

CELL EXCHANGE #404

MAY 9, 2018

Cells	1613-1616
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The results for Cell Exchange #404 are summarized in Table 9 and Table 10. Molecular typing results for individual laboratories are listed in Tables 11-14 for each sample and individual serology results for each sample are listed

in Table 15. The haplotype frequencies used in this report are from the NMDP Bioinformatics website, <https://bioinformatics.bethematchclinical.org/>.

Cell 1613. The reported consensus type for this sample from a Hispanic donor is A*02:06(A2)-A*68:02(A68)-B*35:17(B35)-B*53:01(B53)-C*04:01(Cw4). This sample was previously typed in the exchange as cells 1477 (2012), 1199 (2004), and 1175 (2003). It is the sibling of cell 1614 also examined in this study. Data from family studies reveal the haplotypes in this sample to be A*68:02-B*53:01-C*04:01 and A*02:06-B*35:17-C*04:01. In this present retyping, A*02:06, A*68:02, B*35:17, B*53:01, and C*04:01 were each assigned in completed consensus, with 4 labs assigning A*02:06:01:01, A*68:02:01:01, and C*04:01:01. B*35:17:01 and B*53:01:01 were assigned by 5 labs. A2 (100%), A68 (79%), B35 (100%), B53 (93%), and Cw4 (43%), were reported as the serological types.

Cell 1614. The reported consensus type for this sample from a Hispanic donor is A*68:01(A68)-A*68:02-B*48:01(B48)-B*53:01(B53)-C*04:01(Cw4)-C*08:01(Cw8). As the sibling of cell 1613, the haplotypes in this cell are determined to be A*68:02-B*53:01-C*04:01 and A*68:01-B*48:01-C*08:01. Two subtypes of A68 were detected in this cell, A*68:01 (100%) and A*68:02 (100%). A*68:01:02:01 and A*68:02:01:01 were each assigned by 4 labs. B*48:01, B*53:01, C*04:01, and C*08:01 were also reported in complete consensus, with 5 labs reporting B*48:01:01 and B*53:01:01. C*04:01:01 and C*08:01:01 were each reported by 4 labs. A68 (69%), B48 (100%), B53 (100%), Cw4 (39%), and Cw8 (39%) were the reported serological types.

Cell 1615. The reported consensus type for this sample from a Hispanic donor is A*26:01(A26)-A*31:01(A31)-B*15:09(B70)-B*35:17(B35)-C*04:01(Cw4)-C*07:04(Cw7). Likely associations present in this cell are B*35:17-C*04:01 and B*15:09-C*07:04, with respective HF=0.01631 and 0.00025. The B*15:09-C*07:04 association in this cell was observed in another B*15:09 exchange cell, extract 186 (same as extract 82). A*26:01, A*31:01, B*15:09, B*35:17, C*04:01, and C*07:04 were each assigned in complete consensus, with 3 labs assigning A*26:01:01:01, A*31:01:02:01, and B*15:09:01. B*35:17:01, C*04:01:01, and C*07:04:01 were each reported by 4 labs. A26 (92%), A31 (100%), B70 (62%), B35 (100%), Cw4 (39%), and Cw7 (39%) were the reported serological types.

Cell 1616. The reported consensus type for this sample from a Chinese donor is A*02:06(A2)-A*02:07-B*15:27(B62)-B*46:01(B46)-C*01:02(Cw1)-C*04:01(Cw4). Likely associations present in this cell are A*02:06-B*15:27-C*04:01 and A*02:07-B*46:01-C*01:02, with respective HF=0.00057 and 0.03251. Two subtypes of A*02 were detected in this cell, A*02:06 (92%) and A*02:07 (100%). A*02:06:01:01 and A*02:07:01 were each assigned by 3 labs. B*15:27, B*46:01, C*01:02, and C*04:01 were also assigned in complete consensus, with 4 labs assigning B*15:27:01, B*46:01:01, and C*04:01:01. C*01:02:01 was assigned by 5 labs. A2 (100%), B62 (85%), B46 (77%), Cw1 (31%), and Cw4 (39%) were the reported serological types.

