OPTN Lung Transplantation Committee Meeting Summary April 1, 2021 Conference Call

Erika Lease, MD, Chair Marie Budev, DO, Vice Chair

Introduction

The Lung Transplantation Committee met via Citrix GoTo teleconference on 04/01/2021 to discuss the following agenda items:

- 1. Review of the SRTR Thoracic Simulation Allocation Modeling (TSAM) data request
- 2. COVID-19 lower respiratory testing for donors
- 3. Continuous Distribution update
- 4. 3 year report on monitoring of the removal of DSA from lung allocation
- 5. Refine Lung Data Fields special public comment proposal

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

1. Review of the SRTR Thoracic Simulation Allocation Modeling (TSAM) Data Request

The Committee briefly recapped the Committee's request from the March 31st meeting for the next SRTR TSAM request which included 3 different scenarios with both the 1:1 and 2:1 Lung Allocation Score (LAS) ratios along with the Committee's requested attribute weights for candidate biology, pediatrics, prior living donor, and placement efficiency.¹

	1:1			2:1		
	10% Placement Efficiency	15% Placement Efficiency	20% Placement Efficiency	10% Placement Efficiency	15% Placement Efficiency	20% Placement Efficiency
Waitlist Survival	27.5%	25%	22.5%	37%	33%	30%
Post-Transplant Survival	27.5%	25%	22.5%	18%	17%	15%
Candidate Biology	15%	15%	15%	15%	15%	15%
Pediatric	20%	20%	20%	20%	20%	20%
Prior Living Donor	5%	5%	5%	5%	5%	5%
Placement Efficiency	10%	15%	20%	10%	15%	20%

2. COVID-19 Lower Respiratory Testing for Donors

The Ad Hoc Disease Transmission Advisory (DTAC) Committee requested the Lung Committee's feedback on their support for an emergency policy change to require COVID-19 lower respiratory testing for donors.

Summary of discussion:

¹ The totals recorded during the meeting summed to 105% and this was clarified on the April 7, 2021 Lung Committee Leadership call.

The Committee was highly supportive of adding a requirement to test all donors for COVID-19 using a lower-respiratory tract test as an emergency policy change. The Committee supported having test results pending at the time of organ allocation/initial organ offer, but specifically wanted the results to be available prior to any travel for procurement and stated that the results need to be available prior to transplant of the organ at the latest. The Committee expressed concern over pending results at the time of organ recovery due to the frequent need to fly recovery teams to the donor, as well as risks for potential staff exposure. The Committee discussed that a requirement for any lower respiratory tract specimen is better than what is required now, especially regarding donors after cardiac death (DCD). There was also concern about potential sensitivity differences in bronchoscopy and bronchoalveolar lavage (BAL) versus tracheal aspirate, but with limited data and potential collection issues with BAL specimens in lung donors the Committee was comfortable with not specifying the required specimen testing type. The Committee believes that an emergency policy change would increase lung utilization, as currently many programs are declining otherwise good organs due to a lack of lower respiratory testing. The Committee recommended requiring only one lower respiratory test, but wants the DTAC Committee to consider putting a timeframe on a nasopharyngeal swab for upper respiratory testing prior to procurement.

3. Continuous Distribution Update

An update was provided on the progress of Continuous Distribution (CD) with potential next steps and considerations as the project moves forward. It was highlighted that the Committee would need to recommend a process for heart-lung allocation while lung is in CD and heart is utilizing the current system.

4. 3 year Report on Monitoring of the Removal of DSA from Lung Allocation

UNOS staff presented the results from the 3 year report on monitoring of the removal of DSA from lung allocation. Despite any impacts from the COVID-19 pandemic the system was resilient overall. The results were divided into three "eras" to highlight timeframes that were more impacted by the pandemic. However, most of the analysis falls in the era prior to the pandemic. The results covered waitlist impacts and transplantation impacts. Waitlist impacts included an increase in proportion of candidates in Diagnosis group D and an increase in proportion of candidates with 40+ LAS at time of listing. Transplantation impacts included 68% of transplant hospitals performing equal or more lung transplants and a slight increase in the percent of DCD donors.

Summary of discussion:

A member asked how the results in this report compare with what the TSAM model predicted and SRTR staff mentioned they published a paper comparing the two and noted that while the point estimates were not close the trends and shapes of the curves were similar.²

5. Refine Lung Data Fields special public comment proposal

The Committee reviewed the potential special public comment proposal to refine lung data fields in order to better align policy with IT implementation.

The proposal would:

• refine how data is collected for Body Mass Index (BMI)

² Carli J Lehr, Melissa Skeans, and Maryam Valapour, "Validating thoracic simulated allocation model predictions for impact of broader geographic sharing of donor lungs on transplant waitlist outcomes," *The Journal of Heart and Lung Transplantation*, 39, no. 1 (May 2020), https://pubmed.ncbi.nlm.nih.gov/31813759/

- remove the diagnosis option of "secondary pulmonary fibrosis"
- utilize the same coefficient when a candidate's diagnosis is "pulmonary fibrosis: other" and when the candidate's diagnosis is "COVID-19: pulmonary fibrosis"
- clarify that the coefficient currently used when a candidates' diagnosis is "obliterative bronchiolitis" is also used when the candidate's diagnosis is "constrictive bronchiolitis"
- clarify that when a candidate's mean pulmonary artery (PA) pressure is missing, it is treated as if the mean PA pressure was 30 or less
- update labels for three diagnoses

Summary of discussion:

Regarding BMI, the Chair clarified that only requiring that weight be updated every six months would not likely affect pediatric candidates since those programs are already in the practice of updating height regularly regardless of it being required.

The Committee supported sending this proposal with a special public comment period of April 27, 2021 through May 27, 2021 to the Policy Oversight Committee and Executive Committee for approval with 12 members voting yes, 0 voting no, and 0 abstaining.

Upcoming Meetings

- April 15, 2021 (Committee)
- April 22, 2021 (Updating Mortality Models Subcommittee)

Attendance

- Committee Members
 - Erika Lease, Chair
 - Marie Budev, Vice Chair
 - Alan Betensley
 - o Denny Lyu
 - o Cynthia Gries
 - o Marc Schecter
 - $\circ \quad \text{John Reynolds} \quad$
 - o Ryan Davies
 - o Dan McCarthy
 - o Julia Klesney-Tait
 - o June Delisle
 - o Michael Mulligan
 - Nirmal Sharma
 - o Whitney Brown
- HRSA Representatives
 - Jim Bowman
- SRTR Staff
 - Katie Audette
 - o Melissa Skeans
 - o Andrew Wey
 - Maryam Valapour
- UNOS Staff
 - James Alcorn
 - o Julia Chipko
 - o Rebecca Goff
 - Elizabeth Miller
 - Janis Rosenberg
 - Susan Tlusty
 - Sara Rose Wells
 - Krissy Laurie
 - Leah Slife
 - Courtney Jett
 - Kaitlin Swanner
 - Tatenda Mupfudze
 - Nicole Benjamin
 - Abby Fox
 - o Katrina Gauntt