

OPTN Lung Transplantation Committee

Meeting Summary

August 10, 2023

Conference Call

Marie Budev, DO, Chair

Matthew Hartwig, MD, Vice Chair

Introduction

The Lung Transplantation Committee (the Committee) met via Webex teleconference on 8/10/2023 to discuss the following agenda items:

1. Welcome and agenda
2. Blood type rating scale
3. Next steps and closing comments

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

1. Welcome and agenda

The Chair welcomed Committee members.

Summary of discussion:

There was no further discussion by the Committee.

2. Blood type rating scale

The Committee reviewed analytic approaches for assessing changes to the blood type rating scale. A modified version of the 2015 Thoracic Simulated Allocation Model (TSAM) incorporating appropriate blood type screening is available now but uses an older cohort. SRTR match run analysis is also available; this is not a full-scale simulation but is expected to better reflect current offer acceptance practices. It would take around four weeks to receive modeling using an updated version of TSAM.

Analysis on changing the weight on the blood type rating scale from 0-20% showed that keeping the weight at 5% and adjusting the blood type rating scale generally did a better job of boosting blood type O transplants without increasing waitlist mortality counts. The Chair, Vice Chair, and Review Board Chair reviewed 11 rating scale options and narrowed the focus to six options for the full Committee to review.

The options are as follows:

1. MedUrgency1: Give blood type O candidates the median number of medical urgency points for blood type O candidates at transplant
 - o This option is based on analysis that blood type O recipients under the current system have more medical urgency points at transplant. It would maintain the current points for other blood types.
2. MedUrgency2: Give blood type O candidates the 95th percentile of medical urgency points for all candidates at transplant
 - o This option considers the overall distribution of medical urgency points and maintains points for other blood types
3. Original_Base0: Move the blood type rating scale to a linear scale

- This option uses the same ratings as the current rating scale but is linear instead of a steep nonlinear curve
- 4. Original_Base25: Move the blood type rating scale to a shallow nonlinear scale
 - This option uses the same ratings as the current rating scale but uses a shallow nonlinear curve instead of a steep nonlinear curve
- 5. Upscale_Base0: Scale blood type O candidates up to five points on a linear scale
 - This option assigns points for other blood types accordingly
- 6. Upscale_Base25: Scale blood type O candidates up to five points on a shallow nonlinear scale
 - This option assigns points for other blood types accordingly

Data Summary:

Modified TSAM analysis shows that estimated waitlist mortality and distance traveled is similar across all options and all options maintain the estimated drop in waitlist mortality relative to the former, pre-continuous distribution policy. The overall estimated median donor-to-recipient distance was similar between current policy and the alternative rating scales. MedUrgency2, Upscale_Base0, and Upscale_Base25 show the greatest gains in blood type O transplant rate compared to the current policy. The “MedUrgency” options show increases in blood type O with limited change to other blood types. The “Original” options show variability in changes to other blood types with an increase in blood type O. The “Upscale” options show an increase for blood type O and a decrease for all other blood types so that all blood types have more proportional transplant rates relative to their representation on the waitlist.

Summary of Discussion:

Decision #1: Members favored options three through six.
 Decision #2: The Committee supports moving forward to public comment as soon as possible but agreed that additional information is needed to decide between options three through six.
 Decision #3: The Committee requested additional match run analysis from SRTR to assess the median waitlist survival score at transplant by blood type for options three through six. This will allow the Committee to see how well these options address the concern that blood type O candidates are more medically urgent at the time of transplant in the current system relative to candidates of other blood types.

The Chair asked why MedUrgency2 scales up using the 95th percentile. Staff responded this was intended to give blood type O candidates more priority, but to let them know if a different percentile should be used. A member commented MedUrgency1 and MedUrgency2 are variable since the distribution of medical urgency scores change, so these rating scales would likely require additional modification in the future. Because of this, he favors options three through six. Members agreed. A member commented the Committee should move forward with public comment and perform additional analysis later.

Members noted if additional match run analysis to assess the median waitlist survival score at transplant by blood type can be provided quickly, it would be helpful to enable decision between options three through six. The Committee stated their aim is to choose the option that will give blood type O appropriate priority without disadvantaging other blood types. SRTR staff commented the goal is to provide equal access to transplant for all blood types when candidates are equally sick. One member voiced support for moving forward with Upscale_Base0 to public comment now. The majority of members requested the additional match run analysis.

A member questioned the difference between the Original and Upscale options. Staff affiliated with MIT responded the Base0 rating scales use all the points for blood type while the Base25 rating scales shrink down the points to make sure the other attributes are weighted greater than blood type.

3. Next steps and closing comments

The Committee will review additional match run analysis from SRTR for options three through six. The Committee will then move forward with one of these options for public comment.

Summary of discussion:

Decision #4: The Committee will meet next week to review the additional analysis and consider sending an option out for public comment.

Upcoming Meetings

- August 16, 2023, teleconference, 4:30 pm ET

Attendance

- **Committee Members**
 - Marie Budev
 - Erika Lease
 - Brian Keller
 - Brian Armstrong
 - David Erasmus
 - Ed Cantu
 - Errol Bush
 - Jackie Russe
 - Julia Klesney-Tait
 - Katja Fort Rhoden
 - Pablo Sanchez
 - Stephen Huddleson
 - Thomas Kaleekal
 - Tina Melicoff
 - Wayne Tsuang
- **HRSA Representatives**
 - Jim Bowman
- **SRTR Staff**
 - David Schladt
 - Maryam Valapour
 - Nicholas Wood
 - Katherine Audette
 - Paul Gunsalus
 - Caitlyn Nystedt
 - Tim Weaver
 - Mona Shater
 - Josh Pyke
 - Jon Miller
 - Ajay Israni
- **MIT Staff**
 - Ted Papalexopoulos
- **UNOS Staff**
 - Kaitlin Swanner
 - Taylor Livelli
 - James Alcorn
 - Joel Newman
 - Sara Rose Wells
 - Chelsea Weibel
 - Samantha Weiss
 - Holly Sobczack
 - Krissy Laurie
 - Rachel Hippchen
 - Carlos Martinez
 - Tatenda Mupfudze