

OPTN Liver and Intestinal Organ Transplantation Committee

Meeting Summary

August 20, 2021

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 08/20/2021 to discuss the following agenda items:

1. Redeveloping MELD-Na: LSAM Request

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

1. Redeveloping MELD- Na: LSAM Request

The Committee worked towards developing a Liver-Simulated Allocation Model (LSAM) modeling request for an updated Model for End- Stage Liver Disease (MELD) score.

Summary of discussion:

The Committee determined they would eliminate time-varying models from consideration, as models that included these covariates did not meaningfully improve the MELD score.

The Committee compared potential models that include sex to those that include height. A member asked how the Scientific Registry of Transplant Recipients (SRTR)-derived MELD models are different than the MELD 3.0 models. An SRTR representative responded that the models are similar. Another member commented that due to their height, smaller candidates are likely to wait on the list longer, increasing their chances of mortality. A member voiced their support for a model that includes height because small men and adolescents likely face similar challenges as small women registered to the waiting list. Another member asked if creatinine levels which could be addressed by selecting sex could also be addressed by selecting height. A member responded that including both height and sex could decrease model accuracy because the variables are collinear. A member suggested that in some of their past modeling work, sex addressed disparity more reliably than height. A member suggested that small men should also be considered in the modeling. Another member responded that small woman may have higher risk of mortality due to their small abdominal domains when compared to small men. A member noted that because the disparities in the MELD scores for women have been known for years, they favor adding the sex variable. Other members agreed with this solution.

The Committee discussed the inclusion and/or exclusion of albumin from the new MELD score. A member noted that for patients with high MELD scores, the inclusion of albumin does not lower their scores as previously speculated. A member expressed concern that albumin is easily manipulated and can significantly impact lower MELD scores. For this reason, a few members supported excluding albumin.

The Committee heard a presentation from the SRTR on MELD 3.0 versus SRTR derived scores. Results showed that other than some minor differences, the SRTR derived and MELD 3.0 are rather similar.

The Committee considered all models discussed during the meeting. A member asked the Committee which two models they would support. Some members favored the MELD 3.0 model. A member asked if height could be added to the MELD 3.0 model. An SRTR representative responded that because sex and height are collinear, it would be best for the committee to select one or the other. They continued that because height is a predictor of transplant and sex is a predictor of survival, models that include sex would likely be the most appropriate. Another member referenced a previous meeting where the Committee discussed that the risk of death is not increased for short men, but is increased for short women.

Next steps:

The Committee determined they would reconvene and continue this conversation to determine which potential MELD models should be selected for LSAM modeling.

Upcoming Meeting

- August 27, 2021

Attendance

- **Committee Members**
 - Peter Abt
 - Sophoclis Alexopoulos
 - Sumeet Asrani
 - Scott Biggins
 - Derek DuBay
 - James Eason
 - Alan Gunderson
 - Jennifer Kerney
 - Shekhar Kubal
 - Allison Kwong
 - Greg McKenna
 - Mark Orloff
 - Jorge Reyes
 - James Trotter
 - Kym Watt
- **HRSA Representatives**
 - Jim Bowman
- **SRTR Staff**
 - Katie Audette
 - Ray Kim
 - John Lake
 - David Schladt
 - Tim Weaver
 - Andrew Wey
- **UNOS Staff**
 - Matt Cafarella
 - Julia Foutz
 - Betsy Gans
 - Jason Livingston
 - Jenn Musick
 - Joel Newman
 - Kelley Poff
 - Leah Slife
- **Other Attendees**
 - Evelyn Hsu (OPTN Pediatric Transplantation Committee Chair)
 - Nicholas Wood