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

Table 9. Summary of the 404th Cell Exchange (Cell #1613-1616)

DNA typing

Cell 1613	
20 low/14 high labs - A	%(n)
A*02:06:01:01	29(4)
A*02:06:01G	7 (1)
A*02:06	64(9)
A*02	100(20)
20 low/14 high labs - A	%(n)
A*68:02:01:01	29(4)
A*68:02:01G	14(2)
A*68:02	57(8)
A*68	100(20)
20 low/15 high labs - B	%(n)
B*35:17:01	36(5)
B*35:17	67(10)
B*35	100(20)
B*35	100(20)
20 low/15 high labs - B	%(n)
B*53:01:01	33(5)
B*53:01	67(10)
B*53	100(20)
18 low/14 high Labs - C	%(n)
C*04:01:01:01	14(2)
C*04:01:01	14(2)
C*04:01:01G	7 (1)
C*04:01P	7 (1)
C*04:01	57(8)
C*04	100(18)

Cell 1614	
20 low/14 high labs - A	%(n)
A*68:01:02:01	29(4)
A*68:01:02G	7 (1)
A*68:01P	7 (1)
A*68:01	57(8)
A*68	100(20)
14 high labs - A	%(n)
A*68:02:01:01	29(4)
A*68:02:01G	14(2)
A*68:02	57(8)
20 low/15 high labs - B	%(n)
B*48:01:01:01	7 (1)
B*48:01:01	29(4)
B*48:01	48(10)
B*48	100(20)
20 low/15 high labs - B	%(n)
B*53:01:01	33(5)
B*53:01	67(10)
B*53	100(20)
18 low/14 high Labs - C	%(n)
C*04:01:01:01	14(2)
C*04:01:01	14(2)
C*04:01:01G	7 (1)
C*04:01P	7 (1)
C*04:01	57(8)
C*04	100(18)
18 low/14 high Labs - C	%(n)
C*08:01:01:01	14(2)
C*08:01:01	14(2)
C*08:01:01G	14(2)
C*08:01	57(8)
C*08	100(18)

Cell 1615	
19 low/13 high labs - A	%(n)
A*26:01:01:01	23(3)
A*26:01:01G	15(2)
A*26:01	62(8)
A*26	100(19)
19 low/13 high labs - A	%(n)
A*31:01:02:01	23(3)
A*31:01:02	8 (1)
A*31:01:02G	8 (1)
A*31:01	61(8)
A*31	100(19)
19 low/16 high labs -B	%(n)
B*15:09:01	19(3)
B*15:09	81(13)
B*15(B70)	26(3)
B*15	84(16)
17 low/14 high labs -B	%(n)
B*35:17:01	29(4)
B*35:17	71(10)
B*35	100(19)
19 low/13 high Labs - C	%(n)
C*04:01:01:01	8 (1)
C*04:01:01	15(2)
C*04:01:01G	8 (1)
C*04:01P	8 (1)
C*04:01	61(8)
C*04	100(17)
17 low/13 high Labs - C	%(n)
C*07:04:01:01	8 (1)
C*07:04:01	15(2)
C*07:04:01G	8 (1)
C*07:04	69(9)
C*07	100(17)

Cell 1616	
19 low/12 high labs - A	%(n)
A*02:06:01:01	25(3)
A*02:06:01G	8 (1)
A*02:06	58(7)
A*02:01	8 (1)
A*02	100(19)
12 high labs - A	%(n)
A*02:07:01	25(3)
A*02:07:01G	8 (1)
A*02:07	67(8)
19 low/16 high labs - B	%(n)
B*15:27:01	25(4)
B*15:27	75(12)
B*15(B62)	26(3)
B*15	84(16)
19 low/13 high labs - B	%(n)
B*46:01:01	31(4)
B*46:01	69(9)
B*46	100(19)
17 low/13 high labs - C	%(n)
C*01:02:01	23(3)
C*01:02:01G	15(2)
C*01:02	61(8)
C*01	100(17)
17 low/13 high labs - C	%(n)
C*04:01:01:01	8 (1)
C*04:01:01	15(2)
C*04:01:01G	8 (1)
C*04:01P	8 (1)
C*04:01	61(8)
C*04	100(17)

Table 10. Summary of the 404th Cell Exchange (Cell #1613 - 1616)

Serological typing

(Hispanic) Cell 1613 (14 Samples Typed)	
A2	100.0%
	[100.0%]
A68	78.6%
A28	21.4%
	[100.0%]
B35	100.0%
B53	92.9%
Cw4	42.9%
	[42.9%]
Bw4	71.4%
Bw6	71.4%
Others Found	
B5	14.3%
Cw5	7.1%

