

**OPTN Lung Multi-Organ Workgroup
Meeting Summary
August 19, 2024
Conference Call**

**Marie Budev, DO, MPH, Chair
Lisa Stocks, RN, MSN, FNP, Chair**

Introduction

The OPTN Lung Multi-Organ Workgroup (the Workgroup) met via WebEx teleconference on 08/19/2024 to discuss the following agenda items:

1. Review data from 8/8 MOT meeting
2. Review 8/8 MOT meeting feedback
3. Lung CAS Thresholds

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

1. Review data from 8/8 MOT meeting

OPTN and SRTR contractor staff presented the data from the 08/08/2024 in-person Ad Hoc Multi-Organ Transplantation Committee meeting.

Summary of Presentation:

OPTN data:

OPTN Waiting List removal cohorts are defined based on registration removal dates between July 1st, 2021, and December 31st, 2023. The OPTN Waiting List removal information for single and multiple organ candidates is based on the registration of the organ that is indicated to pull the multiple organ combination in allocation. The data was pulled based on the primary organ as follows:

- The heart registration for heart, heart-liver, heart-kidney, and occasionally heart-lung candidates
- The lung registration for lung, lung-liver, and lung-kidney candidates
- The heart-lung registration for heart-lung candidates if available, otherwise the heart registration is used

Removals from the OPTN Waiting List are reported as registration level counts and include multiple listing and re-listing events. Descriptive statistics does not consider how long candidates were on the OPTN Waiting List before removal.

- Removal reasons from the OPTN Waiting List were summarized into five categories:
- Transplanted - including all removal reasons for deceased donor or living donor transplant, this could imply a single or multiple organ transplant for multiple organ registrations
- Death
- Too Sick
- Candidate Condition Improved

- Other - including all other reasons not listed above (ex. Transferred to another center, Unable to contact candidate, Other, etc.)

Median time to transplant cohorts are based on recipients with transplant dates between July 1st, 2021, and December 31st, 2023. For multiple organ recipients waiting time began at the time the candidate became registered for the second organ in the multiple organ combination. For multivesicular (MVT), this time began when the candidate became listed for both the liver and intestine. Limitations: Calculating median waiting time with a cohort of transplant recipients is potentially biased as it does not consider candidates still waiting for a transplant that may accrue longer waiting times.

SRTR data:

SRTR staff estimated waiting list survival and post-transplant survival for single and multi-organ candidates and recipients. The pre-transplant cohort included candidates on the waiting list on July 1, 2021, or added to the waiting list on July 1, 2021 or later, and accounted for their status as of December 31, 2023. The post-transplant cohort included recipients who had a transplant or were alive with a functioning graft on or after July 1, 2021, and accounted for their status as of December 31, 2023.

Summary of Discussion:

The OPTN Lung Multi-Organ Workgroup did not make any decisions.

Regarding the OPTN data, members expressed interest in understanding the status of heart candidates who died (9.72% or 21% of candidates). The Workgroup Chair recommends always showing this information for reference. It was also noted that there was a significantly higher number of removals for "other reasons" in heart-lung candidates. One member was interested in understanding these reasons more deeply. It's noted that these weren't typically due to refusal for transplant. There is a possibility of candidates being removed due to receiving lungs instead of heart-lung. This involves a small but significant number of patients (46). There was a request for data on liver-lung candidates, specifically their MELD scores. This information will be included in future presentations to the workgroup. Finally, members showed interest in understanding how many individuals have exceptions for their heart status. These data will also be included in a future presentation.

Regarding the SRTR data, the cohort included lung candidates and recipients who were on the waiting list prior to the implementation of the lung composite allocation score (CAS). A placement efficiency score of seven points were assumed for the purpose of calculating a lung CAS for these candidates as candidates within 1,000 nm of the donor hospital receive at least seven placement efficiency points. Per the one-year continuous distribution of lungs monitoring report,¹ the median distance traveled for lung multi-organ recipients was well within 1,000 nautical miles so this placement efficiency score was expected to include most of the lung multi-organ recipients in the cohort.

Next steps

None were discussed.

2. Review 8/8 MOT meeting feedback

OPTN contractor staff reviewed the feedback with workgroup members from the 08/08/2024 in-person Ad Hoc Multi-Organ Transplantation Committee meeting.

¹OPTN, accessed August 21, 2024, available https://optn.transplant.hrsa.gov/media/srino34s/data_report_lung_cd_1year_20240509.pdf.

Presentation summary:

- Committee updates allocation scheme based on VPE, data, and discussion
- Recommended workgroup identify both a high lung CAS threshold to appear near the top of the scheme and a lower lung CAS threshold to appear later in the scheme

Summary of discussion:

The OPTN Lung Multi-Organ Workgroup did not make any decisions.

Members discussed that the CAS cutoff was initially set at 28 by the Lung Committee, capturing more than 98% of multi-organ transplants. This was later lowered to 25 based on preliminary analysis of the distribution of lung CAS for candidates on the waiting list. Members advised that there is a need to identify new CAS thresholds that fit into the MOT scheme based on waitlist mortality.

Regarding pediatric patients, members discussed that there are about 8 pediatric lung transplant candidates currently waiting. Members brought up that pediatric patients receive 20 additional points which could skew the analysis. It was suggested to either exclude pediatric patients or stratify the analysis (represent adult and pediatric results separately). Staff noted those may be lung-alone candidates rather than lung multi-organ candidates.

Concern was raised about the sample size if only looking at the data from March 2023 onwards. A suggestion is made to use indicators for the continuous distribution policy era to increase flexibility in the model while maintaining adequate numbers.

Next steps

None were discussed.

3. Lung CAS Thresholds

OPTN contractor staff presented on the Lung CAS Thresholds.

Summary of discussion:

The OPTN Lung Multi-Organ Workgroup did not make any decisions.

The Workgroup Chair was initially surprised by the Committee's recommendation to establish two different cut-off points. Ultimately, they expressed a preference for having different cut-off points for higher urgency patients compared to those with lower urgency.

The Workgroup discussed submitting a follow-on data request to SRTR to estimate waitlist mortality by CAS to aid in identifying new CAS thresholds. The Workgroup supported submitting the data request and recommended stratifying the data by multi-organ group, blood type, and pediatric vs. adult.

Next steps

The Workgroup will reconvene when the results of the submitted OPTN and SRTR data requests are available.

Upcoming Meeting

- To be determined.

Attendance

- **Workgroup Members**
 - Marie Budev
 - PJ Geraghty
 - Jasleen Kukreja
 - JD Menteer
 - Jackie Russe
 - Chris Sonnenday
- **HRSA Representatives**
 - Jim Bowman
 - Marilyn Levi
- **SRTR Staff**
 - Katie Audette
 - Jon Miller
- **UNOS Staff**
 - Viktoria Filatova
 - Katrina Gauntt
 - Chelsea Hawkins
 - Krissy Laurie
 - Kaitlin Swanner
 - Sarah Roache
- **Others**
 - Gundeep Dhillon