

OPTN/UNOS Policy Notice

Annual Update to Equivalency Tables (2015) Clarifications

Sponsoring Committee: Histocompatibility
Policy/Bylaws Affected: Policy 4.10 (Reference Tables of HLA Antigen Values and Split Equivalencies)
Public Comment: No
Effective Date: Pending implementation and notice to OPTN members

Problem Statement

During the implementation of the Annual Update to Equivalency Tables (2015) project, Histocompatibility Committee leadership identified several antigens omitted from the approved policy language. Due to the safety risks and possible effect on the fairness of organ allocation that could be caused by these omissions, leadership requested to add the antigens when the project is fully implemented.

Summary of Changes

These changes improve the quality of the equivalency tables in several ways. The edits:

- Fix potential patient safety issues
- Improve access to allocation for specific antigens in the 0-ABDR matching antigen equivalency tables
- Provide members with more accurate tables for reference

What Members Need to Do

Members will need to familiarize themselves with the changes to the equivalency tables. Members will also need to work with third-party vendors to determine how the changes affect electronic uploads of candidate unacceptable antigen data.

Affected Policy Language

New language is underlined (example) and language that is deleted is struck through (~~example~~).

4.10 Reference Tables of HLA Antigen Values and Split Equivalences

Table 4-2: HLA A Matching Antigen Equivalences

Patient A Locus Antigen	Equivalent Donor Antigens
1	1
2	2, 0201, 0202, 0203, 0205, 0206
0201	0201, 2

Patient A Locus Antigen	Equivalent Donor Antigens
0202	0202, 2
0203	0203, 2
0205	0205, 2
0206	0206, 2
3	3

Patient A Locus Antigen	Equivalent Donor Antigens
9	9
10	10
11	11, 1101, 1102
1101	1101, 11

Patient A Locus Antigen	Equivalent Donor Antigens
1102	1102, 11
19	19
23	23
24	24, 2402, 2403
2402	2402, 24
2403	2403, 24
25	25
26	26
28	28
29	29, 2901, 2902
2901	2901, 29
2902	2902, 29

Patient A Locus Antigen	Equivalent Donor Antigens
30	30, 3001, 3002
3001	3001, 30
3002	3002, 30
31	31
32	32
33	33, 3301, 3303
3301	3301, 33
3303	3303, 33
34	34, 3401, 3402
3401	3401, 34
3402	3402, 34

Patient A Locus Antigen	Equivalent Donor Antigens
36	36
43	43
66	66, 6601, 6602
6601	6601, 66
6602	6602, 66
68	68, 6801, 6802
6801	6801, 68
6802	6802, 68
69	69
74	74
80	80

Table 4-3: HLA B Matching Antigen Equivalences

Patient B Locus Antigen	Equivalent Donor Antigens
5	5
7	7, 0702
0702	0702, 7
8	8, 0801, 0802, 0803, 0804
0801	0801, 8
0802	0802, 8
0803	0803, 8
0804	0804, 8
12	12
13	13, 1301, 1302
1301	1301, 13
1302	1302, 13
14	14
1401	1401, 64
1402	1402, 65
15	15
1501	1501, 62
1502	1502, 75
1503	1503, 72
1510	1510, 71
1511	1511, 75

Patient B Locus Antigen	Equivalent Donor Antigens
1512	1512, 76
1513	1513, 77
1516	1516, 63
1517	1517, 63
16	16
17	17
18	18
21	21
22	22
27	27, 2705
2705	2705, 27
2708	2708
35	35
37	37
38	38
39	39, 3901, 3902, 3905, 3913
3901	3901, 39
3902	3902, 39
3905	3905, 39
3913	3913, 39
40	40, 4001, 4002, 4006

Patient B Locus Antigen	Equivalent Donor Antigens
4001	4001, 60, 40
4002	4002, 61, 40
4005	4005, 50
4006	4006, 61, 40
41	41
42	42
44	44, 4402, 4403
4402	4402, 44
4403	4403, 44
4415	4415, 45
45	45, 4415
46	46
47	47
48	48
49	49
50	50, 4005
51	51, 5101, 5102
5101	5101, 51
5102	5102, 51
52	52
53	53
54	54

Patient B Locus Antigen	Equivalent Donor Antigens
55	55
56	56
57	57, 5701, 5703
5701	5701, 57
5703	5703, 57
58	58
59	59
60	60, 4001

Patient B Locus Antigen	Equivalent Donor Antigens
61	61, 4002, 4006
62	62, 1501
63	63, 1516, 1517
64	64, 1401
65	65, 1402
67	67
70	70
71	71, 1510

Patient B Locus Antigen	Equivalent Donor Antigens
72	72, 1503
73	73
75	75, 1502, 1511
76	76, 1512
77	77, 1513
78	78
81	81
82	82

Table 4-4: HLA DR Matching Antigen Equivalences

Patient DR Locus Antigen	Equivalent Donor Antigens
1	1, 0101, 0102
0101	0101, 1
0102	0102, 1
103	103
2	2
3	3, <u>0301</u> , <u>0302</u>
0301	0301, 17
0302	0302, 18
4	4, <u>0401</u> , <u>0402</u> , <u>0403</u> , <u>0404</u> , <u>0405</u> , <u>0407</u>
0401	0401, 4
0402	0402, 4
0403	0403, 4
0404	0404, 4
0405	0405, 4
0407	0407, 4

