01:01:01, and C*06:02:01:01 were each reported by 4 labs. Five labs assigned B*37:01:01. Serological assignments were also reported in complete consensus, with labs reporting A3, A30, B37, and B18.

Cell 1634. The reported consensus type for this sample from a Caucasian donor is A*03:01(A3)-A*69:01(A69)-B*38:01(B38)-B*55:01(B55)-C*03:03-C*12:03. Likely associations present in this cell are A*03:01-B*38:01-C*12:03 and A*69:01-B*55:01-C*03:03, with respective HF = 0.00197 and 0.00013, in Caucasians. This cell is the HLA identical sibling of cell 1523 (2014). As with the sibling, labs were in agreement in the assignment of A3 (100%), A69 (80%), B38 (100%), and B55 (90%). Good agreement was also observed among molecular labs, as 100% assigned A*03:01, A*69:01, B*38:01, B*55:01, C*03:03, and C*12:03. A*03:01:01:03, B*55:01:01, C*03:03:01, and C*12:03:01:01, were each assigned by 4 labs, and A*69:01:01:01 and B*38:01:01 were each assigned by 5 labs.

Cell 1635. The reported consensus type for this cell from a donor of mixed African American, Caucasian, and Native American heritage is A*23:01(A23)-A*29:02(A29)-B*44:03(B44)-B*45:01(B44)-C*06:02-C*16:01. One likely association present in this cell is A*23:01-B*45:01-C*06:02. Observed across all populations, the association is most common in African Americans, with HF = 0.00638. The other likely association present is A*29:02-B*44:03-C*16:01, observed most commonly in Hispanics, with HF = 0.02457. A*23:01, A*29:02, B*44:03, B*45:01, C*06:02, and C*16:01 were each reported in complete consensus. Four labs assigned A*23:01:01, A*29:02:01, B*44:03:01, and 3 labs assigned B*45:01:01, C*06:02:01:03, and C*16:01:01:01. Good agreement was also achieved among serology labs, with 100% of labs assigning A23, A29, B44, and B45.

Cell 1636. The reported consensus type for this sample from a Caucasian donor is A*11:01(A11)-A*30:02(A30)-B*18:01(B18)-B*35:01(B35)-C*04:01-C*05:01. Likely associations present in this cell are A*11:01-B*35:01-C*04:01 and A*30:02-B*18:01-C*05:01, with respective HF = 0.01645 and 0.00564, in Caucasians. A*11:01, A*30:02, B*18:01, B*35:01, C*04:01, and C*05:01 were each reported by 100% of labs reported at high resolution. A*11:01:01:01, A*30:02:01:01, B*18:01:01, B*35:01:01, and C*04:01:01 were each reported by 3 labs. Good agreement was also achieved by serology, with labs reporting A11, A30, B18, and B35 in complete consensus.

NEXT MAILING DATE: May 8, 2019

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Table 7. Summary of the 409th Cell Exchange (Cell #1633-1636)

DNA typing

Cell 1633	
17 low/13 high labs - A	%(n)
A*03:01:01:01	31(4)
A*03:01:01G	15(2)
A*03:01	54(7)
A*03	100(17)
17 low/13 high labs - A	%(n)
A*30:02:01:01	31(4)
A*30:02:01G	8 (1)
A*30:02	61(8)
A*30	100(17)
17 low/13 high labs - B	%(n)
B*18:01:01	31(4)
B*18:01:01G	15(2)
B*18:01	54(7)
B*18	100(17)
17 low/13 high labs - B	%(n)
B*37:01:01	38(5)
B*37:01:01G	8 (1)
B*37:01P	8 (1)
B*37:01	46(6)
B*37	100(17)
16 low/13 high Labs - C	%(n)
C*05:01:01:01	31(4)
C*05:01:01G	15(2)
C*05:01	54(7)
C*05	100(16)
16 low/13 high Labs - C	%(n)
C*06:02:01:01	31(4)
C*06:02:01G	15(2)
C*06:02	54(7)
C*06	100(16)

Cell 1634	
17 low/13 high labs - A	%(n)
A*03:01:01:03	31(4)
A*03:01:01G	15(2)
A*03:01	54(7)
A*03	100(17)
17 low/13 high labs - A	%(n)
A*69:01:01:01	38(5)
A*69:01	62(8)
A*69	100(17)
17 low/13 high labs - B	%(n)
B*38:01:01:01	23(3)
B*38:01:01	15(2)
B*38:01	62(8)
B*38	100(17)
17 low/13 high labs - B	%(n)
B*55:01:01	31(4)
B*55:01:01G	15(2)
B*55:01	54(7)
B*55	100(17)
16 low/14 high Labs - C	%(n)
C*03:03:01:01	7 (1)
C*03:03:01	21(3)
C*03:03:01G	7 (1)
C*03:03	64(9)
C*03(Cw9)	13(2)
C*03	87(14)
16 low/13 high Labs - C	%(n)
C*12:03:01:01	31(4)
C*12:03:01G	8 (1)
C*12:03	61(8)
C*12	100(16)

