OPTN Histocompatibility Committee
Discrepant Typings Subcommittee
Meeting Summary
August 8, 2023
Conference Call

John Lunz, PhD, F(ACHI), Chair
Gerald Morris, MD, PhD, Vice Chair
Laurine Bow, PhD, Subcommittee Chair

Introduction

The OPTN Histocompatibility Discrepant HLA Typing Subcommittee (the Subcommittee) met via Webex teleconference on 08/08/2023 to discuss the following agenda items:

1. Review Critical Discrepancies by Lab
2. Discussion and Feedback on Review Process

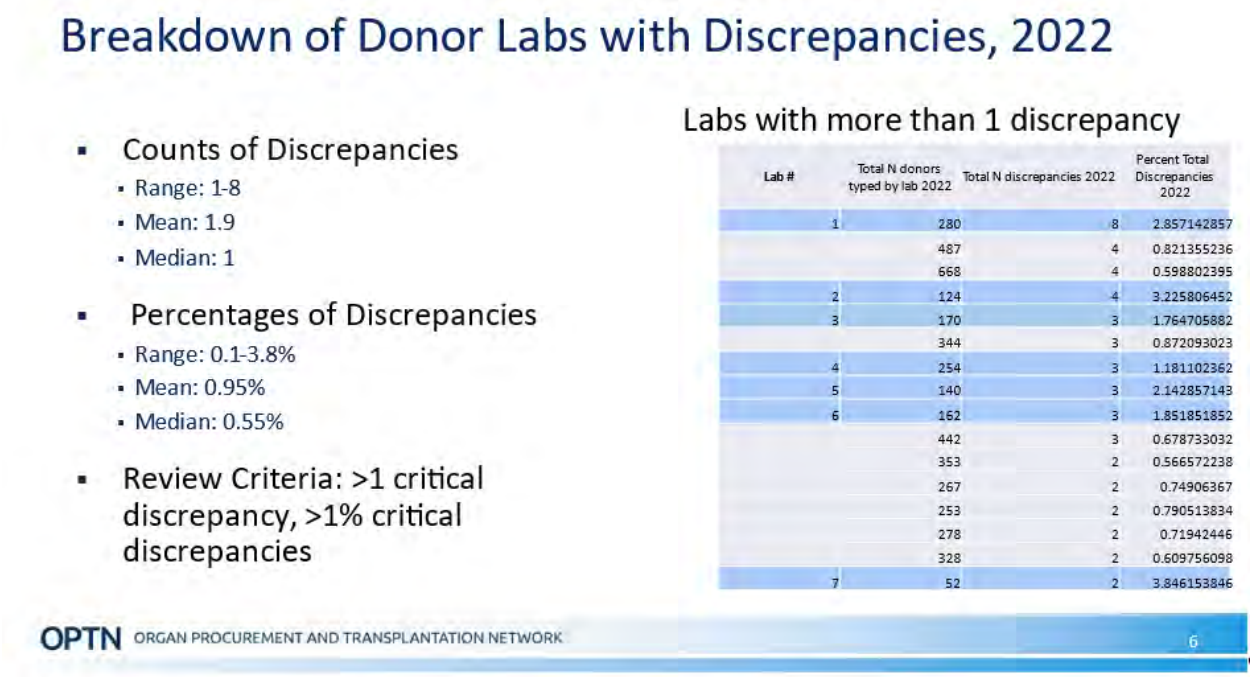
The following is a summary of the Subcommittee's discussions.

1. Review Critical Discrepancies by Lab

The Subcommittee reviewed each lab above the determined threshold from both the primary typing lab and as recipient confirmatory typing lab. The group also determined whether any critical discrepancies should be subtracted from lab totals or if any needed to be elevated to the Membership and Professional Standards Committee (MPSC) for further inquiry based on whether or not they appeared to be a true critical discrepancy and whether or not they appeared to be caused by another lab based on concordance of recipient confirmatory typing data.

Presentation Summary:

- A critical discrepancy is defined as a difference among non-equivalent values, according to OPTN *Policy 4.10* (the HLA equivalency tables), at one or more loci in a candidate's, donor's, or recipient's HLA typing



Summary of discussion:

Decision #1: The Subcommittee decided not to refer Lab 1 to the MPSC for further review.
Decision #2: The Subcommittee decided to refer Lab 2 to the MPSC for further review.
Decision #3: The Subcommittee decided to refer Lab 3 to the MPSC for further review.
Decision #4: The Subcommittee decided to refer Lab 4 to the MPSC for further review.
Decision #5: The Subcommittee decided to refer Lab 5 to the MPSC for further review.
Decision #6: The Subcommittee decided to refer Lab 6 to the MPSC for further review.
Decision #7: The Subcommittee decided to refer Lab 7 to the MPSC for further review.

