Introduction
The Histocompatibility Committee (The Committee) met via Citrix GoToMeeting teleconference on 10/12/2021 to discuss the following agenda items:

1. Monitoring Allele-specific Unacceptable Antigens in CPRA

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

1. Monitoring Allele-specific Unacceptable Antigens in CPRA

The Histocompatibility Committee met to discuss the benefits and potential drawbacks in their proposed changes to the Calculated Panel Reactive Antibody (CPRA) calculator. The change looks to include screening for allele-level unacceptable antigens.

Summary of discussion:

The Chair opened by presenting the largest concern possible due to the intended changes: How can centers be prevented from purposely adding a number of allele-level specificities when most donors are not typed to the allele-level? This presents a problem when the candidates are receiving CPRA points due to the allele-level specificity, but no donors are being screened off because of this specificity.

A review of current policy in effect by the Chair showed how the criteria of an unacceptable antigen is determined by the transplant program. OPTN Bylaws Appendix C does note which areas labs should consider when determining sensitization, but ultimately the definition is determined by the transplant center working in conjunction with the histocompatibility lab. Consequently, there is no uniform definition for an unacceptable antigen that all transplant centers use; it was hypothesized information could be entered “based not necessarily on testing data, but on how they feel or think.” A Committee member inquired whether the Histocompatibility Committee should consider a white paper or similar investigation into unifying the definition for unacceptable antigens. The Chair replied by noting that the Committee did put forth a series of recommendations, which in turn helped drive the Bylaws recommendations.

The current monitoring plan post-policy implementation is to compare antibody listing practices pre-policy implementation to post. The discussion was opened up to the Committee with the question, “Is the proposed monitoring plan sufficient to be able to identify programs that use the opportunity to unfairly advantage their patients?” A committee member responded in favor of the proposed monitoring system, while also suggesting the implementation of a tool to exclude specific blood groups from candidates who have noted specific unacceptable antigens unique to those blood groups. The Chair responded that in theory this was a good solution, however it may not lack the specificity that the Committee would like when screening candidates from donors. A second committee member suggested possibly separating the informational allele-level antigens from the non-allele-level antigens used for
allocation. The Chair replied that this would be useful information for centers to share during allocation, but having two calculators would in part defeat the purpose of the proposed policy changes. A third member noted that the Committee also has a report on centers accepting organs from donors with reportedly unacceptable antigens to also assess how centers are using the new calculator.

The Chair also suggested another possibility for ensuring accurate reporting of CPRA could be done through the accrediting organizations for the histocompatibility labs that UNOS partners with. During their survey of the labs, these organizations could also review how labs are listing unacceptable antigens so as to ensure that they are not listing antigens in such a way to unfairly advantage their candidates. A member replied, saying that, in the current system, there is no specific definition for unfairly advantaging candidates since there are only recommendations to the labs. If there is no set minimum standard, then there are no grounds in policy to determine what constitutes an incorrect, unacceptable antigen listing. The Committee deliberated on whether there should be documentation required for candidates listing at unacceptable antigen percentages below 99 or 100 percent; however, given that the policy is still pre-implementation, and this is all speculation about possible ways transplant programs could game the system, the Committee came to the agreement that, at this phase, there was no increased need for documentation. A member also suggested that, at that point, it may be a problem that the Membership and Professional Standards Committee is better suited to handle.

One member did argue against the increase in stringency for unacceptable antigens, stating that “[they] need to have the discretion [to list candidates for unacceptable antigens based off non-testing data]”, and another followed up saying “there will always be exceptions, and it is legitimate to have exceptions.” Again, though, all Committee members agreed that, especially for exceptions, there needs to be documentation to support the decision. The Chair suggested that a continued monitoring system for the implementation could be used to review how listing practices change over time for the first year or two. To support this, the Chair also noted that this could also dissuade any program from changing a candidate’s unacceptable antigen status without their laboratory’s knowledge. A member did reply to this, saying, from a transplant side, this scenario was unlikely. Overall, the Committee did ultimately support the continued monitoring of any changes in listing practices post-implementation. Conversely, the Committee felt that approaching the accrediting bodies for laboratories would not be helpful, noting that, “having real-world data is going to be helpful in guiding them”.

In developing the report, the Committee agreed that it should have:

- Monitoring of candidates who have a listed unacceptable allele, but receive an organ from a donor with a serologically equivalent allele
- What portion of patients have allele-specific antibodies listed
- Frequency of transplants done by specific transplant programs with listed unacceptable alleles
- Offer rates for programs that switched from antigen-level to allele-level unacceptable typing

The Committee also expressed interest in seeing the current pre-implementation data for centers that are listing with allele-level specificity. Following this conversation with UNOS Research staff, the meeting concluded.

**Upcoming Meeting(s)**

- October 14, 2021
Attendance

- **Committee Members**
  - Peter Lalli
  - John Lunz
  - Caroline Alquist
  - Valia Bravo-Egana
  - Amber Carriker
  - Yvette Chapman
  - Reut Hod Dvorai
  - Idoia Gimferrer
  - William Goggins
  - Evan Kransdorf
  - Gerald Morris
  - Omar Moussa
  - Vikram Pattanayak
  - Jennifer Schiller
  - Karl Schillinger

- **HRSA Representatives**
  - Jim Bowman
  - Raelene Skerda

- **SRTR Staff**
  - Katie Audette

- **UNOS Staff**
  - Nicole Benjamin
  - Amelia Devereaux
  - Courtney Jett
  - Emily Kneipp
  - Kelsi Lindblad
  - Eric Messick
  - Leah Slife
  - Susan Tlusty

- **Other Attendees**
  - Loren Gragert
  - Medhat Askar
  - Cathi Murphey