Cell 1635	
15 low/11 high labs - A	%(n)
A*23:01:01	36(4)
A*23:01:01G	9 (1)
A*23:01	55(6)
A*23	100(15)
15 low/11 high labs - A	%(n)
A*29:02:01:01	27(3)
A*29:02:01	9 (1)
A*29:02:01G	9 (1)
A*29:02	55(6)
A*29	100(15)
15 low/12 high labs - B	%(n)
B*44:03:01:01	17(2)
B*44:03:01	17(2)
B*44:03	66(8)
B*44	100(15)
15 low/12 high labs - B	%(n)
B*45:01:01	25(3)
B*45:01:01G	17(2)
B*45:01	58(7)
B*45	100(15)
14 low/11 high Labs - C	%(n)
C*06:02:01:03	27(3)
C*06:02:01G	18(2)
C*06:02	55(6)
C*06	100(14)
14 low/11 high Labs - C	%(n)
C*16:01:01:01	27(3)
C*16:01:01G	18(2)
C*16:01	55(6)
C*16	100(14)

Cell 1636	
15 low/11 high labs - A	%(n)
A*11:01:01:01	27(3)
A*11:01:01G	18(2)
A*11:01	55(6)
A*11	100(15)
15 low/11 high labs - A	%(n)
A*30:02:01:01	27(3)
A*30:02:01	9 (1)
A*30:02	64(7)
A*30	100(15)
15 low/12 high labs - B	%(n)
B*18:01:01:01	17(2)
B*18:01:01	8 (1)
B*18:01:01G	8 (1)
B*18:01	67(8)
B*18	100(15)
15 low/12 high labs - B	%(n)
B*35:01:01:05	17(2)
B*35:01:01	8 (1)
B*35:01:01G	8 (1)
B*35:01	67(8)
B*35	100(15)
14 low/11 high labs - C	%(n)
C*04:01:01:05	18(2)
C*04:01:01	9 (1)
C*04:01P	9 (1)
C*04:01	64(11)
C*04	100(14)
14 low/11 high labs - C	%(n)
C*05:01:05	18(2)
C*05:01:01	9 (1)
C*05:01:01G	9 (1)
C*05:01	64(7)
C*05	100(14)

Table 8. Summary of the 409th Cell Exchange (Cell #1633 - 1636)

Serological typing							
(Caucasian) Cell 1633		(Caucasian) Cell 1634		(Mixed) Cell 1635		(Caucasian) Cell 1636	
(10 Samples Typed)		(10 Samples Typed)		(8 Samples Typed)		(8 Samples Typed)	
A3	100.0%	A3	100.0%	A23	100.0%	A11	87.5%
						A11.1	12.5%
A30	100.0%	A69	80.0%	A29	100.0%		[100.0%]
		A28	20.0%			A30	100.0%
			[100.0%]	B44	100.0%		
B37	100.0%					B18	100.0%
		B38	100.0%	B45	100.0%		
B18	100.0%					B35	100.0%
		B55	90.0%				
Cw5	40.0%	B22	10.0%	Cw6	37.5%		
			[100.0%]			Cw4	50.0%
Cw6	40.0%			Bw4	100.0%		
		Cw3	50.0%			Cw5	37.5%
Bw4	100.0%			Bw6	100.0%		
		Cw12	10.0%			Bw6	100.0%
Bw6	100.0%						
		Bw4	100.0%				
		Bw6	100.0%				
Others Found		Others Found		Others Found		Others Found	
A29	10.0%	A2	10.0%	B41	12.5%	Cw8	12.5%
B44	10.0%	Cw6	10.0%			A29	12.5%
Cw3	10.0%						