(Hispanic) Cell 1614 (13 Samples Typed)	
A68	69.2%
A28	30.8%
	[100.0%]
B48	100.0%
B53	100.0%
Cw4	38.5%
	[38.5%]
Cw8	38.5%
Bw4	69.2%
Bw6	69.2%
Others Found	
A2	7.7%

(Hispanic) Cell 1615 (13 Samples Typed)	
A26	92.30%
A10	7.70%
	[100.0%]
A31	100.00%
	[100.0%]
B70	46.20%
B71	15.40%
	[61.5%]
B35	100.00%
Cw4	38.50%
	[38.5%]
Cw7	38.50%
Bw6	69.20%
Others Found	
B15	23.10%

(Chinese) Cell 1616 (13 Samples Typed)	
A2	100.0%
	[100.0%]
B62	84.6%
B15	15.4%
	[100.0%]
B46	76.9%
Cw1	30.8%
Cw4	38.5%
	[38.5%]
Bw6	69.2%
Others Found	
Cw3	15.4%
B70	7.7%
B75	7.7%
A68	7.7%

Table 11. Individual laboratory results for Cell #1613

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*68	*35	*53	*04	*04	*02:06	*68:02	*35:17	*53:01	*04:01	*04:01		
725	*02	*68	*35	*53	*04								SSO	
731	*02	*68	*35	*53	*04		*02:06:01G	*68:02:01G	*35:17:01	*53:01:01	*04:01:01G		SSP SSO SBT	A*02:06:07 A*68:02:07
745							*02:06:01:01	*68:02:01:01	*35:17:01	*53:01:01	*04:01:01		SSP SBT NGS	
747	*02	*68	*35	*53	*04	*04	*02:06:01:01	*68:02:01:01	*35:17:01	*53:01:01	*04:01:01:01	*04:01:01:01	SSP SSO NGS	
762							*02:06:01:01	*68:02:01:01	*35:17:01	*53:01:01	*04:01:01:01		NGS	
771	*02	*68	*35	*53	*04								SSO	
774	*02	*68	*35	*53	*04				*35:17	*53:01			SSP SSO	B*53:32 B*53:37
779	*02	*68	*35	*53	*04								SSP SSO	
3186	*02	*68	*35	*53	*04	*04							SSO	
3545	*02	*68	*35	*53	*04		*02:06	*68:02	*35:17	*53:01	*04:01		SSP SSO SBT	A*68:163 C*04:275 C*04:30 C*04:82 C*04:226
3625	*02	*68	*35	*53	*04	*04	*02:06	*68:02	*35:17	*53:01	*04:01	*04:01	SSO SBT	A*68:163 C*04:226
3632	*02	*68	*35	*53	*04		*02:06	*68:02	*35:17	*53:01	*04:01		SSP SSO	
3766	*02	*68	*35	*53									SSO	
3808	*02	*68	*35	*53	*04									
4079	*02	*68	*35	*53	*04		*02:06	*68:02	*35:17	*53:01	*04:01		SSP SSO	C*04:221
4251	*02	*68	*35	*53	*04	*04	*02:06	*68:02:01G	*35:17	*53:01	*04:01P	*04:01P	SSO SBT	
5133							*02:06:01:01	*68:02:01:01	*35:17:01	*53:01:01	*04:01:01		NGS	
5214	*02	*68	*35	*53	*04								RT-PCR	
5462	*02	*68	*35	*53	*04		*02:06	*68:02	*35:17	*53:01	*04:01		SSP SSO NGS	
6649	*02	*68	*35	*53									SSP	
8001	*02	*68	*35	*53	*04								SSO	
8043	*02	*68	*35	*53	*04		*02:06	*68:02	*35:17	*53:01	*04:01		SSP SSO	
8070							*02:06	*68:02	*35:17	*53:01	*04:01		SBT	

