OPTN/UNOS Histocompatibility Committee Meeting Minutes February 13, 2018 Conference Call

Robert Bray, PhD, D(ABHI), Chair Cathi Murphey, PhD, HCLD/CC(ABB), Vice Chair

Introduction

The Histocompatibility Committee met via Citrix GoToTraining teleconference on 02/13/2018 to discuss the following agenda items:

1. Presentation: National Marrow Donor Program (NMDP) CPRA Calculator

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

1. Presentation: NMDP CPRA Calculator

As part of a project idea to update the CPRA calculation, the Committee connected with a group who created a CPRA calculator based on NMDP data.

Summary of discussion:

The presenter gave a brief history of how their group's work began. While the presenter was working for National Marrow Donor Program (Be the Match), they became interested in how to apply some of the Be the Match HLA population genetics data to solid organ transplant. Committee leadership approached Be the Match staff who ran the bioinformatics research department and made the connection to present the preliminary results.

The presenter discussed the benefits of using NMDP data, which includes several HLA loci that are not capture in the current UNOS CPRA calculation. This can be important for the highly sensitized population. They developed the HLA haplotype frequency data that is used for the matching algorithm for stem cell transplantation, which predicts allele-level matching for potential match donors and sorts potential matches based on that. They have over 15 million adult donors in the registry and 250,000 cord blood units.

The group used an algorithim that would handle typing abiguities. They then wanted to convert the NMDP HLA haplotype frequencies at a high resolution to a format that would be compatible with the UNOS CPRA calculator. A Committee member asked how they handled alleles that did not have an IMGT equivalent. The group said they used a consistent rule of assigning those to the two digit category (i.e. truncating the allele down to the first two digits).

Next steps:

The Committee expressed interest in using this NMDP data as part of the project idea to update the CPRA calculation. The presenter shared that they are working to release a publication and the data set, which will get peer reviewed. The Committee will explore options for incorporating this work into the project to update the CPRA calculation

Upcoming Meeting(s) (delete the parenthesis and/or the 's' if necessary)

• March 13, 2018 – Chicago, IL

Attendance

- (Sub)Committee Members
 - o First Name Last Name
 - o First Name Last Name
- HRSA Representatives
 - o First Name Last Name
- SRTR Staff
 - o First Name Last Name
- OPTN/UNOS Staff
 - o First Name Last Name
- Other Attendees
 - o First Name Last Name