OPTN Pancreas Transplantation Committee Continuous Distribution Workgroup
Meeting Summary
November 6, 2020
Conference Call

Silke Niederhaus, MD, Chair
Rachel Forbes, MD, Vice Chair

Introduction

The Pancreas Transplantation Committee Continuous Distribution Workgroup (the Workgroup) met via Citrix GoToMeeting teleconference on 11/6/2020 to discuss the following agenda items:

1. Overview of Project – Review of 10/23 meeting
2. Review and Discussion of Attributes

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

1. Overview of Project – Review of 10/23 meeting

The Workgroup reviewed the scope of the Continuous Distribution project as well as the objectives of the first phase of the project (identifying and categorization of attributes).

Summary of discussion:

During the October 23rd meeting, the Workgroup continued their discussions on pancreas-specific attributes and how best to categorize them in the Continuous Distribution model. The Workgroup discussed and included the following attributes to the Continuous Distribution model as follows:

Added to Post-Transplant Outcomes category:

- Facilitated pancreas allocation (surrogate of ischemic time)
- Travel (surrogate of ischemic time)
- Distance (surrogate of ischemic time)

Added to Candidate Biology category:

- PAK - clarifications were made to include both
- C-peptide

Added to Patient Access category:

- Safety Net

Added to Donor Characteristics category:

- Age (of the donor)

There were no comments or questions.

2. Review and Discussion of Attributes

The Workgroup reviewed and discussed proposed attributes and their categorization related to pancreas transplantation for consideration in the Continuous Distribution project.

Summary of discussion:

After an internal review of the attributes proposed by the Workgroup, some clarifying questions were posed to the Workgroup to further specify rationale and categorization of certain attributes. A more simplified version of the category definitions were provided and reviewed by the Workgroup as follows:

- *Medical Urgency:* Amount of risk to a candidate's life or long term health without receiving an organ transplant.

- *Post-Transplant Survival:* A candidate's likelihood of survival for one year after receiving a transplant.

- *Candidate Biology:* Medical characteristics of a candidate can make them harder to match. This can include a candidate's blood type, their body's sensitivity to accepting an organ, or their height.

- *Patient Access:* This addresses transplant access for candidates under the age of 18, as well as *prior living donors*, those who have previously donated an organ or part of an organ.

- *Placement Efficiency:* The amount of resources required to identify a suitable candidate willing to accept the organ and deliver the organ for transplant.

The Workgroup reviewed and provided input on highlighted attributes previously proposed by the Workgroup and their categorization as follows:

Candidate Biology:

Attribute: HLA Matching (0-ABDR mismatch)

The Workgroup previously discussed having this attribute mirror what was being discussed with the Kidney Committee. Currently, the Kidney Committee categorized this attribute in Post-Transplant Outcomes. The Workgroup was asked for their thoughts on the current categorization of HLA Mismatching (0-ABDR) in Candidate Biology.

SRTR staff stated that the caution would be the data. The data for associating post-transplant outcomes with HLA mismatch in kidney is stronger, at least for the DR locus. It is at least level 2 type data for kidney while for pancreas, it would be more level 3 data. As it is not the same strength of data for pancreas as it is for kidney, it may be hard to provide strong rationale.

A member stated that although the data is less significant, based on the definition of Post-Transplant Survival being a candidate's likelihood of survival for one year after receiving a transplant, the literature would support the categorization.

The Workgroup Chair stated that the post-transplant survival may not be the best measure of patient survival as opposed to graft survival. For pancreas transplant, there is not really good outcome data and there may be better evidence to suggest that someone with a high PRA has more waiting time than someone with a low PRA. With this thought, Candidate Biology would make more sense because the candidate would potentially be harder to match. It may be that an HLA 0-mismatch would fit under post-transplant survival but a PRA would more fit in candidate biology.

SRTR staff stated that there is a hierarchy in the data available with kidney alone data being the strongest, followed by KP data and then pancreas alone data. It may be challenging to make them all post-transplant survival. It can be theorized that candidate biology is effected by having rejection episodes. It all depends by how much evidence is needed in formulating these. It would be best to place these attributes in places where it can be defended better.

The Workgroup Chair stated that for 0-mismatch, it may be better for KP to be placed in post-transplant outcomes. For pancreas, it may be better to categorize as candidate biology.

SRTR staff stated that 0-mismatch should not be an issue and can be categorized in post-transplant outcomes. With pancreas alone priority, it should be ok with moving this attribute to the post-transplant outcomes survival, as it would not affect other organs.

