

**OPTN/UNOS Histocompatibility Committee
Meeting Minutes
March 21, 2017
Chicago, IL**

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Introduction

The Histocompatibility Committee met in Chicago, Illinois, on 03/21/2017 to discuss the following agenda items:

1. Discrepant HLA Typing
2. DPB1 and Annual Equivalency Table Review
3. CPRA: Two Decimal Places and for Thoracic Organs
4. Amending DQA1 Table
5. New CPRA
6. UNOS Histocompatibility Education Effort
7. Other Projects
8. Other Significant Items

The following is a summary of the Committee's discussions.

1. Discrepant HLA Typing

The Discrepant HLA Typing Subcommittee has reviewed critical discrepant data reports from Quarters 1-3 of 2016 and created an IT project plan to address typing errors that the Committee will review.

Summary of discussion:

- Members of the Discrepant HLA Typing Subcommittee presented an overview of the types of critical discrepancies found in Quarters 1-3 of 2016.

Quarter 1: 119 occurrences (19 of 119 had more than one error [138 total errors])

- Individual errors that would have impacted match run: 20 (~17%)
- Broad/split: 20 errors
 - Most were C-locus and a few DQ
- DPB/A: 63 errors
- DPB: 20 errors
 - Others were "G" allele differences
- DRB: 12 errors
 - 7 related to miscalling DR 53
 - 4 related to DR51 +/- or DR52 +/-
 - 1 parent vs. split (DR6 vs. DR14)
- DQA allele vs. antigen (01 vs. 01:01) or missed DQA/DQB antigen call: 29 errors

Quarter 2: 74 total errors

- High vs. low resolution: 16 errors
 - Cw3 vs. 9 or 10: 6 errors
 - DQ3 vs. 7, 8, 9: 4 errors
 - DP P group ambiguities: 5 errors
 - A2 vs. 203: 1 error

- Incorrect typings: 58 errors
 - DR53 Null: 5 errors
 - Incorrect DHF data: 5 errors
 - Additional incorrect typings: 48 errors

Quarter 3: 86 total errors

- High vs. low resolution: 35 errors
 - Cw3 vs. 9 or 10: 14 errors
 - DQ3 vs. 7, 8, 9: 1 error
- Incorrect typings: 47 errors
 - DRB 3, 4, 5: 2 errors
 - Bw4/6: 1 error
 - DQA: 6 errors
 - DP: 11 errors
 - A: 4 errors
 - B: 2 errors
 - DR: 3 errors
 - C: 3 errors

For Quarter 3, there were also two completely wrong donor typings. The percentage of match runs affected for each quarter ranged from about 5 to 8%. The Committee was reminded that Quarter 4 data will be available soon, but any results from the educational letters sent to individual labs and the general letter sent to all labs will not be reflected until the Quarter 1 2017 data is available in June 2017. The Committee agreed that waiting to see if there is any change in the discrepancy rate in Q1 2017 is not necessary before presenting the IT proposal to the Policy Oversight Committee (POC). Several Committee members expressed concern over the rate of errors and think critical errors should be handled as seriously as when they occur at other transplant organizations. The Committee also discussed establishing a rate of errors that a lab would have to reach before further action was taken (examples considered for further action included referral to Member Quality or a warning letter). While there was no consensus on what the rate of errors should be and if it should be measured as a percentage or as a number, the Committee did agree that any communication with the labs about their errors should occur on a quarterly basis.

There was interest from the Committee about who inputs the data that appears on the discrepant reports. Since transplant programs have different processes for who is responsible for entering the data, Committee members were interested in knowing if the discrepant typings were entered by people who are not educated in HLA, such as data coordinators or OPO staff. UNOS Research staff said that this data is available in the system but has not been pulled for this project idea before.

The Committee reviewed the IT project plan proposal. The two IT changes the Subcommittee proposed to reduce the number of discrepant typing errors are:

1. Require users to double enter HLA information on the donor's Crossmatch and HLA page
2. Make HLA data, once entered and confirmed, "read only" on the match run page

The Committee supported both IT changes. One Committee member asked if the first entry a user enters will be blinded (disappear) before they have to re-enter the data. The Subcommittee Chair confirmed that the data would be hidden after the first entry to prevent the user from re-entering incorrect information. While supportive of double entry by the same user, some Committee members whose transplant programs use software such as DonorTrac to upload

data were concerned about how the double entry component would work. The Subcommittee had considered this concern before and will continue to work on the issue.

- The Committee approved sending this IT plan to the POC.

Next steps:

-UNOS staff will work on preparing the project to be presented to the POC in May.

2. DPB1 and Annual Equivalency Table Review

The DPB1 and Annual Equivalency Table Review Subcommittees met in February to discuss a new approach to developing DPB1 tables.