Decision #1: The Subcommittee decided not to refer Lab 1 to the MPSC for further review.

Lab 1had a total of 280 HLA typings, the N of critical discrepancies as the original typing lab was 5 (1.8%). After further review, the N of critical discrepancies for potential MPSC referral was 2 (0.7%). Since the percentage of critical discrepancies is less than 1%, this is not a lab that needs to be referred to the MPSC for further review.

Discrepancy 1**:** Considering that a recipient confirmatory typing lab cited a "transcription error" on the TIEDI discrepancy form, this is a case that is most likely not caused by the primary lab and should not be counted in their totals.

Discrepancy 2**:** The Chair stated that this is a topic that should be discussed further in the in-person Histocompatibility Committee meeting considering situations like these are discrepancies but are not reported as so on TIEDI forms due to the limitations of what is required and flagged as discrepant. They also stated that even though this may not be a discrepancy caused by this specific lab, it should remain discrepant since there was no resolution between the two and it is not possible to tell which lab caused the discrepancy. The Subcommittee offered that it would still be a good idea to elevate this case to the MPSC so that they may undertake a resolution process.

Discrepancy 3: Since the final report was that the donor HLA-B typing was matched the reported Bw typing, the result of the original typing lab would be correct. The Subcommittee suggested that the confirmatory lab that reported the discrepant Bw typing was most likely the source of the discrepancy in this situation and this case should not be counted toward the original lab's total.

Discrepancy 4: Since the original typing lab reported both the initial and second typing, there is a clear discrepancy between the two typings reported by the original lab.

Discrepancy 5: The Subcommittee discussed how both typings are in the same p group, with one of the typings being the lowest allele in the p-group string. The members decided that since they are situated in the same p group, it is fair to say that this is not critically discrepant and the definition of a critical discrepancy may need to be modified.

Decision #2: The Subcommittee decided to refer Lab 2 to the MPSC for further review.

Lab 2 had a total of 124 HLA typings, the N of critical discrepancies as the original typing lab was 4 (3.2%). After further review, the N of critical discrepancies for potential MPSC referral was 4 (3.2%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC for further review.

Discrepancy 1: A member stated that there was an obvious discrepancy with the typing on the match run versus what was reported by the same lab on the donor histocompatibility form (DHF), so this would be considered a critical discrepancy that occurred at the original typing lab.

Discrepancy 2: The Chair states that even though the correction was made on the second match run, this case would be considered a near miss and should be looked at closer in a root cause analysis to understand the mistake with the initial typing. Since the same lab reported both typings which are discrepant, this would be a case where the discrepancy clearly occurred at this lab.

Discrepancy 3: Even though the original typing lab reported one typing on the match run and a critically discrepant typing on the DHF, this would be considered a discrepancy that occurred at this lab and should be looked at closer with a root cause analysis.

Discrepancy 4: The same lab reported one typing on the first match run and a critically discrepant typing on the second match run. This is considered a near miss and should be looked at closer in a root cause analysis.

Decision #3: The Subcommittee decided to refer Lab 3 to the MPSC for further review.

Lab 3 had a total of 254 HLA typings, the N of critical discrepancies as the original typing lab was 3 (1.2%). After further review, the N of critical discrepancies for potential MPSC referral was 3 (1.2%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC for further review.

Discrepancy 1: Even though the TIEDI discrepancy form stated the reason for a discrepancy as "other" there was a difference in what was reported on the match run and on DHF, both reported by the same lab. They state the difference between the two warrants further investigation.

Discrepancy 2: The Subcommittee acknowledges that this is a confusing case to determine what occurred based on the information available, however, since there is a discrepancy in all the loci between what the original typing lab reported on the match run and what they have on the DHF, it should be referred to the MPSC.

Discrepancy 3: The Subcommittee discussed that this would be another near miss situation in which a mistake was still made at the original typing lab, as they reported two different results on two different match runs.Therefore, this is a situation that should be looked at closer in a root cause analysis to understand the mistake with the initial typing.

Decision #4: The Subcommittee decided to refer Lab 4 to the MPSC for further review.

Lab 4 had a total of 170 HLA typings, the N of critical discrepancies as the original typing lab was 4 (2.4%). The N of critical discrepancies as the recipient confirmatory typing lab was 3. After further review, the N of critical discrepancies for potential MPSC referral was 2 (1.2%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC.

Discrepancy 1: The same lab reported two different Bw typings on the match run and DHF. The group discussed how this seems to be a transcription error or reporting error on the DHF, however, this was ultimately an error. This should be considered a critical discrepancy on the part of the original typing lab.

Discrepancy 2: Even though it doesn't fit the current definition of a critical discrepancy, the group discussed that alleles within the same p group should be excluded from being a critical discrepancy, therefore subtracting this case from the lab's total.

