OPTN Ad Hoc Multi-Organ Transplantation Committee
Lung Multi-Organ Workgroup
Meeting Summary
October 4, 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 10/04/2024 to discuss the following agenda items:

1. Review feedback from Lung Committee
2. Review lung CAS tool updates
3. Discuss potential lung CAS thresholds

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

1. Review feedback from Lung Committee

OPTN contractor staff and the Workgroup Chair presented the feedback received from the Lung Committee.

Summary of Presentation:

There is concern that the lung Composite Allocation Score (CAS) tool does not sufficiently differentiate between candidates with varying levels of medical urgency. This is because 90-95% of lung candidates have a medical urgency score between 0 and 2. The lung CAS takes into account the expected post-transplant survival, which is not considered for other organs. There is also a suggestion not to create separate CAS thresholds based on donor blood type in this project since the Lung Committee is considering a new project to modify how biological traits are incorporated into the lung CAS.

Summary of Discussion:

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

The Chair advised that the group needs to focus on the medical urgency score range displayed in the tool. The current range of zero to two is not detailed enough for the group to make informed decisions. If the score distribution can be broken down further in the tool, the workgroup would be able to make better decisions.

2. Review lung CAS tool updates

SRTR contractor staff presented on the lung CAS tool updates.

Presentation summary:

The SRTR contractor staff presented updates on the lung CAS tool. They showcased a virtual CAS widget that demonstrated the relationship between the CAS score and the risk of mortality. The distribution of waitlist mortality scores was updated to break down the 0-2 point group into half points (0-0.5, 0.5-1, 1-1.5, and 1.5-2) to better discriminate between observations of candidates with varying degrees of

medical urgency. SRTR staff showed an example, holding the placement efficiency (distance) score constant at seven.

Summary of discussion:

The OPTN Lung Multi-Organ Workgroup supported the changes to the lung CAS tool.

The Chair posed the question of whether selecting a distance score of seven from SRTR modeling is appropriate for medically urgent patients. A UNOS staff member advised that the median distance for transplant recipients was 385 nautical miles, and for medically urgent cases, it was 526 nautical miles. Over 75% of transplants are done within a thousand nautical miles. Therefore, those who are being transplanted are experiencing at least a seven-point efficiency improvement. With a possibility to potentially even go up to 8 points, but seven is a safe bet based on what was observed in the first year of continuous distribution. Another member raised the concern about decreased lung utilization from donors in their region since the policy implementation. Members advised that there is a need to balance avoiding very long-distance transplants without disadvantaging remote patients or encouraging only local transplants.

Next steps

SRTR staff will publish the changes to the lung CAS tool on the web-based version so the Workgroup can use the updated tool.

3. Discuss potential lung CAS thresholds

OPTN contractor staff reviewed data to inform the development of modified lung CAS thresholds.

Presentation summary:

Determining a new CAS threshold:

1. Consider candidates' average lung CAS across lung match runs
2. Examine the distribution of lung CAS at the level of individual match run appearances
    - For heart-lung, lung-liver, and lung-kidney candidates separately
    - For all lung multi-organ candidates combined
3. Leverage the CAS of multi-organ recipients under continuous distribution
4. *Leverage the SRTR pretransplant mortality and posttransplant graft failure modeling results

Summary of discussion:

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

Members noted there may be variability among organ procurement organizations (OPOs) about how to interpret the current allocation policy for heart-lung candidates. Some OPOs may be allocating all the way to status four on the heart match run before moving to the lung match run, whereas the policy requires OPOs to offer through classification four on the heart match run before moving to the lung match run. One member noted that this may explain the geographic variability in heart-lung transplants.

Members agreed that it is challenging for status four patients to receive heart-lung transplants, and it is difficult to get hearts even for single-organ transplants at this status.

OPTN contractor staff noted that the MOT project would include implementation in the system such that the system would guide OPOs how to work through the different match runs, which will help to standardize the allocation process and ensure heart-lung offers are being made to the appropriate candidates.

OPTN contractor staff noted that SRTR staff completed analysis for the MOT Committee to model the waitlist mortality for each of the groups of candidates in the proposed multi-organ algorithm, and suggested that the Workgroup could use that analysis to assess what lung CAS threshold represented a similar degree of medical urgency. The Workgroup can use that tool along with the analysis of where the lung multi-organ candidates are typically falling on the match runs to assess how many candidates would be captured by modified lung CAS thresholds.

Next steps

The Workgroup will reconvene to discuss some potential CAS threshold options based on the data.

Upcoming Meeting

- To be determined.

Attendance

- **Workgroup Members**
  - Marie Budev
  - Chris Curran
  - Lisa Stocks
  - PJ Geraghty
  - JD Menteer
  - Jackie Russe
  - Shelley Hall
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - Katie Audette
  - Jon Miller
- **UNOS Staff**
  - Ben Wolford
  - Viktoria Filatova
  - Katrina Gauntt
  - Chelsea Hawkins
  - Kaitlin Swanner
  - Houlder Hudgins
  - Sara Langham
- **Others**
  - Gundeep Dhillon