OPTN Histocompatibility Committee
Meeting Summary
October 10, 2023
Conference Call

John Lunz, Ph.D., F(ACHI) Chair
Gerald Morris, MD, Ph.D., Vice Chair

Introduction

The OPTN Histocompatibility Committee (the Committee) met via Webex teleconference on 10/10/2023 to discuss the following agenda items:

1. Vice Chair Selection Process
2. Review Policy Language for Update HLA Equivalency Tables, 2023
3. Data Request: HLA Typing for Donors and Sensitization in Lung Candidates

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

1. Vice Chair Selection Process

The Committee heard an overview of the Vice Chair Selection Process for the 2024-2026 Committee terms. The overview included the Vice Chair's nomination goals, process, qualifications, and timeline.

Summary of discussion:

There were no further discussions.

2. Review Policy Language for Update HLA Equivalency Tables, 2023

The Committee reviewed the proposed policy language for *Update HLA Equivalency Tables, 2023*. Based on the proposed policy language, the Committee was asked: Should alleles beyond the first allele in the P-group also screen off the full P-group in the equivalence?

Summary of discussion:

Decision #1: The Committee supported the proposed policy changes for *Update HLA Equivalency Tables, 2023*.

A member commented that potentially compatible transplants should not be excluded. He explained that if an individual is listed as having an unacceptable antigen to C*02:10 and not C*02:02, the typed C*02:02P donor should not be screened off. Another member commented that C*02:02 is equivalent to C*02:10. Another member stated that it is essential to understand how the system allows the exclusion of C*02:10 donors but not exclude C*02:02. Another member agreed and noted that it may be likely that the more broad unacceptable antigens will be entered into the system. Also, there are instances where a candidate may want to exclude offers from the less common alleles within the P-group, but not exclude the root P-group antigen. He suggested not excluding the root P-group antigen for all alleles within the P-group. Another member stated that it's essential not to be overly inclusive of which P-groups should be excluded. He explained that there are instances where if a *02:10 was listed and not *02:02, and they were equivalent to each other, they would be considered unacceptable. However,

there was agreement from multiple members that the P-groups are identical in their antigen recognition domains, so they should be listed as the same protein for unacceptable antigens. If programs do not list them together, then the process must be clarified because they might not understand that they're not screening off equivalent alleles.

Staff asked if P-groups should be created as standalone unacceptable antigens. The Chair replied that it would become redundant and recommended that P-groups not be created as standalone unacceptable antigens. The Vice-Chair clarified that the goal is to build an infrastructure to support the labs that are transitioning to high-resolution donor typing without building in the capability to list all IMGT/HLA high-resolution typing in the OPTN Computer System because it will be a minimal number of labs utilizing these at first. Another member asked how often the HLA antigen values and split equivalences reference tables are updated. The presenter replied that the tables are updated every year.

Should the P-group be equivalent to the higher alleles within the P-group?

Support: 8 Abstain: 3 Oppose: 3

Does the Committee support the proposed policy language written for implementation?

Support: 10 Abstain: 1 Oppose: 0

Next steps:

A policy notice regarding the changes for *Update HLA Equivalency Tables, 2023,* will be released to the Community.

3. Data Request: HLA Typing for Donors and Sensitization in Lung Candidates

The Committee heard results on the HLA typing donors and sensitization in lung candidates' data request. This analysis will look at the percentage of donors with a complete HLA typing at the time of the match run by organ in the approximately five months since the lung allocation policy was implemented to get a sense of the percentage of lung donors that do not have a complete typing when the match is run.

The switch to a continuous distribution framework also added points for CPRA into the lung framework. Candidates were previously able to enter unacceptable antigens but did not receive any allocation priority for their CPRA. In continuous distribution, points are added to a candidate composite allocation score for a candidate's CPRA; therefore, this analysis will also look at the percentage of lung candidates on the OPTN Waiting List by their sensitization status and whether or not unacceptable antigens were listed.

Additionally, the committee was asked the following:

- Are there existing concerns for allocation efficiency due to incomplete donor HLA at the time of the match run for lung candidates?
- Are there existing concerns for candidate equity due to incomplete donor HLA at the time of the match run for lung candidates?
- Does the Committee have any recommendations for the Lung Efficiency in Allocation Workgroup based on the data?

Data summary:

- Overall, every organ had at least 94.68% of all donors having completed HLA typing for matches run from March 9, 2023- August 31, 2023. Lung donors had completed HLA typing for the match run 97.05% of the time during this time period.

- Of the 971 lung candidates waiting on the list on August 31, 2023, 287 (29.56%) candidates had at least one unacceptable antigen listed.

Decisions #2: The Committee determined that while there are existing concerns for allocation efficiency due to incomplete donor HLA at the time of the match run for lung candidates, there is also a concern for DCD donation and there is additional data needed.

Summary of discussion:

The Vice-Chair noted that most donors' HLAs are being typed before the match run. A member shared that at their program, it is sometimes a concern when an unacceptable antigen is listed for a particular heart recipient and no HLA typing is available on the heart donor. Therefore, this leads to the idea that the heart may be acceptable for transplant because there is no typing. She further commented that if the goal is to optimize allocation, the donor's heart antigens should be entered into the OPTN Computer System, which would help with compatibility evaluations for sensitized patients. Another member inquired if there was a way to inform programs that typing is unavailable for the donor. For example, suppose a recipient seems to be compatible with a potential donor. In that case, there should be an alert within the OPTN Computer System that there is no typing available for the donor and, therefore, may not be compatible with the intended recipient.

Another member noted that it's vital to understand why typing was not completed for the 3% of donors. Staff commented that it is still to be analyzed whether or not donors were considered brain-dead or donation circulatory death (DCD) to determine if any of these would be regarded as rapid DCDs. A member clarified that in the current OPTN policy, kidneys require HLA typing to be entered into the OPTN Computer System before running the match run, but lung does not. Therefore, policy should remain the same because it may impact rapid DCD donation, which should not be precluded.

Next steps:

Feedback from the Committee will be discussed with the Lung Efficiency in Allocation Workgroup.

Upcoming Meeting

- November 14, 2023 (Teleconference)

Attendance

- **Committee Members**
  - John Lunz
  - Lenore Hicks
  - Darryl Nethercot
  - Gerald Morris
  - Julie Houp
  - Amber Carriker
  - Hemant Parekh
  - Qingyong Xu
  - Caroline Alquist
  - Crystal Usenko
  - Hua Zhu
  - John Lunz
  - Stephanie Osier
  - Omar Moussa
  - Laurine Bow
  - Jerome Saltarrelli
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - Jon Miller
  - Katie Audette
  - Rajalingam Raja
- **UNOS Staff**
  - Courtney Jett
  - Tamika Watkins
  - Isaac Hager
  - Betsy Gans
  - Thomas Dolan
  - Susan Tlusty
  - Amelia Devereaux
  - Laura Schmitt
  - Kaitlin Swanner