A member stated that the Workgroup should not be limited to mirroring what Kidney does and if there are some differences with pancreas alone transplants, it should be ok. For KP attributes, those attributes would need consensus from both Committees.

The Workgroup agreed on moving this attribute to the post-transplant outcomes category.

Attribute: C-peptide

The Workgroup previously introduced this attribute to be categorized as candidate biology and were asked to provide additional clarity and rationale on this attribute and the current categorization versus (vs.) medical urgency.

A member stated that this attribute is also challenging to classify. In using C-peptide, it seems to be used as a surrogate to determine medical urgency. It depends on which perspective this is being reviewed and discussed.

The Workgroup Chair voiced concern that in moving C-peptide to medical urgency, this may make those candidates more medically urgent if placed here. There is currently no data to show a patient would be more urgent with a high C-peptide. Although rare, there are Type II diabetics who could have detectable C-peptide as well. There may be cases where Type II diabetic candidates have more severe and more frequent medical urgency in terms of hypoglycemic unawareness.

SRTR staff stated that if C-peptide is being used as a surrogate for advanced disease, Type I diabetes, and/or organ damage, it would make sense to categorize it as medical urgency. C-peptide is candidate biology that may then lead to some characteristics that could evoke a medically urgent status that could then be separately classified.

The Workgroup Chair stated that C-peptide may not need to be in the Continuous Distribution model and if it is included, there would need to be rationale as to why it's being used temporarily

A member asked if there were data available showing that individuals with low C-peptide have worse outcomes than those who have higher C-peptide. SRTR staff stated that there is currently no data demonstrating that those with lower levels of C-peptide have worse outcomes. C-peptide alone does not predict mortality and there is currently no literature to support medical urgency based upon C-peptide levels.

The Workgroup agreed to make C-peptide a tentative attribute. It was discussed that this attribute could potentially be discussed further on the Pancreas Committee's Medical Urgency project.

Patience Access

Attribute: Age (Pediatric Prioritization)

The Workgroup were asked their thoughts on stratifying age in preparation for the next phase of the project of scaling attributes.

The Workgroup Chair suggested in stratifying by under 18 years of age. It is thought that pediatric candidates should have priority for a Kidney-Pancreas transplant. There was uncertainty that there was any evidence to stratify pediatric age any further than this.

The Workgroup determined that the stratification of pediatric prioritization should mirror the Kidney Committee's recommendation (specifically for Kidney-Pancreas). In terms of pancreas alone, the Workgroup discussed reviewing the Kidney Committee's recommendation and then determining from a pancreas alone standpoint, if additional stratification is needed.

Donor Characteristics

Attribute: Age (of donor) and BMI

The Workgroup was asked for the impact of including the age of the donor and BMI to the Continuous Distribution model. Additionally, the Workgroup were asked their thoughts on stratifying age of the donor.

The Workgroup Chair stated that the age of the donor could be left as it is currently stratified in policy. The Workgroup Chair continued that the age of the donor could be stratified as a continuous variable.

SRTR staff stated that there are good data for age and BMI in multiple studies that show that a high donor BMI is associated with increased technical complications and short term graft loss and donor age is associated with long term graft outcomes. The downside is that each of these variables have a slightly different cut off. Based on the data available, a continuous stratification may be challenging to define in a granular way and defend.

The Workgroup Chair stated that this can be a question posed in Public Comment by presenting the current age/BMI cutoff in current policy and ask for additional feedback.

SRTR staff stated that it would be beneficial to see what the Kidney Committee has determined for this attribute in order to determine how granular it needs to be for pancreas.

The Workgroup agreed to review the Kidney Committee's recommendation to assess further for pancreas.

Next Steps:

- UNOS staff will synthesize the information from the meeting and revise the working attribute table for pancreas which will be shared with the Workgroup to review and discuss further during the next Workgroup meeting.

Upcoming Meetings

- November 20, 2020 (Teleconference)

Attendance

- **Committee Members**
  - Silke Niederhaus
  - Parul Patel
  - Todd Psavento
- **SRTR Staff**
  - Bryn Thompson
  - Jonathan Miller
  - Raja Kandaswamy
- **UNOS Staff**
  - Joann White
  - Rebecca Brookman
  - Ross Walton
  - Nang Thu Thu Kyaw
  - Amber Wilk
  - Kerrie Masten