

**OPTN Histocompatibility Committee  
Meeting Summary  
December 12, 2023  
Conference Call**

**John Lunz, Ph.D., F(ACHI), Chair  
Gerald Morris, MD, Ph.D., Vice Chair**

## **Introduction**

The Histocompatibility Committee, the Committee, met via WebEx teleconference on 12/12/2023 to discuss the following agenda items:

1. Calculated Panel Reactive Antibody (CPRA) Calculation Issue: Policy 4-3
2. Board Meeting Debrief

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

### **1. Calculated Panel Reactive Antibody (CPRA) Calculation Issue: Policy Table 4-3**

The Committee discussed potential issues with the CPRA calculator as it may not align appropriately with how the CPRA calculator should function in OPTN Policy Table 4-3. More specifically, since the data from the NMDP database was not rich enough for certain DQA alleles, there was not a good population of these alleles at the required resolution of typing for the Committee to be able to incorporate them in the CPRA calculation.

#### Presentation summary:

Initial Conclusions from Committee Discussions:

- The decision to combine the DQA1 alleles was done because the Committee felt there was no way to distinguish those alleles based on the data provided
- The Committee knew and understood the limitations of this as it applied to the calculation
- Therefore, they felt that combining them was the best option for highly sensitized patients

Based on a preliminary analysis, it seems the values provided by the subcontractor and subsequently implemented in the CPRA calculation differ from what the policy states would be used for the specific unacceptable antigens in Table 4-3. Instead of equal values as policy states, staff have confirmed the system is using distinct and separate values for the antigens listed in the table.

Impact of Implementing Table 4-3:

- At the time of implementation on 12/06/23, there were 3,212 registrations with at least one of the affected DQA1 values
  - Of these, 2,010 registrations had an increase in CPRA
- There were 1,976 registrations where the increase in CPRA had the potential to affect allocation priority (kidney, pancreas, kidney-pancreas, or lung)
  - 24 kidney registrations went from < 98% CPRA to >= 98% CPRA
  - 3 pancreas and 2 kidney-pancreas registrations went from < 80% CPRA to >= 80% CPRA

- Analysis of historical impact is underway

Summary of discussion:

**The Committee did not make any decisions.**

The Chair expressed gratitude to the OPTN contractor staff for presenting an overview of the impact of Table 4-3. The Chair emphasized the significance of this information in gaining a comprehensive understanding of the disparity between what was included in the calculator versus the policy. Additionally, the Chair highlighted the Committee's keen interest in examining historical data when it becomes accessible. Understanding the historical context would enable the Committee to effectively quantify whether any patients were removed or potentially disadvantaged because of the implemented changes.

When asked a question about validation, the Chair stated that the only way that they would have been able to identify the error would have been to specifically go back and analyze allele for allele and compare it to what they expected with the policy. The only real change from the file and what should have been in the calculator should have been changes outlined in Policy Table 4-3.

## **2. Board Meeting Debrief**

The Chair debriefed the Committee on his experience at the recent Board of Directors (BOD) meetings. In addition, he shared updates about the Expeditious Task Force.

Presentation summary:

The Chair of the Committee participated in the recent BOD meeting with the aim of providing insights to fellow Board members and engaging with other Chairs present. During the meeting, it was emphasized that significant developments are underway within the OPTN. There was extensive discussion about legislative changes recently signed by the President of the United States. Furthermore, the OPTN Board is actively collaborating with the Health Resources and Services Administration (HRSA) as HRSA pursues the restructuring and new management of the OPTN. It was noted that these proposals might be released soon. At that time, other organizations will be able to bid on various components of the OPTN contract as part of the reshaping process.

In the recent BOD meeting, discussions centered around the OPTN's efficiency task force and its associated goals. The Chair emphasized that the kidney continuous distribution has been temporarily suspended to address critical efficiency concerns within the OPTN. The efficiency task force is actively seeking input from existing Committees and the community to enhance the efficiency of the transplant ecosystem and allocation process.

The task force has set ambitious goals, aiming to facilitate 100,000 transplants by 2030. Notably, they are not seeking minor changes but are focusing on larger and more ambitious initiatives. The Board members expressed their support for these substantial endeavors to improve the overall system, which is seen as an encouraging development.

One pertinent idea discussed involved increasing virtual cross matching. The proposal suggested centralizing the entire virtual crossmatch system, allowing for the input of information that could generate a virtual cross match. This initiative aims to streamline and enhance the matching process in transplantation.

Summary of discussion:

**The Committee did not make any decisions.**

The Chair expressed a perspective on the proposed centralized cross-matching system, characterizing it as a lofty and subject to considerable debate. Despite reservations about this specific idea, the Chair sees potential in the broader concept of promoting more transplants by liberalizing the use of virtual cross-matching. The Chair believed that the Committee could actively support this goal and explore the formulation of policies that encourage the expanded use of virtual cross-matching, ultimately contributing to the facilitation of more transplants within the OPTN.

During the discussion, one member expressed reservations about the ambitious goal of implementing a centralized virtual crossmatching system, deeming it premature. Citing factors such as technology readiness, coverage, and the need for high-resolution typing of donors, the member believed achieving this goal in the next few years may not be feasible. While acknowledging the widespread use of virtual crossmatching in 90% of his patients, implementing it at the outset of the match run was considered challenging.

Another member suggested a more incremental approach to move the needle forward. Proposing the idea of disseminating data on virtual crossmatching, the member believed this could demonstrate a shift from minority to majority usage, instilling confidence in its application. Additionally, the member suggested creating a white paper outlining best practices for virtual crossmatches. Such a document could provide concrete and granular insights into virtual crossmatching, specifying aspects such as when it should and should not be employed.

The Chair emphasized the importance of active participation and staying up to date as the ongoing work unfolds. Highlighting the potential trickle-down effect that could impact laboratories or other crucial aspects of transplantation, the Chair urged members to remain engaged. Member involvement is seen as essential in providing valuable perspectives and feedback necessary to ensure the genuine efficiency of the system.

**Upcoming Meeting**

- January 9, 2024

## Attendance

- **Committee Members**
  - John Lunz
  - Gerald Morris
  - Caroline Alquist
  - Laurine Bow
  - Amber Carriker
  - Lenore Hicks
  - Julie Houp
  - Andres Jaramillo
  - Helene McMurray
  - Omar Moussa
  - Darryl Nethercot
  - Jeroma Saltarrelli
  - Crystal Usenko
  - Qingyong Xu
  - Hua Zhu
  - First Name Last Name
  - First Name Last Name
- **HRSA Representatives**
  - Jim Bowman
  - Marilyn Levi
- **SRTR Staff**
  - Katie Audette
  - Jon Miller
- **UNOS Staff**
  - Courtney Jett
  - Amelia Devereaux
  - Thomas Dolan
  - Laura Schmitt
  - Kaitlin Swanner
  - Susan Tlusty