Table 12. Individual laboratory results for Cell #1614

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01		
725	*68		*48	*53	*04	*08							SSO	
731	*68	*68	*48	*53	*04	*08	*68:01:02G	*68:02:01G	*48:01:01	*53:01:01	*04:01:01G	*08:01:01G	SSP SSO SBT	C*04:04:01
745							*68:01:02:01	*68:02:01:01	*48:01:01	*53:01:01	*04:01:01	*08:01:01:01	SSP SBT NGS	
747	*68	*68	*48	*53	*04	*08	*68:01:02:01	*68:02:01:01	*48:01:01	*53:01:01	*04:01:01:01	*08:01:01	SSP SSO NGS	
762							*68:01:02:01	*68:02:01:01	*48:01:01	*53:01:01	*04:01:01:01	*08:01:01	NGS	
771	*68		*48	*53	*04	*08							SSO	
774	*68		*48	*53	*04	*08			*48:01	*53:01			SSP SSO	B*48:35 B*53:32
779	*68	*68	*48	*53	*04	*08							SSP SSO	
3186	*68	*68	*48	*53	*04	*08							SSO	
3545	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSP SSO SBT	C*08:22 C*04:30
3625	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSO SBT	A*68:163 C*04:226 A*68:11N A*68:152
3632	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSP SSO	
3766	*68	*68	*48	*53									SSO	
3808	*68		*48	*53	*04	*08								
4079	*68		*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSP SSO	C*04:221
4251	*68	*68	*48	*53	*04	*08	*68:01P	*68:02:01G	*48:01	*53:01	*04:01P	*08:01:01G	SSO SBT	
5133							*68:01:02:01	*68:02:01:01	*48:01:01:01	*53:01:01	*04:01:01	*08:01:01:01	NGS	
5214	*68		*48	*53	*04	*08							RT-PCR	
5462	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSP SSO NGS	
6649	*68		*48	*53									SSP	
8001	*68		*48	*53	*04	*08							SSO	
8043	*68	*68	*48	*53	*04	*08	*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SSP SSO	
8070							*68:01	*68:02	*48:01	*53:01	*04:01	*08:01	SBT	

Table 13. Individual laboratory results for Cell #1615

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04		
725	*26	*31	*15	*35	*04	*07							SSO	
731	*26	*31	*15	*35	*04	*07	*26:01:01G	*31:01:02	*15:09:01	*35:17:01	*04:01:01G	*07:04:01G	SSP SSO SBT	
745							*26:01:01:01	*31:01:02:01	*15:09:01	*35:17:01	*04:01:01	*07:04:01	SSP SBT NGS	
747	NT												SSP SSO NGS	
762							*26:01:01:01	*31:01:02:01	*15:09	*35:17:01	*04:01:01:01	*07:04:01	NGS	
771	*26	*31	*15	*35	*04	*07							SSO	
774	*26	*31	*15	*35	*04	*07			*15:09	*35:17			SSP SSO	
779	*26	*31	*15	*35	*04	*07			*15:09				SSP SSO	
3186	*26	*31	*15	*35	*04	*07							SSO	
3545	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSP SSO SBT	A*31:119 A*26:117 C*07:11 C*04:30 C*04:82 C*04:226 C*04:275
3625	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSO SBT	A*26:117 A*31:119 C*04:226
3632	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSP SSO	
3766	*26	*31	*15 (B70)	*35									SSO	
3808	*26	*31	*15	*35	*04	*07			*15:09					
4079	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSP SSO	C*04:221
4251	*26	*31	*15	*35	*04	*07	*26:01:01G	*31:01:02G	*15:09	*35:17	*04:01P	*07:04	SSO SBT	
5133							*26:01:01:01	*31:01:02:01	*15:09:01	*35:17:01	*04:01:01	*07:04:01:01	NGS	
5214	*26	*31	*15 (B70)	*35	*04	*07							RT-PCR	
5462	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSP SSO NGS	
6649	*26	*31	*15	*35									SSP	
8001	*26	*31	*15 (B70)	*35	*04	*07							SSO	
8043	*26	*31	*15	*35	*04	*07	*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SSP SSO	
8070							*26:01	*31:01	*15:09	*35:17	*04:01	*07:04	SBT	

