

OPTN Lung Transplantation Committee

Meeting Summary

August 8, 2024

Conference Call

Matthew Hartwig, MD, Chair

Dennis Lyu, MD, Vice Chair

Introduction

The Lung Transplantation Committee (Committee) met via Webex teleconference on 8/8/2024 to discuss the following agenda items:

1. System enhancement question: Bypass Bilateral and Other Lung Button
2. Background: Candidate Biology in Continuous Distribution
3. Open Forum

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

1. System enhancement question: Bypass Bilateral and Other Lung Button

The *Promote Efficiency of Lung Allocation* proposal, which included an enhancement to the OPTN Computer System, was approved at the June 2024 Board of Directors meeting. The enhancement, a "Bypass bilateral and other lung" button, will allow the OPO to bypass all the bilateral candidates on the match run at once if a single lung as been accepted, as well as any candidates who need a lung of the opposing laterality.

While lung candidate registrations indicate acceptable lung laterality in the OPTN computer match system, heart-lung registrations do not. Therefore, functionality of the enhancement in the following scenario must be determined:

- If the "Bypass bilateral and right lung" button is used because only a left lung is available, what should happen to heart-lung registrations on the match?
 - Option 1: Bypass all of the heart-lung registrations
 - Option 2: Bypass none of the heart-lung registrations

Summary of discussion:

The Committee decided that all heart-lung registrations should remain on the match run when a single lung is offered.

The Committee decided that all heart-lung registrations should remain on the match run when a single lung is offered. Members discussed that most heart-lung candidates are bilateral lung candidates but there have been a few instances of heart-lung transplants involving a single lung. Lung transplant programs need the ability to review these offers individually, in the rare event that their candidate requires only one lung.

Next steps:

The Committee may discuss the implementation of the *Promote Efficiency of Lung Allocation* proposal during future meetings.

2. Background: Candidate Biology in Lung Continuous Distribution

During the March 21, 2024 [meeting](#) in Houston, TX, the Committee agreed to proceed with a formal data request to the Scientific Registry of Transplant Recipients (SRTR) for an adjusted analysis examining equity in lung allocation by height, HLA sensitization (measured by Calculated Panel Reactive Antibodies, or CPRA), and blood type. The Committee supported examining potential interactions between height & blood type in relation to transplant access.

Presentation Summary:

In preparation for upcoming data request results, the Committee received an overview of candidate biology in Lung Continuous Distribution (CD), including:

- Current state of candidate biology in [lung composite allocation score](#) (CAS)
- How biological rating scales [were developed](#) initially
 - How the blood type rating scale was [adjusted in September 2023](#)
- Summary of lung CD [1-year monitoring results](#) by height, CPRA, and blood type
- Trends over time in waitlist mortality & transplant rates by height, CPRA, and blood type
 - Available via SRTR's [Donation and Transplantation System Explorer](#)
- Previous discussions about whether biological disadvantages interact in a multiplicative manner

This data request aims to analyze whether disparities in transplant rates by height, blood type, and CPRA persist when accounting for medical urgency or post-transplant survival.

The primary analysis involves adjusted models to assess the impact of height and blood type on transplant rates, considering both medical urgency and post-transplant survival. Secondary analysis will explore the cumulative incidence of waitlist mortality or delisting for deteriorated conditions by blood type and height, using urgency-adjusted models. Sensitivity analysis will examine the impact of CPRA values on transplant rates and explore interactions between height, blood type, and CPRA.

Summary of discussion:

No decisions were made.

There was some discussion about how biological rating scales for lung CAS were developed; specifically, there was a question about how the proportion of donors estimated to be biologically incompatible were mapped to the CPRA rating scale. There was a suggestion to consider if changes in the donor pool may be impacting transplant rates.

Next steps

The Committee will review the SRTR data request results at their September 12, 2024 meeting.

3. Open Forum

There were no open forum speakers.

Upcoming Meetings

- September 12, 2024, teleconference, 5PM ET

Attendance

- **Committee Members**
 - Matthew Hartwig
 - Dennis Lyu
 - Marie Budev
 - Jackie Russe
 - Thomas Kaleekal
 - Katja Fort Rhoden
 - Brian Keller
 - David Erasmus
 - Gary Schwartz
 - Heather Strah
 - Joseph Tusa
 - Stephen Huddleston
- **HRSA Representatives**
 - James Bowman
- **SRTR Staff**
 - David Schladt
 - Katie Audette
 - Maryam Valapour
 - Nick Wood
- **UNOS Staff**
 - Kelley Poff
 - Kaitlin Swanner
 - Chelsea Hawkins
 - Holly Sobczak
 - Samantha Weiss
 - Susan Tlusty
 - Sara Rose Wells