Table 9. Individual laboratory results for Cell #1633

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02		
725	*03	*30	*18	*37	*05	*06							SSO	
731	*03	*30	*18	*37	*05	*06	*03:01:01G	*30:02:01G	*18:01:01G	*37:01:01	*05:01:01G	*06:02:01G	SSP SSO SBT	
745							*03:01:01:01	*30:02:01:01	*18:01:01	*37:01:01	*05:01:01:01	*06:02:01:01	SSP SBT NGS	
747	*03	*30	*18	*37	*05	*06	*03:01:01:01	*30:02:01:01	*18:01:01	*37:01:01	*05:01:01:01	*06:02:01:01	SSP SSO NGS	
762							*03:01:01:01	*30:02:01:01	*18:01:01	*37:01:01	*05:01:01:01	*06:02:01:01	SSO NGS	
771	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02	SSO SBT	
774	*03	*30	*18	*37	*05	*06							SSP	
3186	*03	*30	*18	*37	*05	*06							SSO	
														B*18:17N B*18:131 A*03:291 A*03:292 A*03:293 A*03:301 B*18:144 B*18:145 B*37:68 C*05:145 C*05:153N C*06:213 C*06:214 C*06:83
3545	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02	SSP SSO SBT	
3632	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02	SSP SSO	
3808	*03	*30	*18	*37	*05	*06							SSP	
4079	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02	SSP SSO	A*03:154
4251	*03	*30	*18	*37	*05	*06	*03:01:01G	*30:02	*18:01:01G	*37:01:01G	*05:01:01G	*06:02:01G	SSO SBT	
5133							*03:01:01:01	*30:02:01:01	*18:01:01	*37:01:01	*05:01:01:01	*06:02:01:01	NGS	
5214	*03	*30	*18	*37	*05	*06							SSO	
5462	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01P	*05:01	*06:02	SSO NGS	B*37:68
6649	*03	*30	*18	*37									SSO	
8001	*03	*30	*18	*37	*05	*06							SSO	
8043	*03	*30	*18	*37	*05	*06	*03:01	*30:02	*18:01	*37:01	*05:01	*06:02	SSP SSO	

Table 10. Individual laboratory results for Cell #1634

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03		
725	*03	*69	*38	*55	*03	*12							SSO	
731	*03	*69	*38	*55	*03	*12	*03:01:01G	*69:01:01:01	*38:01:01	*55:01:01G	*03:03	*12:03	SSP SSO SBT	
745							*03:01:01:03	*69:01:01:01	*38:01:01:01	*55:01:01	*03:03:01	*12:03:01:01	SSP SBT NGS	
747	*03	*69	*38	*55	*03	*12	*03:01:01:03	*69:01:01:01	*38:01:01	*55:01:01	*03:03:01:01	*12:03:01:01	SSP SSO NGS	
762							*03:01:01:03	*69:01:01:01	*38:01:01:01	*55:01:01	*03:03:01	*12:03:01:01	SSO NGS	
771	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSO SBT	
774	*03	*69	*38	*55	*03	*12							SSP	
3186	*03	*69	*38	*55	*03	*12							SSO	
														C*12:167 C*12:220 A*03:291 A*03:292 A*03:293 A*03:301 B*55:85 C*03:357 C*03:372 C*03:383 C*12:143 C*03:20N C*03:227 C*03:341
3545	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSP SSO SBT	
3632	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSP SSO	
3808	*03	*69	*38	*55	*03	*12					*03:03		SSP	
4079	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSP SSO	A*03:154
4251	*03	*69	*38	*55	*03	*12	*03:01:01G	*69:01	*38:01	*55:01:01G	*03:03:01G	*12:03:01G	SSO SBT	
5133							*03:01:01:03	*69:01:01:01	*38:01:01:01	*55:01:01	*03:03:01	*12:03:01:01	NGS	
5214	*03	*69	*38	*55	*03 (Cw9)	*12							SSO	
5462	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSO NGS	
6649	*03	*69	*38	*55									SSO	
8001	*03	*69	*38	*55	*03 (Cw9)	*12							SSO	
8043	*03	*69	*38	*55	*03	*12	*03:01	*69:01	*38:01	*55:01	*03:03	*12:03	SSP SSO	

Table 11. Individual laboratory results for Cell #1635

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01		
725	*23	*29	*44	*45	*06	*16							SSO	
731	*23	*29	*44	*45	*06	*16	*23:01:01	*29:02:01	*44:03:01	*45:01:01G	*06:02:01G	*16:01:01G	SSP SSO SBT	
745							*23:01:01	*29:02:01:01	*44:03:01	*45:01:01	*06:02:01:03	*16:01:01:01	SSP SBT NGS	
747	NT													
762							*23:01:01	*29:02:01:01	*44:03:01:01	*45:01:01	*06:02:01:03	*16:01:01:01	SSO NGS	
771	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01	SSO SBT	
774	*23	*29	*44	*45	*06	*16							SSP	
3186	*23	*29	*44	*45	*06	*16							SSO	
														B*45:19 C*06:213 C*06:214 C*16:118 C*06:83 C*16:111 C*16:112 A*23:17 A*29:95 A*29:100
3545	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01	SSP SSO SBT	
3632	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01	SSP SSO	
3808	*23	*29	*44	*45	*06	*16			*44:03	*45:01			SSP	
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
4251	*23	*29	*44	*45	*06	*16	*23:01:01G	*29:02:01G	*44:03	*45:01:01G	*06:02:01G	*16:01:01G	SSO SBT	
5133							*23:01:01	*29:02:01:01	*44:03:01:01	*45:01:01	*06:02:01:03	*16:01:01:01	NGS	
5214	*23	*29	*44	*45	*06	*16							SSO	
5462	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01	SSO NGS	
6649	*23	*29	*44	*45									SSO	
8001	*23	*29	*44	*45	*06	*16							SSO	
8043	*23	*29	*44	*45	*06	*16	*23:01	*29:02	*44:03	*45:01	*06:02	*16:01	SSP SSO	