Table 14. Individual laboratory results for Cell #1616

Center	Low Resolution						High Resolution						Method	Other Alleles
	HLA-A		HLA-B		HLA-C		HLA-A		HLA-B		HLA-C			
278	*02	*02	*15	*46	*01	*04	*02:01	*02:07	*15:27	*46:01	*01:02	*04:01		
725	*02		*15	*46	*01	*04							SSO	
731	*02	*02	*15	*46	*01	*04	*02:06:01G	*02:07:01G	*15:27:01	*46:01:01	*01:02:01G	*04:01:01G	SSP SSO SBT	A*02:01 A*02:474
745							*02:06:01:01	*02:07:01	*15:27:01	*46:01:01	*01:02:01	*04:01:01	SSP SBT NGS	
747													SSP SSO NGS	
762							*02:06:01:01	*02:07:01	*15:27:01	*46:01:01	*01:02:01	*04:01:01:01	NGS	A*02:01:01:01 A*02:474
771	*02		*15	*46	*01	*04							SSO	
774	*02		*15	*46	*01	*04			*15:27				SSP SSO	
779	*02	*02	*15	*46	*01	*04			*15:27				SSP SSO	
3186	*02	*02	*15	*46	*01	*04							SSO	
3545	*02	*02	*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SSP SSO SBT	A*02:01 A*02:474 C*04:30 C*04:82 C*04:226 C*01:85 C*01:127 C*01:142 C*04:275
3625	*02	*02	*15	*46	*01	*04	NT		*15:27	*46:01	*01:02	*04:01	SSO SBT	C*01:127 C*04:226
3632	*02	*02	*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SSP SSO	A*02:474
3766	*02	*02	*15 (B62)	*46									SSO	
3808	*02		*15	*46	*01	*04			*15:27					
4079	*02		*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SSP SSO	C*04:221
4251	*02	*02	*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02:01G	*04:01P	SSO SBT	
5133							*02:06:01:01	*02:07:01	*15:27:01	*46:01:01	*01:02:01	*04:01:01	NGS	
5214	*02		*15 (B62)	*46	*01	*04							RT-PCR	
5462	*02	*02	*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SSP SSO NGS	
6649	*02		*15	*46									SSP	
8001	*02		*15 (B62)	*46	*01	*04							SSO	
8043	*02	*02	*15	*46	*01	*04	*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SSP SSO	
8070							*02:06	*02:07	*15:27	*46:01	*01:02	*04:01	SBT	

Table 15. Individual laboratory results for Cell #1613-1616 by serology

Investigator	Days Old	Cell No 1613 (Hispanic)									Cell No 1614 (Hispanic)						Cell No 1615 (Hispanic)							Cell No 1616 (Chinese)												
		Viab %	A2	A68	B35	B53	Cw4	Bw4	Bw6	OTHERS	Viab %	A68	B48	B53	Cw4	Cw8	Bw4	Bw6	OTHERS	Viab %	A26	A31	B70	B35	Cw4	Cw7	Bw6	OTHERS	Viab %	A2	B62	B46	Cw1	Cw4	Bw6	OTHERS
Cecka, J. Mic	2	95	+	+	+	+		+	+		95	+	+	+			+	+		95	+	+	B71	+			+		95	+	+	+			+	
Dunckley, Hea	8	95	+	A28	+	+					95	A28	+	+						90	+	+	B15	+				90	+	+	+					
Enczmann, J		95	+	+	+	+					95	+	+	+						95	+	+	+	+				95	+	+	+					
Fort, Marylis	3	96	+	+	+	+					95	+	+	+			+	+		95	+	+	B71	+			+	90	+	+	+				+	
Hahn, Amy B.		99	+	+	+	+					99	+	+	+			+	+		99	+	+		+			+	99	+	+	+				+	
Hogan, Patric	13	50	+	+	+	+	+	+	+		0									85	+	+	B15	+	+	+	+	85	+	+	+	+	+	+		
Latham, Katy	3	95	+	+	+	+					95	+	+	+			+	+	A28	99	+	+	+	+			+	90	+	+	+				+	
Permpikul, Ve	6	90	+	+	+	+					90	+	+	+			+	+		90	+	+		+			+	90	+	+	+				+	
Pule, Ziningi		90	+	+	+	B5	+				85	A28	+	+	+	+				90	+	+	+	+	+	+		90	+	+	B70		+		A68,Cw3	
Rees, Tracey		90	+	+	+	+	+				90	+	+	+	+	+				90	+	+	+	+	+	+		90	+	+	+	+	+			
Renac, Virgin		100	+	A28	+	+					100	A28	+	+			+	+		100	+	+	B15	+			+	100	+	B15	+				+	
Shai, Isaac	9	94	+	A28	+	+	+	+	+	B5,Cw5	92	A28	+	+	+	+	+	+	A2	90	A10	+	+	+	+	+	+	90	+	+		+	+	+	B75,Cw3	
Vidan-Jeras,	6	100	+	+	+	+	+	+	+		80	+	+	+	+	+	+	+		97	+	+	+	+	+	+	+	98	+	B15		+	+	+		
Villard, Jean		90	+	+	+	+	+	+	+		90	+	+	+	+	+	+	+																		