OPTN Histocompatibility Committee Donor and Recipient Histocompatibility Forms Review Workgroup Meeting Summary April 18, 2023 Conference Call

Introduction

The Donor and Recipient Histocompatibility Forms Review Workgroup ("Workgroup") met via Citrix GoToMeeting teleconference on 04/18/2023 to discuss the following agenda items:

- 1. HLA Antibody Screening Continued
- 2. TIEDI Discrepancy Form

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

1. HLA Antibody Screening Continued

Staff provided a summary of the Workgroup's previous decisions and requested feedback on the unanswered questions.

Summary of discussion:

A member felt that displaying peak CPRA would only be useful if programs are listing unacceptable antigens. They also felt that the system should auto-populate the most recent CPRA from what is available in the system. A second member felt that both may not be that useful if there are no unacceptable antigens listed. It was also noted that continuous distribution for lungs does factor in CPRA values, so, whether unacceptable antigens are listed or not, most recent CPRA is valuable data for retrospective review of continuous distribution. They added that they felt it was rare that programs delisted unacceptable antigens from their patients, which would be the only time in which a peak could be higher than the most recent CPRA.

Many members agreed that CPRA should be based off the unacceptable antigens that are listed in the system. This would prevent programs from listing candidates as high CPRA and still having them appear on a large number of match runs.

Next steps:

Staff summarized that the committee would like the most recent CPRA to remain on the form and for it to be auto-populated from the OPTN Waiting List.

2. TIEDI Discrepancy Form

The TIEDI discrepancy form is available for kidney, pancreas, and kidney-pancreas deceased donors and/or recipients for which discrepant HLA results have been entered.

Data summary:

The report will only show discrepancies found for A, B, DR, Bw4, and Bw6 antigens.

Summary of discussion:

A member felt that all loci should be included in the report so as to better understand the nature of any discrepancies. A second member agreed, noting that this will also help understand the impact of an increasing usage of virtual crossmatching. A third member added that this should apply for both donors and recipients.

A member felt that it may be less important to have a report of the discrepancies than to develop safeguards and procedures to ensure discrepancies do not occur. They acknowledged that the most recent proposal on confirmatory typing proposal may have been less desirable due to the lack of available data, however. Finally, they considered that there may be benefit in capturing discrepant typing data across all organs.

It was asked what two sources of typing information are used to compare results for recipients. Staff clarified that the HLA records in waitlist are compared against the Recipient Histocompatibility form submitted to the Data System for the OPTN.

Staff asked if the report should include living donor discrepancies. Living donor discrepancies are difficult to track because the typing data is only tracked from the donor histocompatibility form. A member replied that this would likely be a very small number of discrepancies, in part because of the number of times in which a living donor is retyped is small. Two other members agreed that this likely would not provide useful data to evaluate.

Staff asked if the resolve reason on the discrepancy report "discrepancy not resolvable" should remain. A member responded that they could not think of a reason a discrepancy would not be resolvable these days. A second member noted that there may be instances in which typing material is no longer available to resolve a discrepant typing. Especially for a third confirmatory typing, if a small amount of sample is available baseline, material may be exhausted before getting a definitive result. Staff noted that in the past year of review, "discrepancy not resolvable" had not been used at all. Multiple members agreed that, with that information, it should not be included as a response option.

Staff inquired if there were response options available for the resolve reason that were no longer relevant. A member noted that "PBL versus LN/Spleen" was no longer relevant, given that it should not matter where your cells come from, especially for DNA typing. A second member added that "Low Antigen Expression", "Poor Cell Viability", "Low Cell Numbers", and "Serology vs. Molecular" also should be struck. It was noted that "Correct Typing" also seemed to be confusing and should be renamed. Another member suggested removing "Blank Antigen" and "Unable to Type/Identify Antigens". A member asked if other members felt that "Parent vs. Split" and "Incorrect Split" should be separate. A second member felt that they should be merged. Staff asked if a response option for "Null Alleles" should be added. Two members agreed it should be added. It was suggested that a resolution-level discrepancy be included; another member proposed renaming it to "Nomenclature Variance". Staff wondered if "Incorrect Assignment" could also be bundled into the new category of "Nomenclature Variance". A member agreed that it likely would.

A member asked if it would be beneficial to separate out "Non-impactful Nomenclature Variance" and "Impactful Nomenclature Variance". A second member supported this separation.

A member expressed concern that equivalencies were showing up as discrepant typing results. Staff clarified that this would not happen after the 2022 update to equivalency tables.

It was suggested to split the discrepancy table up between minor discrepancies and major discrepancies. A member supported this proposal but noted that there would have to be a definition for what constituted a major versus a minor discrepancy. A second member postulated that a major discrepancy

was anything that could have had a potential patient safety impact. They noted that this would allow the discrepancy review group to focus only on the discrepancies that could have had patient impact.

Next steps:

Staff will compile the Workgroup's recommendations into an updated list and preview it to the Workgroup at their next call.

Upcoming Meeting

• May 16, 2023

Attendance

• Workgroup Members

- o Andrew Jaramillo
- o Hemant Parekh
- Kelley Hitchman
- o Omar Moussa
- o Valia Bravo-Egana
- o John Raposa
- o Laurine Bow
- o Rajalingam Raja
- o Crystal Usenko
- o Helene McMurray

• HRSA Representatives

- o Jim Bowman
- UNOS Staff
 - o Courtney Jett
 - o Isaac Hager
 - o Debra Vicars
 - o Krissy Laurie
 - o Darby Harris