OPTN Minority Affairs Committee
Refit KDPI without Race and HCV Workgroup
Meeting Summary
July 27, 2023
Conference Call

Alejandro Diez, MD, Chair
Oscar Serrano, MD, Vice Chair

Introduction

The OPTN Refit KDPI without Race and HCV Workgroup (the Workgroup) met via Citrix GoToMeeting teleconference on 07/27/2023 to discuss the following agenda items:

1. July 21st Meeting Recap
2. SRTR Background
3. Request Modeling Metrics
4. Finalize Request

The following is a summary of the Workgroups discussions.

1. Workgroup Member Introductions

The Workgroup heard a recap of the project's purpose, scope, and timeline. The purpose of the project is to better reflect the quality and post-transplant survival of kidneys from deceased donors who identify as African American and who are Hepatitis C virus (HCV) positive. The scope includes refitting KDPI without race and HCV that can be modeled by SRTR. The project is slated for the January 2024 public comment.

Summary of discussion:

There were no further discussions.

2. SRTR Background

The Scientific Registry of Transplantation (SRTR) will model a refit of the kidney donor profile index (KDPI) calculation without race and HCV variables. The purpose of the KDPI modeling is to provide the Workgroup with sufficient evidence to propose OPTN policy change to KDPI.

Summary of discussion:

There were no further discussions.

3. Request Modeling Metrics

The Workgroup discussed the modeling request to SRTR, which will include the following questions:

- What is the cohort used for modeling?
- How are the coefficients changing?
- Who is moving between KDPI groups?

Summary of discussion:

The Workgroup came to a consensus on which modeling metrics will be included in the SRTR request.

The chair asked, if once race and HCV variables are removed from the KDPI calculation, would the modeling inform how this will impact the other variables within the calculation? The presenter replied that the modeling request submitted to SRTR will help answer how the other coefficients will be affected once race and HCV are removed. He further questioned which cohort year will be used in the SRTR modeling. A member replied that the cohort used by the SRTR in a similar analysis is from 2015-2022.

Another member noted that at the end of 2015, the HCV treatment was approved and access to HCV treatment would not have been widely accessible until late 2016 to early 2017. Therefore, there may not be a significant impact of HCV treatment on the survival of that specific cohort. Another member agreed and commented that a cohort of 2016-2022 may be more reasonable. She stated that HCV trials in transplantation were published in 2016-2018 and pointed out that there was broader access to HCV medications post-transplant for recipient and therefore using a cohort during this time period may be more suitable than using cohort dates prior to 2018.

The Chair asked if there would be a difference in outcomes in the HCV-positive recipient population receiving an HCV-positive kidney versus an HCV-negative population receiving a positive organ. A member replied no and explained that there should not be a difference if the infection is treated early.

A member asked if the modeling would show which candidates are switching between KDPI groups and, based on other information, whether the donor's kidney was utilized. A member replied that in a previous publication, there was an analysis of the probability of organ non-use; however, the analysis was not a prediction of future behavior.

The Chair asked how to define HCV-positive donors. A member replied that HCV-positive donors are designated as either antibody-positive or nucleic acid amplification test (NAAT) testing positive. Staff asked if there is anything highly correlated with HCV that the Workgroup should include when considering candidate movement between KDPI sequences. A member commented that HIV should be included. Another member stated that creatinine correlates with HCV, as it reflects any preexisting renal dysfunction in HCV. Another member suggested that diabetes and hypertension are associated with HCV.

Next steps:

The Workgroup will finalize the request to the SRTR.

4. Finalize Request

The Workgroup will request a recalculation of the coefficients used to calculate the KDRI excluding the Black race variable and the HCV positive donor variable and with an updated cohort of transplants. The Workgroup will also request a counterfactual analysis in a recent cohort of donors to answer questions of how KDPI for certain types of donors would have been different if KDPI models had historically excluded the Black race and HCV status predictors.

Summary of discussion:

Specifically, the committee would like the following questions answered:

1. What is the cohort of transplants used for calculating the updated KDRI coefficients and what is the cohort of donors used for the counterfactual analysis of changes to KDPI? Including, in particular:
    1. Cohort dates – the committee suggested keeping in mind, for the counterfactual cohort of donors, innovations in HCV treatment in 2017, but please look at the data – particularly quantitative assessments of HCV+ kidneys to HCV– recipients – and determine which cohort dates work best.
    2. Size of the cohort
    3. Donor and recipient demographics (race/ethnicity, HCV status, sex, blood type, age, all variables included in KDPI)
2. How are the coefficients changing?
    1. What are the new coefficients?
    2. Which coefficients had the biggest change?
    3. Which coefficient is now the most heavily weighted?
    4. Model fit and summary statistics
3. Which donors move between KDPI sequences?
    1. General demographics of each KDPI sequence for refit KDPI and original KDPI (race/ethnicity, HCV status, sex, blood type, age, all variables included in KDPI)
    2. Average change in KDPI per donor
    3. Total number or percent of people moving between KDPI sequences, particularly the top two KDPI sequences, by all variables included in KDPI, plus donor sex, ABO, age, HIV status, and HCV NAT+ vs. antibody, if sample sizes allow

If time allows, the MAC would also like to request a counterfactual analysis exploring changes in nonuse with the removal of race and HCV from KDPI, with appropriate caveats.

Upcoming Meeting:

- September 15, 2023 @ 3 pm ET (Teleconference)

Attendance

- **Workgroup Members**
  - Alejandro Diez
  - Andreas Price
  - Cynthia Delgado
  - Dong Lee
  - Helen Te
  - Reza Saidi
  - Sanjeev Akkina
  - Stephanie Pouch
  - Tanjala Purnell
- **HRSA Representatives**
  - Mesmin Germain
  - Shelley Grant
- **SRTR Staff**
  - Bryn Thompson
  - Jon Miller
- **UNOS Staff**
  - Darby Harris
  - Divya Yalgoori
  - Jesse Howell
  - Kaitlin Swanner
  - Kayla Temple
  - Kelley Poff
  - Kieran Mcmahon
  - Lindsay Larkin
  - Tamika Watkins
  - Taylor Livelli
- **Other Attendees**
  - Morgan Reid
  - Rachel Meyer