

**OPTN Thoracic Committee  
Continuous Distribution of Lungs Workgroup  
Meeting Minutes  
May 9, 2019  
Conference Call**

**Erika Lease, MD, Workgroup Chair  
Rocky Daly, MD, Lung Subcommittee Chair**

**Introduction**

The Continuous Distribution of Lungs Workgroup (hereafter, the Workgroup) met via Citrix GoToTraining teleconference on 05/09/2019 to discuss the following agenda items:

1. Continuous Distribution of Lungs

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

**1. Continuous Distribution of Lungs**

The Workgroup continued discussing the blood type factor in lung allocation and previewed geography, which will be the next factor.

Data summary:

UNOS staff summarized the following factors by blood type from the 2017 ADR:

- Distribution
- Transplant rate
- Waitlist mortality

The 2017 ADR conclusions found that the majority of blood type candidates on the Waitlist are blood type O, and the smallest blood type subgroup awaiting transplantation is blood type AB. However, despite blood type AB being the smallest subgroup awaiting transplantation, they have the highest transplant rate, whereas blood type O has the lowest transplant rate (blood type O has had the lowest transplant rate for the past 10 years). Furthermore, blood type O, AB and A have similar waitlist mortality rates in an unadjusted analysis.

In addition to viewing ADR data, a Committee member who published a paper on access for blood type O candidates, summarized their conclusions. These conclusions found that blood type O candidates experience lower rates of transplantation and higher rates of waiting list mortality compared with matched blood type non-O candidates. Further evaluation of regional sharing of allografts to increase transplantation rates for blood type O candidates may be warranted to optimize equity in access to transplants.

Summary of discussion:

UNOS staff provided a summary of the following:

- Where the Workgroup was in the project plan
- Visual overview of project
- April 17<sup>th</sup> in-person meeting regarding the factors
- Points of consensus regarding blood type factor
- Overall approach to evaluate factors

UNOS staff facilitated a discussion to conclude the blood type factor discussion. A visual of how blood type is currently handled in policy was presented. A Committee member asked whether

the Thoracic Simulation Allocation Model (TSAM) includes blood type in the modeling. SRTR staff confirmed that it does. This member continued, suggesting two possible options for continued modeling. One option could be to model a system whereby incompatible blood type O donors are given to all candidates older than 2 years of age. Another option may be to model a system that shares organs more broadly before compatible candidates (not the identical candidates) get access to the blood type O donor organs. The reason for both of these modeling suggestions is see whether the new DSA-free system will have the intended outcomes. One Committee member noted that though there was a relatively small percentage of compatible transplantations occurring (approximately 15%), blood type O candidates still had the lowest transplant rate. In response, a Committee member clarified that 15% is actually a significant number of blood type O donor organs (about 1,400) that were not transplanted into blood type O candidates.

Another Committee member asked what impact replacing DSA with a 250 nautical miles radius had on access for the various blood types. UNOS staff confirmed this was in the monitoring report for removal of DSA as a unit of lung allocation. The one-year report showed there was not a statistically significant difference in the blood type of transplant recipients between the two eras.

UNOS staff summarized the blood type factor discussion, stating that in lung allocation, there are three different groups: identical, compatible and intended incompatible and that these may be treated essentially the same in a continuous distribution framework. The Committee will remain cognizant of blood type O candidates and pediatric candidates. UNOS staff confirmed the Workgroup had completed the initial vetting of this factor, and could transition to the next. The approach for all other factors will be the same.

UNOS staff opened the discussion regarding geography. There are two potential subunits within this attribute: cold ischemic time and travel mode. UNOS staff will pull relevant background from previous minutes from the emergency changes to the lung allocation (replacing DSA with 250 NM) and share a single-center study regarding the impact of those changes on that center's finances. In addition, the OPTN Operations and Safety's ("Ops and Safety") questionnaire regarding effective practices in broader distribution might be informative.

One Committee member questioned how the OPTN Liver Committee determined their transportation modeling (e.g. was there a clear demarcation or was 150NM arbitrary?). UNOS staff clarified that there was not a clear demarcation. The use of 150NM was from discussions stemming from the OPTN Ops and Safety questionnaire, as well as UNOS Organ Center data on kidney allocation.

Another Committee member asked whether OPOs could share their transportation and cost data with the OPTN. There was concern that there may be significant variability in the OPTN Ops and Safety questionnaire data, because there may be several transportation modes that may be influencing cost (such as the use of helicopters). UNOS staff clarified that AOPO has collected some data and presented that data to the OPTN OPO Committee; UNOS staff will consult internally to see what information might be useful for the workgroup. The OPO representative offered to post a question to the AOPO list serve to see what transportation and cost data OPO's might be willing to share with the OPTN.

Next, the OPO representative asked if the OPTN has the latest data analysis from the emergency lung changes. UNOS staff stated that the 1-year monitoring report is available on the OPTN site, but that they will send a link to the workgroup.

SRTR clarified that the LSAM estimated the driving time from every donor hospital to every recipient hospital. Furthermore, the LSAM used a 2 hour cut-off limit for driving time, though it

was unknown how this time limit was decided (e.g. surveying transplant hospitals etc.). Similarly, the SRTR plans to include a similar data variable in the TSAM modeling. UNOS staff asked the workgroup if there was any other data available that may indicate when lung programs would drive versus fly (e.g. time threshold). UNOS staff also asked Committee members to think about what other information could be pulled together for the next travel mode discussion. Committee members will continue to think about what other resources or data are available prior to the next workgroup meeting.

Next steps:

- May 16: Next meeting
- May 30: Finish discussion of geography
- June 13: Continue discussion, progress to this point will be included in the concept; introduce methodology in how to weigh factors against each other

**Upcoming Meeting**

- May 16, 2019

## Attendance

- **Workgroup Members**
  - Erika Lease, MD
  - Alan Betensley, MD
  - Matthew Hartwig, MD
  - Hilary Goldberg, MD
  - Masina Scavuzzo, RN
  - Selim Arcasoy, MD
  - Stuart Sweet, MD
  - Kevin Chan, MD
  - Lisa Hinsdale, RN, MBA
  - Marie Budev, MD
  - Timothy Whelan, MD
  - Gundeep Dhillon, MD
  - Ryan Davies, MD
- **HRSA Representatives**
  - Jim Bowman
  - Joyce Hager
- **SRTR Staff**
  - Katie Audette
  - Melissa Skeans
- **UNOS Staff**
  - Kim Uccellini, MS, MPH
  - Rebeca Lehman, PhD
  - James Alcorn, JD
  - Craig Connors, MBA
  - Eric Messick, MPP
  - Shyni Mohan
  - Hannah Byford, RN