Patient DR Locus Antigen	Equivalent Donor Antigens
5	5
6	6
7	7
8	8
9	9, <u>0901</u> , <u>0902</u>
0901	0901, 9
0902	0902, 9
10	10
11	11
1101	1101, 11
1104	1104, 11
12	12
1201	1201, 12
1202	1202, 12
13	13, 1301, 1303
1301	1301, 13
1303	1303, 13
14	14, 1401,

Patient DR Locus Antigen	Equivalent Donor Antigens
	1402, 1403, 1404, 1454
1401	1401, 14, 1454
1402	1402, 14
1403	1403, 14
1404	1404, 14
1454	1454, 14, 1401
15	15, <u>1501</u> , <u>1502</u> , <u>1503</u>
1501	1501, 15
1502	1502, 15
1503	1503, 15
16	16, <u>1601</u> , <u>1602</u>
1601	1601, 16
1602	1602, 16
17	17, 0301
18	18, 0302

Table 4-6 HLA B Unacceptable Antigen Equivalences

Patient Unacceptable B Locus Antigen	Donor Equivalent Antigens
5	5, 51, 5101, 5102, 52
7	7, 0702
0702	0702
8	8, 0801, 0802, 0803, 0804
0801	0801
0802	0802
0803	0803
0804	0804
12	12, 44, 4402, 4403, 4415, 45
13	13, 1301, 1302
1301	1301
1302	1302
14	14, 64, 65, 1401, 1402
1401	1401
1402	1402
15	15, 62, 63, 75, 76, 77, 1501, 1502, 1503, 1510, 1511, 1512, 1513, 1516, 1517
1501	1501
1502	1502
1503	1503
1510	1510
1511	1511
1512	1512
1513	1513
1516	1516
1517	1517
16	16, 38, 39, 3901, 3902, 3905, 3913

Patient Unacceptable B Locus Antigen	Donor Equivalent Antigens
17	17, 57, 5701, 5703, 58
18	18
21	21, 49, 50, 4005
22	22, 54, 55, 56
27	27, 2705, 2708
2705	2705
2708	2708
35	35
37	37
38	38
39	39, 3901, 3902, 3905, 3913
3901	3901
3902	3902
3905	3905
3913	3913
40	40, 60, 61, 4001, 4002
4001	4001, 60
4002	4002
4005	4005, 50
4006	4006
41	41
42	42
44	44, 4402, 4403
4402	4402
4403	4403
4415	4415, 45
45	45, 4415
46	46
47	47
48	48
49	49

Patient Unacceptable B Locus Antigen	Donor Equivalent Antigens
50	50, 4005
51	51, 5101, 5102
5101	5101
5102	5102
52	52
53	53
54	54
55	55
56	56
57	57, 5701, 5703
5701	5701
5703	5703
58	58
59	59
60	60
61	61, 4002, 4006
62	62, 1501
63	63, 1516
64	64, 1401
65	65, 1402
67	67
70	70, 71, 72, 1503, 1510
71	71, 1510
72	72, 1503
73	73
75	75, 1502, 1511
76	76, 1512
77	77, 1513
78	78
81	81
82	82

Patient Unacceptable B Locus Antigen	Donor Equivalent Antigens
Bw4	Bw4, 0802, 0803, 0804, 5, 13, 1301, 1302, 1513, 1516, 1517, 17, 27, 37, 38, 44, 4402, 4403, 4415, 47, 49, 51, 5101, 5102, 52, 53, 57, 5701, 5703, 58, 59, 63, 77

Patient Unacceptable B Locus Antigen	Donor Equivalent Antigens
Bw6	Bw6, 7, 0702, 8, 0801, 14, 1401, 1402, 1501, 1502, 1503, 1510, 1511, 1512, 18, 22, 2708, 35, 39, 3901, 3902, 3905, 3913, 40, 4001, 4002, 4006, 41, 42, 45, 48, 50, 4005, 54, 55, 56, 60, 61, 62, 64, 65, 67, 70, 71, 72, 75, 76, 78, 81, 82

Table 4-12: HLA DQB1 Unacceptable Antigen Equivalences

Patient Unacceptable DQB1 Locus Antigen	Donor Equivalent Antigens
1	1, 5, 6, 0501, 0502, 0601, 0602, 0603, 0604, 0609
2	2, 0201, 0202
<u>0201</u>	<u>0201</u>
<u>0202</u>	<u>0202</u>
3	3, 7, 8, 9, 0301, 0302, 0303, 0319
0301	0301, 7
0302	0302, 8
0303	0303, 9
0319	0319, 7
4	4, 0401, 0402
0401	0401
0402	0402
5	5, 0501, 0502
0501	0501
0502	0502
6	6, 0601, 0602, 0603, 0604, 0609
0601	0601
0602	0602
0603	0603
0604	0604
0609	0609
7	7, 3, 0301, 0319
8	8, 3, 0302
9	9, 3, 0303

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