OPTN Histocompatibility Committee
HLA Tables Review Subcommittee
Meeting Summary
September 28, 2020
Conference Call

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

Introduction

The HLA Tables Review Subcommittee met via Citrix GoToMeeting teleconference on 09/28/2020 to discuss the following agenda items:

1. Common, Intermediate, and Well-Documented Alleles
2. DPA1
3. Null Alleles

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

1. Common, Intermediate, and Well-Documented Alleles

The Histocompatibility Vice Chair presented on the idea of using the updated CIWD 3.0 to revise the HLA equivalency tables in OPTN Policy 4.10.

Summary of discussion:

With the requirement for molecular typing for HLA, labs are now able to type candidates with increased granularity. In addition, the updated CIWD 3.0 contained over 8 million typings to draw the data from, in comparison to a few hundred thousand that previous updates have used. Since there was such a large amount of data used to determine common and intermediate alleles in a given population, it seems likely that this wouldn't necessitate changes quite as frequently. In addition, expanding OPTN HLA tables to include common and intermediate alleles would allow for more accurate matching, and hopefully better patient outcomes due to that. This would be a very large expansion of the tables, but would allow for more accurate typing in Waitlist/DonorNet and better screening of unacceptable antigens. This likely wouldn't change matching as it currently is, since it is based on serologic equivalents. A change in matching wouldn't be possible without a change in policy requiring allele-level typing for all histocompatibility labs.

Currently labs are able to look at the raw typing uploaded, but don't have the option to enter all of the alleles within the system. The most common question the committee gets is why certain alleles aren't available for entry. This would require a lot of work from the committee right now, but the subcommittee agreed that it is worthwhile and will place them in a better position in the future. They think this would be of great benefit to both patients and providers, and would allow the committee to require allele-level typing for all donors when feasible and appropriate.

Committee members discussed the "other allele" option, slated to be implemented by the end of December by UNOS IT for DPB1 alleles not currently within UNet. One member asked if this would just be for HLA DPB1, and expressed concerns that if it's allowable for HLA A/B/DR it could adversely affect matching priority. Staff explained that it will only be implemented for DPB1.

Next steps:

Discuss further at full Histocompatibility Committee meeting in October.

2. DPA1

The Histocompatibility Vice Chair presented on the idea of adding DPA1 to the HLA equivalency tables in OPTN Policy 4.10.

Summary of discussion:

Discussed the goals of aligning all enterable HLA data across UNet systems. Currently, DPA1 is enterable for recipient histocompatibility, but is not available within Waitlist or DonorNet. Discussed that the committee might not require typing at this locus currently, as that would necessitate a policy change, but that it would be helpful to allow DPA1 to be in donor and candidate typing, as well as helpful to allow for DPA1 unacceptable antigen assignment.

Next steps:

Discuss further at full Histocompatibility Committee meeting in October.

3. Null Alleles

The Histocompatibility Vice Chair discussed the idea of requiring typing for an OPTN-defined list of common null alleles.

Summary of discussion:

Including a requirement to type for null alleles would keep candidates from being incorrectly screened off of match runs. This would require a policy change, but null alleles listed for ASHI are currently covered by RT PCR kits and wouldn't create an extra burden.

One subcommittee member asked how often null alleles are incorrectly included in donor HLA typing. Unfortunately, there is not data on this as there is no required reporting. The Committee could request data based on common alleles linked with null alleles, but that wouldn't be entirely accurate. Sometimes this is mentioned in donor highlights text, but overall the current reporting and typing is very inconsistent, especially as some labs report null alleles as expressed to be on the safe side.

One subcommittee member asked if this would be simply aligning the OPTN list of null alleles with the current ASHI list. The Vice Chair responded that the OPTN is not required to do so, and can instead create their own independently evaluated list. It can still be a starting point and guideline.

One subcommittee member suggested that this could start with voluntary reporting of null alleles within DonorNet without a policy requirement. There was some debate that this could potentially cause confusion, especially when the people entering data into DonorNet aren't from the histocompatibility lab. If it was required and not put into DonorNet it might be less confusing. Labs would then be expected to define null alleles with fidelity, but not report them. This could potentially be a challenge for low resolution labs who may currently be over-reporting DR53.

Next steps:

Discuss further at full Histocompatibility Committee meeting in October.

Upcoming Meetings

- TBD

Attendance

- **Subcommittee Members**
  - Cathi Murphey
  - Jennifer Schiller
  - John Lunz
  - Pete Lalli
  - Taba Kheradmand
  - Tracy McRacken
  - Valia Bravo-Egana
- **HRSA Representatives**
  - Jim Bowman
- **UNOS Staff**
  - Adel Husayni
  - Courtney Jett
  - Emily Ward
  - Kelsi Lindblad
  - Leah Slife
  - Nicole Benjamin
  - Susan Tlusty