Summary of discussion:

The Subcommittee Chair presented the new proposed plan for creating a DPB1 table in policy to the Committee. This new plan has three phases:

Phase 1: List “G” alleles as equivalent

Phase 2: List epitope matched alleles

Phase 3: Provide software as aid in assessment

The Committee was supportive of the three phase approach, citing that listing the “G” alleles is a good place to start with this project. A Committee member questioned how the epitope programming would work in UNet. The Subcommittee Chair explained that the Subcommittee will continue to work with IT to see how the programming would work when they get to Phase 2. The Subcommittee Chair went on to explain that the Subcommittee will work together to come up with which epitopes to include as they had before this three phase approach was considered.

Next steps:

The Subcommittee will continue to meet and bring the DPB1 “G” allele table and any other existing table updates to the Committee at the May or June meeting to approve for the next public comment cycle.

3. CPRA: Two Decimal Places and for Thoracic Organs

The Committee discussed the benefits of listing the CPRA to two decimal places (also referred to as “four digit CPRA”) in UNet. A Committee member referenced instances where clinicians want to know if a patient has a “true 100% CPRA” or has a 99.X% CPRA that was rounded up to 100%. This is important in consideration of a potential organ offer when those in the 99.X% range may have a higher chance of receiving a better offer in the future while the actual 100% candidate may never get another offer due to their high CPRA. Currently, CPRA with two decimal places is available on the CPRA calculator. The Committee agreed that this was an important issue, and will pursue it in the future. The Committee stressed that they are only interested in having the CPRA display to two decimal places in UNet and that this change would not need to change allocation policy.

The Committee also considered listing CPRA for thoracic organs. There was consensus that this in an important issue. One Committee member commented that the CPRA value is important to the thoracic surgeons at their transplant center. UNOS staff and the Committee agreed that this would need to be a joint committee project with the Thoracic Committee.

Next steps:

The Committee will consider where this project fits within their current list of projects at a later date.

4. Amending DQA1 Table

During the implementation of the DQA1 project approved by the Board in June 2016, a question from IT to Committee leadership revealed an error in the inclusion of DQA1*04:03N in the unacceptable antigen table. Since it is biologically impossible to have an antibody to DQA1*04:03N because it is a null allele, Committee leadership supported its removal from the policy before the project is fully implemented.

Summary of discussion:

Committee leadership provided the Committee with the background of this proposal. The Committee agreed that it was a mistake to have DQA1*04:03N in the table.

The Committee voted unanimously to approve sending this amendment to the Executive Committee (16 yes; 0 no; 0 abstain).

5. New CPRA

The Committee previously expressed interest in updating the CPRA calculation.

Summary of discussion:

The Committee heard a presentation from UNOS Research staff on a data request they had submitted to see what the impact would be to the CPRA calculation if DQA1 and DPB1 were added. From UNOS data pulled by Research that reflected kidney, pancreas, and kidney-pancreas registrations on the waiting list as of February 17, 2017, 7.4% of registrations had reported DQA1 and/or DPB1 unacceptable antigens. One Committee member mentioned that the number may be higher than the data show because there are currently no incentives (such as CPRA points) for listing DP. The Committee is interested in comparing UNOS data with National Marrow Donor Program (NMDP) data, which is a larger resource for these types of frequencies. The Committee is interested in pursuing this as a data request and future project.

Next steps:

Once Committee leadership receives the requested NMDP data set, the Committee will prioritize this data request among current data requests and projects.

6. UNOS Histocompatibility Education Effort

The Instructional Innovations Department at UNOS is in the early stages of producing a histocompatibility education series with the help of selected histocompatibility experts.

Summary of discussion:

The Committee had some questions about the scope of this education effort. UNOS Instructional Innovations staff outlined progress made to date, and stressed that this project is in the very early stages of development. Committee members asked what the audience for this project would be. UNOS Instructional Innovations staff explained what the project team had discussed about potential target audiences, and after further discussion the Committee and UNOS staff agreed that transplant coordinators would be a good audience for the initial project efforts.

Next steps:

UNOS Instructional Innovations will continue to work with their project team on this project and provide updates to the Committee as necessary.

7. Other Projects:

The Committee reviewed public comments made on the Guidance Document for OPTN/UNOS Histocompatibility Laboratory Bylaws and Policies proposal. After discussions, the Committee agreed on several non-substantive clarifications to the guidance document. As the public comment period ends on March 24, 2017, the Committee will have to revisit the guidance document at the next full committee meeting to consider any public comments made between this meeting and the close of the public comment period.

8. Other Significant Items

The Committee discussed issues with labs or OPOs attaching insufficient HLA paperwork to donor/candidate profiles in UNet. Several Committee members commented that it would be very useful if the raw data was attached. UNOS staff reminded the Committee that if this was going to be a policy requirement, the project would have to go through the POC. One Committee member suggested an educational letter to labs and OPOs encouraging them to attach raw data as a first step before a potential policy change. UNOS staff said they would look into an education request for this matter.

Upcoming Meeting

- The Committee will meet by teleconference on April 11, 2017.