

HLA Antigen Values and Split Equivalence

HLA A, B, and DR Matching Antigen Equivalences					
PATIENT A LOCUS ANTIGEN	EQUIVALENT DONOR ANTIGEN(S)	PATIENT B LOCUS ANTIGEN	EQUIVALENT DONOR ANTIGEN(S)	PATIENT DR LOCUS ANTIGEN	EQUIVALENT DONOR ANTIGEN(S)
1	1	5	5	1	1,103
2	2,203	7	7,703,2708	2	2
3	3	8	8	3	3
9	9	12	12	4	4
10	10	13	13	5	5
11	11	14	14,64,65	6	6
19	19	15	15	7	7
23	23	16	16	8	8
24	24,2403	17	17	9	9
25	25	18	18	10	10
26	26	21	21	11	11
28	28,69	22	22	12	12
29	29	27	27	13	13
30	30	35	35	14	14,1403,1404
31	31	37	37	15	15
32	32	38	38	16	16,2
33	33	39	39,3901,3902,*3905	17	17,3
34	34	40	40,61	18	18,3
36	36	41	41	103	103,1
43	43	42	42	1403	1403,14,6
66	66,*6601,*6602	44	44	1404	1404,14,6
68	68	45	45	** 99	(No equivalent)
69	69,28	46	46		
74	74	47	47		
80	80	48	48		
203	203,2	49	49		
210	210,2	50	50,4005		
2403	2403,24	51	51,5102,5103		
*6601	*6601,66	52	52		
*6602	*6602,66	53	53		
** 99	(No equivalent)	54	54		
		55	55		
		56	56		
		57	57		
		58	58		
		59	59		
		60	60		
		61	61,40		
		62	62		
		63	63		
		64	64		
		65	65		
		67	67		
		70	70,71,72		
		71	71,70		
		72	72,70		
		73	73		
		75	75,15		
		76	76,15		
		77	77,15		
		78	78		
		81	81		
		82	82,*8201		
		703	703,7		
		*0804	*0804,8		
		*1304	*1304,15,21,49,50		
		2708	2708,27,7		
		3901	3901,39		
		3902	3902,39		
		*3905	*3905, 39		
		4005	4005,50		
		5102	5102,51,53		
		5103	5103,51		
		7801	7801		
		*8201	*8201,82		
		** 99	(No equivalent)		

*** Indicates an allele; may not have a WHO-approved serologic specificity**

**** Code 99 means not tested**

Examples of how "Antigen Equivalences" works:

If patient has B60: Donors with B60 are considered not mismatched.

If patient has B61: Donors with B61 or B40 are considered not mismatched. Donors with B60 are considered mismatched.

