

OPTN/UNOS Histocompatibility Committee
Meeting Summary
September 13, 2016
Conference Call

Robert Bray, PhD, Chair
Cathi Murphey, PhD, Vice Chair

Discussions of the full committee on September 13, 2016 are summarized below. All committee meeting summaries are available at <https://optn.transplant.hrsa.gov>.

Committee Projects

1. Histocompatibility Guidance Document

The Committee briefly discussed the status of the revised guidance document. UNOS staff noted that a revised draft is available for review and a subcommittee call was scheduled for Oct. 4, 2016. The full committee will review and finalize the guidance document at the in-person meeting on Oct. 21, 2016. UNOS staff noted that the guidance document will need to be distributed for a 30-day public comment period prior to submission to the Board of Directors or Executive Committee for approval.

2. Review of Committee Projects

Committee leadership noted that subcommittee rosters are being revised and committee members should notify the committee liaison of their interest in working on the various projects.

Other Significant Items

3. Review of Data Request - Review of Implemented Changes to Expand HLA Typing Requirements

UNOS Research staff presented data to review the policy change that expanded HLA typing requirements, specifically the reporting of DQA1 and DPB1 unacceptable antigens.

Committee Request:

For a subset of all registrations on the waiting list analyze data on:

- Number and percent of registrations with DQA1 unacceptable antigens reported, overall and by organ;
- Number and percent of registrations with DPB1 unacceptable antigens reported, overall and by organ;
- Number and percent of registrations with parent DQA1 values reported as unacceptable but no corresponding subtypes reported:
 - Parent: 01; subtypes: 01:01, 01:02, 01:03, 01:04, 01:05, 01:06, 01:07, 01:08, 01:09, 01:10, 01:11, 01:12;
 - Parent: 02; subtype: 02:01;
 - Parent: 03; subtypes: 03:01, 03:02, 03:03;
 - Parent: 04; subtypes: 04:01, 04:02, 04:04;
 - Parent: 05; subtype: 05:01, 05:02, 05:03, 05:04, 05:05, 05:06, 05:07, 05:08, 05:09, 05:10, 05:11;
 - Parent: 06; subtypes: 06:01, 06:02.

Results:

- The overall number of registrations with reported unacceptable antigens increased from 3,039 on May 31 to 3,476 on July 29 for DQA1 and from 3,481 to 3,936 for DPB1. Most of those registrations were kidney registrations.
- The percentage of kidney registrations with reported DQA1 and DPB1 unacceptable antigens increases as sensitization level increases. As of July 29, 2016, the percentage of registrations with unacceptable antigens reported increased from 0.5% for unsensitized kidney registrations to 18.5% for 100% CPRA for DQA1 and from 0.6% to 23.9% for DPB1.
- Except for DQA1*02 and DQA1*03, all or almost all registrations with all DQA1 subtypes reported had a corresponding parent value reported as an unacceptable antigen.
- Most of registrations with parent DQA1 values reported had all or some corresponding subtype(s) reported. Overall, less than 7% of registrations with parent values had no corresponding subtypes reported.

4. Review of Data Request - Review of Implemented Changes to HLA Equivalency Tables

UNOS Research staff presented data to review the implemented changes to the HLA equivalency table.

Committee Request:

For kidney, kidney-pancreas and pancreas registrations waiting on the implementation day:

- Examine changes in CPRA values due to the implementation.

Compare March 31, 2015 vs. March 31, 2016 data on:

- HLA frequencies of kidney, kidney-pancreas and pancreas registrations on the waiting list.

For unacceptable antigens with changes in equivalences, frequencies of reporting on the waiting list on March 31, 2015 vs. March 31, 2016. These include:

- A: 10, 23, 24, 25, 26, 66, 68, 69, 6601, 6602;
- B: 5, 7, 27, 38, 39, 44, 45, 49, 50, 51, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 71, 72, 4005, 7801, 8201;
- DR: 1, 13, 14, 15, 16, 17, 18, 1403, 1404.

Compare April 16, 2014 – April 15, 2015 vs. April 16, 2015 – April 15, 2016 data on:

- The number and percentage of kidney offers refused due to a positive crossmatch.

Results

Changes in CPRA Values

As a result of April 16, 2015 implementation, CPRA values changed for 5.1% of kidney, 7.2% of kidney-pancreas and 5.9% of pancreas registrations. For registrations with changes in CPRA values, almost all values decreased and the most common change was a decrease in CPRA value by 1% point.

The most common changes in kidney CPRA values were:

- Old CPRA = 4%, new CPRA = 2% (N=384);
- Old CPRA = 57%, new CPRA = 56% (N=152);
- Old CPRA = 100%, new CPRA = 99% (N=113) (these include all changes to old CPRA =100%).

For kidney registrations with changes and old CPRA=99%:

- 96 registrations had new CPRA= 98%;
- 2 registrations had new CPRA = 100%.

For kidney registrations with changes and old CPRA=98%:

- All (N=80) registrations had new CPRA= 97%.

One committee member asked how many registrations went from having no avoids to having avoids only for DQA1 or DPB1. UNOS Research staff agreed to provide that information at a later date.

Upcoming Meetings

- The next in-person meeting will be held on Friday, October 21, 2016 in Chicago, Illinois.