Discrepancy 3: Since both alleles fall within the same p group, this would not be considered a critical discrepancy and would be subtracted from the lab's total.

(Recipient Confirmatory Lab) Discrepancy 1: Since this lab was in the majority with its typing and it matches the second match run, this is most likely a problem with the initial match run typing and should not be counted toward the confirmatory lab's total number of discrepancies to investigate.

(Recipient Confirmatory Lab) Discrepancy 2: The data shows that this is not a critical discrepancy because the Bw call is consistent with the B typing and with what was reported on the DHF. This case should not count toward this lab's total.

(Recipient Confirmatory Lab) Discrepancy 3: This lab's reported typing is concordant with the second match run, DHF, and one other confirmatory lab's typing. While it is discrepant with the original match run, it should not be counted towards this lab's total as it appears the discrepancy occurred with the original typing lab.

(Recipient Confirmatory Lab) Discrepancy 4: This is a case where the confirmatory typing is discrepant from the match run, DHF, and one other confirmatory lab's typing, and therefore should be counted toward this lab's total and referred to the MPSC for further review.

Decision #5: The Subcommittee decided to refer Lab 5 to the MPSC for further review.

Lab 5 had a total of 140 HLA typings, the N of critical discrepancies as the original typing lab was 3 (2.1%). The N of critical discrepancies as the recipient confirmatory typing lab was 1. After further review, the N of critical discrepancies for potential MPSC referral was 3 (2.1%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC.

Discrepancy 1: This would be considered a discrepancy for this lab as they had the differences in reporting between the first and second match runs.

Discrepancy 2: The discrepancy between the first and second match run was a near miss and needs to be referred to the MPSC, as both discrepancies occurred with reporting by the initial typing lab.

Discrepancy 3: Since the two typings do not fall in the same p group, and both typings were reported by the original typing lab on the match run and DHF respectively, this is a case that should be considered a critical discrepancy for the original typing lab.

(Recipient Confirmatory Lab) Discrepancy 1: The original typing lab reported a different typing between the match run and DHF, but this confirmatory lab's typing was concordant with the results on the match run. It appears that this discrepancy was with the original typing lab, so this case should not go towards this lab's total.

Decision #6: The Subcommittee decided to refer Lab 6 to the MPSC for further review.

Lab 6 had a total of 162 HLA typings, the N of critical discrepancies as the original typing lab was 2 (1.2%). After further review, the N of critical discrepancies for potential MPSC referral was 2 (1.2%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC.

Discrepancy 1: Even though the correction was made on the second match run, this was a near miss and would warrant further review by the MPSC as the same lab reported discrepant typings on two match runs.

Discrepancy 2: This is a similar near miss situation with two discrepant typings reported by the same lab on two match runs. It could have excluded candidates on the first match run, and therefore warranted a referral to the MPSC.

Decision #7: The Subcommittee decided to refer Lab 7 to the MPSC for further review.

Lab 7 had a total of 52 HLA typings, the N of critical discrepancies as the original typing lab was 2 (3.8%). After further review, the N of critical discrepancies for potential MPSC referral was 2 (3.8%). Since the percentage and number of critical discrepancies exceeds the review threshold, this lab will be referred to the MPSC.

Discrepancy 1: The first match run typing was critically discrepant and different from the second reported match run typing and DHF, and the case would be considered a near miss. The group determined this should be referred to the MPSC.

Discrepancy 2: This is again a near miss where two different typings were reported on two different match runs and should be referred to the MPSC.

Next steps:

OPTN Contractor staff will refer the specified labs that were above the threshold to the MPSC for further review. OPTN Contractor staff will compile the same information for recipient typing labs for review by the Subcommittee.

2. Discussion and Feedback on Review Process

Summary of discussion:

When the Subcommittee was asked if this the review process to refer labs to the MPSC was fair, a member added that they did think it was fair and questioned how the Histocompatibility community would feel since this practice had not been shared with them yet. A member answered that there was nothing new in the process other than the pre-screening element. The pre-screening part is meant to ensure that the MPSC is receiving cases that truly need to be reviewed further and to improve workflow so that labs do not need to spend additional time answering questions from the MPSC if they do not need to.

Upcoming Meeting(s)

- TBD

Attendance

- **Subcommittee Members**
  - John Lunz
  - Gerald Morris
  - Caroline Alquist
  - Laurine Bow
  - Amber Carriker
  - Lenore Hicks
  - Julie Houp
  - Andres Jaramillo
  - Marilyn Levi
  - Helen McMurray
  - Stephanie Osier
  - Hemant Parekh
- **UNOS Staff**
  - Courtney Jett
  - Jenna Reformina
  - Thomas Dolan
  - Krissy Laurie
  - Joel Newman