HLA A, B, C, DR, and DQ Unacceptable Antigen Equivalences

PATIENT'S UNACCEPT-ABLE A LOCUS ANTIGEN	DONOR EQUIVALENT ANTIGEN(S)	PATIENT'S UNACCEPT-ABLE B LOCUS ANTIGEN	DONOR EQUIVALENT ANTIGEN(S)	PATIENT'S UNACCEPT-ABLE C LOCUS ANTIGEN	DONOR EQUIVALENT ANTIGEN(S)
1	1	5	5,51,5102,5103,52,78	w1	w1
2	2,203,210	7	7,703,2708	w2	w2
3	3	8	8	w3	w3,w9,w10
9	9,23,24,2403	12	12,44,45	w4	w4
10	10,25,26,34,66,*6601,*6602	13	13	w5	w5
11	11	14	14,64,65	w6	w6
19	19,29,30,31,32,33,74	15	15,62,63,75,76,77	w7	w7
23	23,9	16	16,38,39	w8	w8
24	24,2403,9	17	17,57,58	w9	w9
25	25,10	18	18	w10	w10
26	26,10	21	21,49,50,4005	*12	*12
28	28,68,69	22	22,54,55,56	*13	*13
29	29	27	27,2708	*14	*14
30	30	35	35	*15	*15
31	31	37	37	*16	*16
32	32	38	38,16	*17	*17
33	33	39	39,3901,3902,*3905,16	*18	*18
34	34	40	40,60,61		
36	36	41	41		
43	43	42	42		
66	66,*6601,*6602,10	44	44,12		
68	68,28	45	45,12		
69	69,28	46	46		
74	74	47	47		
80	80	48	48		
203	203	49	49,21		
210	210	50	50,4005,21		
2403	2403	51	51,5102,5103		
*6601	*6601,66	52	52		
*6602	*6602,66	53	53		
		54	54,22		
		55	55,22		
		56	56,22		
		57	57,17		
		58	58,17		
		59	59		
		60	60,40		
		61	61,40		
		62	62,15		
		63	63,15		
		64	64,14		
		65	65,14		
		67	67		
		70	70,71,72		
		71	71,70		
		72	72,70		
		73	73		
		75	75		
		76	76		
		77	77		
		78	78		
		81	81		
		82	82,*8201		
		703	703		
		*0804	*0804		
		*1304	*1304		
		2708	2708		
		3901	3901		
		3902	3902		
		*3905	*3905		
		4005	4005		
		5102	5102		
		5103	5103		
		7801	7801		
		*8201	*8201		
		Bw4	Bw4 (see below)		
		Bw6	Bw6(see below)		

HLA A, B, C, DR, and DQ Unacceptable Antigen Equivalences (continued)			
PATIENT'S UNACCEPTABLE DR LOCUS ANTIGEN	DONOR EQUIVALENT ANTIGEN(S)	PATIENT'S UNACCEPTABLE DQ LOCUS ANTIGEN	DONOR EQUIVALENT ANTIGEN(S)
1	1,103	1	1,5,6
2	2,15,16	2	2
3	3,17,18	3	3,7,8,9
4	4	4	4
5	5,11,12	5	5,1
6	6,13,14,1403,1404	6	6,1
7	7	7	7,3
8	8	8	8,3
9	9	9	9,3
10	10		
11	11		
12	12		
13	13,6		
14	14,1403,1404,6		
15	15,2		
16	16,2		
17	17,3		
18	18,3		
103	103		
1403	1403,6		
1404	1404,6		
51*	51,2,15,16		
52*	52,3,5,6,11,12,13,14,17,18		
53*	53,9		

* Indicates an allele; may not have a WHO-approved serologic specificity

*** Please refer to the end of this section for information

Example of how "Unacceptable Antigen Equivalences" works:

If a patient has B40 listed as an "unacceptable antigen": Donors typed as B40, B60, or B61 are considered unacceptable.

If a patient has B60 listed as an "unacceptable antigen": Donors typed as B40, B60 are considered unacceptable, donors typed as B61 are considered acceptable.

Therefore, if a patient has antibodies to all splits of a broad antigen, enter the broad antigen as well as the splits as unacceptable antigens, or enter only the broad antigen as an unacceptable antigen.

Additional Unacceptable Antigen Equivalences to be used in the Calculated PRA Only

Bw4 should exclude B5,B13, B17, B27, B37, B38, B44,B47,B49, B51,B52,B53, B57,B58, B59,B63,B77,Bw4.

Bw6 should exclude

B7,B8,B14,B18,B22,B35,B39,B40,B41,B42,B45,B48,B50,(B*4005),B54,B55,B56,B60,B61,B62,B64,B65,B67,B70,B71,B72,B75,B76

,B78,B81, ~~B46,B73~~Bw6

DR51 should also exclude DR2,DR15,DR16.

DR52 should also exclude DR3,DR5,DR6,DR11,DR12,DR13,DR14,DR17,DR18.

DR53 should also exclude DR4,DR7,DR9.

NOTE: *The remaining amendments to Appendix 3A to Policy 3 (HLA Antigen Values and Split Equivalences) shall be effective pending distribution of appropriate notice and programming in UNetsm. (Approved at the November 8-9, 2010 Board of Directors Meeting)*