Table 12. Individual laboratory results for Cell #1636

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01		
725	*11	*30	*18	*35	*04	*05							SSO	
731	*11	*30	*18	*35	*04	*05	*11:01:01G	*30:02:01	*18:01	*35:01	*04:01	*05:01	SSP SSO SBT	
745							*11:01:01:01	*30:02:01:01	*18:01:01	*35:01:01	*04:01:01	*05:01:05	SSP SBT NGS	
747													SSP SSO NGS	
762							*11:01:01:01	*30:02:01:01	*18:01:01:01	*35:01:01:05	*04:01:01:05	*05:01:01	SSO NGS	
771	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01	SSO SBT	
774	*11	*30	*18	*35	*04	*05							SSP	
3186	*11	*30	*18	*35	*04	*05							SSO	
														A*11:270 A*11:278 A*11:280 B*18:144 B*18:145 A*11:263 B*18:17N C*04:82 C*04:226 C*04:275 C*04:277 B*35:347 B*35:365 B*35:370 B*18:131 B*35:42 B*35:332 C*04:30
3545	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01	SSP SSO SBT	
3632	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01	SSP SSO	
3808	*11	*30	*18	*35	*04	*05			*18:01	*35:01			SSP	B*18:17N B*35:42
4079	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP SSO	
4251	*11	*30	*18	*35	*04	*05	*11:01:01G	*30:02	*18:01:01G	*35:01:01G	*04:01P	*05:01:01G	SSO SBT	
5133							*11:01:01:01	*30:02:01:01	*18:01:01:01	*35:01:01:05	*04:01:01:05	*05:01:05	NGS	
5214	*11	*30	*18	*35	*04	*05							SSO	
5462	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01	SSO NGS	
6649	*11	*30	*18	*35									SSO	
8001	*11	*30	*18	*35	*04	*05							SSO	
8043	*11	*30	*18	*35	*04	*05	*11:01	*30:02	*18:01	*35:01	*04:01	*05:01	SSP SSO	

Table 13. Individual laboratory results for Cell #1633-1636 by serology

Investigator	Days Old	Cell No 1633 (Caucasian)										Cell No 1634 (Caucasian)								Cell No 1635 (Mixed)								Cell No 1636 (Caucasian)									
		Viab %	A3	A30	B37	B18	Cw5	Cw6	Bw4	Bw6	OTHERS	Viab %	A3	A69	B38	B55	Cw3	Bw4	Bw6	OTHERS	Viab %	A23	A29	B44	B45	Cw6	Bw4	Bw6	OTHERS	Viab %	A11	A30	B18	B35	Cw4	Cw5	Bw6
Cecka, J. Mi	2	>95	+	+	+	+			+	+		>95	+	+	+	+		+	+		>95	+	+	+	+		+	+		>95	+	+	+	+		+	
D'Orsogna,		90	+	+	+	+	+		+	+		90	+	+	+	+		+	+		90	+	+	+	+		+	+		60	+	+	+	+		+	
Fort, Marylis	3	97	+	+	+	+			+	+		98	+	+	+	+		+	+		NT								NT								
Latham, Kat	3	90	+	+	+	+			+	+		100	+	+	+	+		+	+		100	+	+	+	+		+	+		100	+	+	+	+		+	
Loewenthal,		80	+	+	+	+	+	+	+	+		80	+	+	+	+	+	+	+		75	+	+	+	+	+	+	+		80	+	+	+	+	+	+	
Permpikul, V	6	90	+	+	+	+			+	+		90	+	+	+	+		+	+		90	+	+	+	+		+	+		90	A11.1	+	+	+		+	
Shai, Isaac	10	90	+	+	+	+	+	+	+	+	B44,A29, Cw3	88	+	A28	+	B22	+	+	+	Cw6,A2	90	+	+	+	+	+	+	+	B41	90	+	+	+	+	+	+	A29,Cw8
Tabata, Luca		NT										NT									NT								NT								
Varnavidou,	7	98	+	+	+	+			+	+		98	+	+	+	+		+	+		98	+	+	+	+		+	+		98	+	+	+	+		+	
Vidan-Jeras,	7	95	+	+	+	+			+	+		95	+	+	+	+	+	+	+		100	+	+	+	+		+	+		95	+	+	+	+	+	+	
Villard, Jean		85	+	+	+	+	+	+	+	+		85	+	A28	+	+	+	+	+	Cw12																	