OPTN Histocompatibility Committee
HLA Equivalency Tables Review Subcommittee
Meeting Summary
February 24, 2021
Conference Call

Peter Lalli, Ph.D., D(ABHI), Chair
John Lunz, Ph.D., D(ABHI), Vice Chair

Introduction

The HLA Equivalency Tables Review Subcommittee met via Citrix GoToMeeting teleconference on 02/24/2021 to discuss the following agenda items:

1. Discussion: Tables Expansion, CIWD 3.0
2. Discussion: New DPA1 Table
3. Discussion: Update DPB1 Table
4. Additional Discussion

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

1. Discussion: Tables Expansion, CIWD 3.0

The Vice Chair opened the discussion with the following questions:

- Should we include only common alleles, or common and intermediate alleles?
- What about DRB 3/4/5, as those included in our tables currently are only well documented or rare?
- How do we handle DQA1 and DPA1, which weren't included in this study?

Summary of discussion:

One member brought up that for solid organ what is really used for matching and unacceptable antigen purposes is really serologic antigen specificities, not alleles-level specificities. While allele-level specificities are important to resolve for bone marrow donation due to graft vs. host disease (GVD), that's not as necessary for solid organ. In addition, the majority of labs aren't performing true high resolution typing for initial donor typings. This member proposed that instead, the subcommittee expand the p-group equivalencies, because many labs aren't able to fully resolve ambiguous typings at this time.

Another member brought up that some centers with next generation capacity are doing dome retrospective absolute donor typings in their TIEDI forms. We're seeing an increase in this in the HLA discrepancies subcommittee. One member brought up that selective use of high- vs. low-resolution typing makes it more difficult to manage the data, and that right now the high-resolution data isn't being fully utilized and might not be necessary to capture. The current matching algorithm is also using serologic equivalents currently. Universal, unambiguous high-resolution typing for donors is about ten years away, so this member proposed using either serologic equivalents or p-groups. The Vice Chair brought up that there are a few issues the member is trying to address there: what typing is available for donors, what's available for reporting in the equivalency tables, and what OPTN systems are currently using for other purposes.

One member asked why we couldn't simply use the IMGT as the source for the data. UNOS liaison mentioned that UNOS does not want the OPTN system to rely on an outside system that they do not maintain, and that the UNet systems still need to be programmed independently. The committee can choose the best source of their data, but we would still need to intake it in some way.

Committee members were not in agreement on next steps. They agreed that a guidance document on the entry of donor and recipient typing may be helpful, especially in regards to ambiguous typings. There will still be the ability for labs to upload raw typing data. Their disagreement was on the benefit of additional data being entered beyond what is currently used in the system, and not needing to continually update and being a year or more behind as testing kits are added.

Next steps:

The subcommittee will bring this discussion to the full committee on their 3/9/21 meeting for feedback.

2. Discussion: New DPA1 Table

The subcommittee discussed adding a table for HLA-DPA1 in policy, as it is currently in some places in UNet.

Summary of discussion:

Members agreed unanimously that there should be the ability to enter DPA1 typings and unacceptable antigens in UNet. Their main concern was ensuring that the options were in all systems, including KPD. Subcommittee members also unanimously agreed that typing for DPA1 should be required for both living and deceased donors. The committee agreed that the current list of reportable values within UNet looks fairly comprehensive.

Next steps:

The subcommittee will add a requirement to type for DPA1 and a list of reportable and unacceptable values for DPA1 in their proposal for public comment in summer 2021.

3. Discussion: Update DPB1 Table

The Vice Chair posed the following suggestions for committee updates:

- Update table 4-14 with most recent p-group equivalences from IMGT 3.4.3
- Update table 4-15 with the epitopes from IMGT 3.4.3
- Update table 4-16 with all reportable DPB1 epitopes from IMGT 3.4.3

Summary of discussion:

Members agreed on the proposed updates unanimously with no concerns.

Next steps:

Committee leadership will discuss how to best divide the work load of updating the HLA-DPB1 tables.

4. Additional Discussion

A committee member postulated that the committee should also develop a list of null alleles that all labs would be able to type for. There have been multiple typing errors in the past due to incorrect assignment or entry of null alleles, and putting the need for resolution of a list of common null alleles in policy would be helpful for both typing discrepancies and allocation to sensitized patients.

Upcoming Meetings

- TBD

Attendance

- **Subcommittee Members**
  - Cathi Murphey
  - Jennifer Schiller
  - Jerry Morris
  - John Lunz
  - Peter Lalli
  - Taba Kheradmand
  - Tracy McRacken
  - Valia Bravo-Egana
- **HRSA Representatives**
  - Arjun Naik
  - Jim Bowman
- **UNOS Staff**
  - Abigail Fox
  - Adel Husayni
  - Courtney Jett
  - Kelsi Lindblad