

## **OPTN Lung Transplantation Committee**

### **Meeting Summary**

**January 19, 2023**

**Conference Call**

**Marie Budev, DO, Chair**

**Matthew Hartwig, MD, Vice Chair**

### **Introduction**

The Lung Transplantation Committee met via Citrix GoTo teleconference on 1/19/2023 to discuss the following agenda items:

1. Welcome and Agenda
2. Burden Estimate for Lung Candidate Exception Form
3. Composite Allocation Score (CAS) Calculator Preview
4. Recap of Waitlist and Post-transplant Survival Waiting Scales
5. Additional Analyses of CAS Subscore
6. Next Steps and Closing Comments

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

#### **1. Welcome and Agenda**

Staff welcomed Committee members.

##### Summary of discussion:

There were no further discussions.

#### **2. Burden Estimate for Lung Candidate Exception Form**

The Committee was asked to provide feedback regarding a burden estimate for the lung candidate exception form following an overview presentation from staff

##### Summary of discussion:

A member asked to clarify the purpose of the discussion. The presenter replied that the purpose of the discussion is for the committee to provide insight into the estimated burden associated with completing a lung exception form.

A member stated that the narrative for each exception form would vary. Some forms will have a templated response, while other exception forms will not have templated responses depending on what the exception request is for. Therefore, the time to complete an exception form will vary. The Chair noted that the exception form can be for lung or heart-lung. Writing a narrative for a heart-lung is more challenging because of the hemodynamic parameters and all the other necessary values.

A member stated that, on average, it takes 30 minutes to complete a simple lung exception request form, while it takes more than an hour to complete an exception form for a rare request. Another member agreed that most lung exception forms take an average of 30-45 minutes to complete. Exception forms requiring more effort can take longer than the average time. A member mentioned that for heart-lung exception forms, the heart team would complete the heart portion of the form, which

may require 30 minutes to an hour depending on the complexity of the patient. The Committee agreed that it would take 45 minutes to complete a lung exception form and one hour and 30 minutes to complete a heart-lung exception form.

A member asked if the exception form is completed by a physician only. The Chair replied that if a request form is templated, such as pulmonary hypertension, then a coordinator can enter the numbers and will have their attending physician review it. However, in most cases, it is usually completed by a physician. A member clarified that there is no single heart-lung exception request that can be submitted; members must submit either a heart exception or a lung exception, or both. Another member commented that the system allows a heart-lung listing to have a lung exception and a heart exception. A member clarified that a heart-lung exception form is separate from the lung exception form. The heart-lung exception form may take additional time considering the information that needs to be researched to complete the form. Additionally, some staff may not know how to complete the exception or may need to be reminded how to, which may factor into the time required to complete the form.

Next steps:

Staff will use the feedback provided to develop an average burden estimate for completion of the exception form.

**3. Composite Allocation Score (CAS) Calculator Preview**

The Committee heard an overview of the Composite Allocations Score (CAS) calculator, which will be available on February 2, 2023.

Summary of discussion:

The Chair noted that the calculator should be called a sub-CAS score calculator. The presenter replied that a CAS range is provided in the calculator output which incorporates the sub-score. There is a reminder that up to ten points are not accounted for in the calculator output because placement efficiency is captured at the time of the match run, but the CAS range covers the range of possible CAS scores inclusive of placement efficiency points.

**4. Recap of Waitlist and Post-transplant Survival Waiting Scales**

The Committee heard a recap of the waitlist and post-transplant survival rating scales.

Summary of discussion:

A member asked how much weight was assigned to placement efficiency in the example the Committee reviewed back in 2020 showing how different curves for the waiting list survival rating scale would interact with placement efficiency. The presenter replied that they would double-check this answer and follow up with the Committee. However, the Committee looked at the Massachusetts Institute of Technology (MIT) analyses on optimization work and found that choosing a placement efficiency weight of 10% was the best way to balance the efficiency component while maximizing the reduction and waitlist deaths. SRTR staff noted that the SRTR modeling also evaluated different weights for placement efficiency and the Committee used that modeling to inform their final decision.

**5. Additional Analyses of CAS Subscore**

The Committee heard a presentation on additional analysis of the CAS subscore.

Data summary:

When examining the ranking quantiles of candidates in CAS and LAS, it was determined that 13.3% of candidates in Group A shifted upward in rank and are in the top quartile of the CAS subscore. In Diagnosis Group A, chronic obstructive pulmonary disease (COPD) patients shifted substantially out of the bottom quartile of subscore rankings. In contrast, non-COPD patients shifted away from the bottom quartile, though not as much as the COPD patients. There was an upward shift in rankings among 35-49 years old, while 65+-year-old candidates experienced a downward shift, possibly due to a more significant emphasis on post-transplant survival in CAS.

All pediatric candidates are in the top quartile—the most significant shift in priority is seen for the 0-11-year-old candidates. There was also an upward shift for 12-17-year-old pediatric candidates. The shifts were greatest for pediatric candidates in Diagnosis Groups A and C.

Candidates aged 18-24 in Group A shifted from the bottom to the top two quartiles. At the same time, there is a larger percentage of candidates in Group B in the bottom quartile. Candidates in Group A, aged 35-49, are in the top quartile instead of the bottom quartile.

There was a more even distribution in ranking quartiles among 50-64-year-old candidates. 65+ candidates experienced a downward shift in ranking in Groups B and D.

When analyzing post-transplant survival scores vs. CAS Ranking, it was found that candidates with low post-transplant survival scores are at the highest end of the CAS ranking. This may be due to having a low waitlist survival score (high medical urgency). The scatter plot showed that candidates with moderately low post-transplant survival also had a low CAS ranking. This may be due to candidates having a relatively low post-transplant survival score, but their medical urgency is not significant enough to increase their point value in the CAS subscore rankings.

When reviewing the waitlist survival and CAS ranking by age, it was determined that most patients are expected to survive more than 200 days on the waitlist, and patients who are expected to survive less than 300 days, in general, are prioritized.

#### Summary of discussion:

When comparing waitlist survival and CAS ranking by height, a member asked if the Committee could see a graph that excludes pediatrics. The presenter replied that the graph represents everyone, including pediatrics. However, since there are few pediatric lung candidates, they can be excluded from the graph, showing only adult lung candidates by height.

#### Next steps:

Staff will follow up with additional information for the Committee.

### **6. Next Steps and Closing Comments**

The in-person meeting will take place in Detroit on Monday, February 27, 2023.

#### Summary of discussion:

There were no further discussions.

#### **Upcoming Meetings**

- February 16, 2023
- February 27, 2023

## Attendance

- **Committee Members**
  - Marie Budev
  - Erika Lease
  - John Reynolds
  - Brian Armstrong
  - Denny Lyu
  - Kelly Willenberg
  - Lara Schaheen
  - Marc Schechter
  - Matthew Hartwig
  - Pablo Sanchez
  - Julia Klesney-Tait
  - Nirmal Sharma
  - Soma Jyothula
- **HRSA Representatives**
  - Jim Bowman
  - Marilyn Levi
- **SRTR Staff**
  - Katherine Audette
  - David Schladt
  - Maryam Valapour
- **UNOS Staff**
  - Tamika Watkins
  - Kaitlin Swanner
  - Taylor Livelli
  - Sara Rose Wells
  - Susan Tlusty
  - Tatenda Mupfudze
  - Holly Sobczak
  - Krissy Laurie
  - Nadine Hoffman
  - Samantha Weiss
  - Jonathan Chiep