

**OPTN Histocompatibility Committee
Discrepant HLA Typings Subcommittee
Meeting Summary
September 14, 2020
Conference Call**

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

Introduction

The Discrepant HLA Typings Subcommittee met via Citrix GoToMeeting teleconference on 09/14/2020 to discuss the following agenda items:

1. Review Discrepant HLA Typings Report
2. Discrepant HLA Typings Analysis
3. Project Discussion: HLA Typings Change Mandatory Notification

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

1. Review Discrepant HLA Typings Report

UNOS Research staff explained that they are working to resolve technical issues with the quarter 2 2020 discrepant HLA typings report.

Next steps:

UNOS Research staff to distribute quarter 2 2020 discrepant HLA typings report when complete.

2. Discrepant HLA Typings Analysis

Histocompatibility Committee Chair described the discrepant HLA typings research report, its fields, and how and why the analysis is completed and used.

Data summary:

Current fields in the discrepant HLA typings report from UNOS Research include:

- Assigned blinded donor number
- Donor type (deceased vs. living)
- Discrepancies noted
- Source of HLA information
- Assigned blinded histocompatibility lab number
- Full HLA typing information
- Reported typing method
- Discrepancy reason noted in database
- Days to reporting discrepancy reason
- Time of match runs

Current reasons for discrepancy in analysis include:

- Sample integrity issue (wrong specimen, completely incorrect typing)

- Clerical, technical, and interpretive typing errors
 - BW4/BW6 issues
 - DRB345 issues
 - DR53 null issues
 - DPB1 errors
 - Other typing errors
- Split vs. parent antigens
 - CW3
 - DR3
 - DQ3
 - Other

The data is then broken down into total errors, critical errors, total donors with donor histocompatibility forms (DHF) and match run within the report, and percentage of errors. There is then a section for times the match was re-run when there were critical errors, and the average time between match run in those cases.

Summary of discussion:

The Committee Chair discussed previous projects that have been undertaken to try to limit the number of discrepancies. Histocompatibility labs are now required to upload raw HLA typing data, and the project for double entry of HLA typings was just implemented in February.

One member asked why less than half of matches were re-run for critical discrepancy cases in 2019. The Chair responded that UNOS Research is starting to look into reasons, but some potential ones may be that the discrepancies weren't recognized until after transplant, or that the discrepancy didn't change the allocation or cause issues with the intended recipient. In addition, the OPO could have had a logistical reason to not re-execute a match, or had other potential recipients from the original match run who were able to accept the updated donor typing even if the original intended recipient was not.

One committee member noted that some of the DP errors on the first quarter report for 2020 were within equivalent p-groups. She proposed that anything within the same p-group should be considered equivalent after analysis.

One member noted that the number of reports with total errors was less than the number of each type of error added up. UNOS staff clarified that this is because some HLA donor typings contained multiple errors.

Next steps:

A subcommittee member volunteered to review the second quarter 2020 report when UNOS Research completes it, and then review it with the members.

3. Project Discussion: HLA Typings Change Mandatory Notification

The Histocompatibility Committee Chair introduced the project idea and requested feedback from the workgroup composed of Histocompatibility, Operations and Safety, and OPO committee members.

Summary of discussion:

All members were in agreement that critical HLA typing changes should necessitate an active notification. Workgroup members discussed stakeholder groups and agreed that ASHI, CAP, AST, ASTS, and AOPO are likely to be the most impacted. Members agreed that notifications shouldn't be required for every discrepancy, but should be required for critical discrepancies. The previous subcommittee had

defined critical discrepancies as ones that have the potential to cause adverse patient outcomes such as hyperacute rejection, but did not create a more granular definition.

Workgroup members expressed that patient safety contacts were likely not the best people to notify for discrepancies detected pre-recovery or pre-transplant, but that post-transplant they are likely the preferred contact. One member noted that the transplant coordinator on call may be a better contact pre-transplant, as they are more involved in patient care and likely have a quicker response. Members also noted that there may be a gray area post cross-clamp and pre-transplant, and that the OPO is likely going to have the easiest time making sure the appropriate people are notified as soon as possible. One member brought up the concern of “provisional yes’s”, and that it would be time-consuming for OPOs to actively notify every provisional yes if there are dozens. In that case, the OPO representative recommended that the Histocompatibility lab contact the OPO, the OPO call transplant programs as appropriate, and a blanket electronic notification be sent to all programs with a provisional yes.

The workgroup began discussing match re-execution when critical discrepancies were detected pre-transplant, but was concerned about the varying circumstances and timelines in deceased donor cases. They were all in agreement that any candidate who had accepted an organ be first given a chance to accept with the updated HLA typing.

Next steps:

The Histocompatibility Committee will work together with the subcommittee to define critical discrepancies. The Histocompatibility Vice Chair will present the project to POC for approval on October 14th.

Upcoming Meetings

- TBD

Attendance

- **Subcommittee Members**
 - Greg Abrahamian
 - Idoia Gimferrer
 - Jennifer Schiller
 - John Lunz
 - Karl Schillinger
 - Larry Suplee
 - Marcelo Pando-Rigal
 - Medhat Askar
 - Peter Lalli
 - Phyllis Weech
 - Reut Hod Dvorai
 - Vandana Khungar
- **HRSA Representatives**
 - Marilyn Levi
- **UNOS Staff**
 - Adel Husayni
 - Courtney Jett
 - Emily Ward
 - Kelsi Lindblad
 - Nicole Benjamin
 - Susan Tlusty