OPTN Liver and Intestinal Organ Transplantation Committee
Meeting Summary
January 20, 2023
Conference Call

James Pomposelli, MD, PhD, Chair
Scott Biggins, MD, Vice Chair

Introduction

The OPTN Liver and Intestinal Organ Transplantation Committee (the Committee) met via Citrix GoToMeeting teleconference on 01/20/2023 to discuss the following agenda items:

1. Overview: Building Rating Scales and Determining Weights for the Continuous Distribution of Livers and Intestines
2. Primer on Allocation Modelling and Organ Allocation Simulation

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

1. Overview: Building Rating Scales and Determining Weights for the Continuous Distribution of Livers and Intestines

The Committee received an overview of how to build rating scales and determine relative weights for the different attributes in continuous distribution.

Rating scales are mathematical functions that calculate how much priority is assigned to candidates for that specific attribute. Rating scales are derived from clinical and operational data or value judgements.

Weights reflect the relative importance of each attribute toward the overall goal of organ allocation. The sum of weights of all attributes will be 100 percent, the overall composite allocation score. Weights are derived from values-based decisions.

Summary of discussion:

A member asked how the rating scale of one attribute may impact other attributes. The Vice Chair said that for proximity efficiency, the Committee may seek to develop different rating scales for donation after circulatory death (DCD) and donation after brain death (DBD) organs.

The Committee requested data to help build rating scales for attributes pertaining to the following goals using relevant historical OPTN data, medical urgency, patient access, candidate biology, and placement efficiency.

Next steps:

The Committee will continue to discuss rating scales for attributes in the continuous distribution framework.

2. Primer on Allocation Modelling and Organ Allocation Simulation

The Committee received a presentation on allocation modeling and the organ allocation simulation (OAS).

The OAS includes all aspects of organ allocation; candidates, donors, and allocation rules. A computer simulation is a computer program that uses step by step methods to explore the approximate behavior of the OAS. The simulation generates data about "possible worlds". Through assumptions, statistical modeling, and running the simulation over a historical period with different allocation rules, match runs can be created that did not happen in reality. The data produced from the simulation "looks like" the historical data. This creates comparison of the type "what would have happened under different allocation policies".

Summary of discussion:

The Vice Chair asked if the modelling has been trialed with historical data and known occurrences to see if it compares to real life scenarios for liver. SRTR staff confirmed that is the plan.

Next steps:

The Committee will continue to develop the continuous distribution framework for livers and intestines and utilize allocation modeling and OAS.

Upcoming Meeting

- February 3, 2023 @ 3:00 PM ET (teleconference)
- February 17, 2023 @ 3:00 PM ET (teleconference)

Attendance

- **Committee Members**
  - Alan Gunderson
  - Allison Kwong
  - Bailey Heiting
  - Christopher Sonnenday
  - Colleen Reed
  - Erin Maynard
  - Greg McKenna
  - James Markmann
  - Jim Pomposelli
  - James Trotter
  - Neil Shah
  - Peter Abt
  - Scott Biggins
  - Shunji Nagai
  - Sophoclis Alexopoulos
  - Sumeet Asrani
  - Vanessa Pucciarelli
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - John Lake
  - Katie Audette
  - Nick Wood
  - Simon Horslen
  - Tim Weaver
  - Ryutaro Hirose
- **UNOS Staff**
  - Betsy Gans
  - Eric Messick
  - Erin Schnellinger
  - Joel Newman
  - Julia Foutz
  - Matt Cafarella
  - Meghan McDermott
  - Niyati Upadhyay
  - Susan Tlusty
- **Other Attendees**
  - Dave Weimer
  - Emily Perito
  - Pratima Sharma