

OPTN Ad Hoc Multi-Organ Transplantation Committee**Meeting Summary****December 11, 2024****Conference Call****Lisa Stocks, RN, MSN, FNP, Chair****Zoe Stewart Lewis, MD, PhD, MPH, FACS, Chair****Introduction**

The Ad Hoc Multi-Organ Transplantation (MOT) Committee (Committee) met via WebEx teleconference on 12/11/2024 to discuss the following agenda items:

1. 1-Year Monitoring Report: Establish Eligibility Criteria and Safety Net for Heart-Kidney and Lung-Kidney Allocation
2. Data request: Multi-Organ Transplant and Donor Population
3. Update on Lung CAS thresholds

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

1. 1-Year Monitoring Report: Establish Eligibility Criteria and Safety Net for Heart-Kidney and Lung-Kidney Allocation

OPTN contractor staff presented the 1-Year Monitoring Report: Establish Eligibility Criteria and Safety Net for Heart-Kidney and Lung-Kidney Allocation.

Presentation summary:

The eligibility criteria for simultaneous heart-kidney (SHK) and lung-kidney (SLuK) transplants were updated to include kidney function requirements, with the goal of improving equity for multi-organ and single-organ candidates. The policy changes expanded eligibility for SHK to include candidates in heart statuses 1–5 or any active pediatric heart status who meet kidney criteria. SLuK eligibility was adjusted to include a composite allocation score (CAS) of 25 or above or age under 18 at listing, along with kidney function criteria. Safety net policies prioritize kidney allocation to heart and lung recipients meeting specific medical criteria within one year of their transplant. The Safety Net policy for heart and lung candidates in need of a kidney following heart or lung transplant applies to those registered on the kidney waiting prior to the 1-year anniversary of their heart or lung transplant. Candidates on the waiting list between 60 and 365 days of the heart or lung transplant receive priority access to kidney transplant if have a measured or estimated creatine clearance or glomerular filtration rate of less than equal to 20 or are on dialysis.

Post-policy, the proportion of multi-organ registrations decreased, but registrations meeting SHK/SLuK eligibility increased, primarily due to chronic kidney disease sub criteria. Similarly, the proportion of SHK/SLuK transplants meeting eligibility criteria rose, with SHK recipients maintaining consistent heart statuses and SLuK recipients showing higher CAS post-policy. Safety net registrations for kidney-after-heart increased over time, with all recipients meeting eligibility criteria at transplant. Kidney-after-lung registrations remained stable with slight increases later in the post-policy era. Transplant removals for deceased donor kidneys rose post-policy for both kidney-after-heart and kidney-after-lung recipients. Additionally, donor kidney quality indicators, such as KDPI, and outcomes like graft survival and candidate removal rates were monitored for ongoing evaluation.

Thoracic multi-organ transplant (MOT) registrations and transplants have decreased slightly, but a greater proportion of SHK and SLuK registrations have been eligible at listing. Removals from the OPTN Waiting List for SHK, SLuK, and Safety Net registrations due to death or being too sick have remained stable or decreased across policy eras. Chronic kidney disease was the most common sub criteria for SHK and SLuK eligibility among both registrations and transplants. Trends in SHK and SLuK transplants related to medical urgency, eligibility, and donor kidney quality (KDPI) have remained consistent. The implementation of the Safety Net policy has significantly increased kidney registrations and transplants for individuals who previously received a thoracic transplant, with Safety Net recipients more likely to receive higher KDPI kidneys compared to SHK or SLuK recipients.

Summary of discussion:

The Committee did not make any decisions

Members highlighted the parallels between the changes following recent changes to liver-kidney allocation policy, noting a decrease in multi-organ registrations and an appropriate use of the safety net, which has contributed to a reduction in multi-organ transplants. Another member inquired about data on kidney graft function following safety net transplants. OPTN contractor staff noted that 30% of cases involved delayed graft function and that 3-month graft survival data is also included in the report.

Next steps:

None were discussed.

2. Data request: Multi-Organ Transplant and Donor Population

OPTN contractor staff presented results of the Data request: Multi-Organ Transplant and Donor Population.

Presentation summary:

Between July 1, 2022, and June 30, 2024, 32,777 organ donors were recovered in the United States, with 95.4% having at least two organs recovered with the intent to transplant. For donors with at least two organs recovered with the intent to transplant, 60% were covered by the proposed allocation tables.

Among all donors, there were 7,305 (22.3%) DCD donors aged 18+ with KDPI 35-85% and 207 (5.3%) donated to multi-organ recipients. Additionally, 5,709 donors (17.4%) had KDPI greater than 85% and 20 of those donors donated to multi-organ recipients. These are the largest groups of donors not covered by the proposed allocation tables.

A total of 3,890 donors donated to a multi-organ recipient, with 93% covered by proposed allocation tables. Most multi-organ recipients received organs from donors aged 18+, brain-dead, with a KDPI of 0-34%, while multivisceral transplant (MVT) recipients were more likely to receive organs from donors under 18. Heart-kidney and liver-kidney recipients were typically older, whereas MVT recipients were younger. Most heart MOT recipients were in heart status two or higher at transplant, and most liver MOT recipients (except heart-liver) had MELD/PELD scores of 29 or higher. About 6% of MOTs were from donors not covered by allocation tables, with 4% from DCD donors aged 18+ with KDPI 35-85%. Approximately 70-85% of adult recipients and 70% of pediatric recipients would have been captured by the proposed policy.

Summary of discussion:

The Committee did not make any decisions

The Co-Chair noted that some might focus on the proportion of donors not covered by the proposed allocation tables and suggested noting that a relatively small number of these donors donated to multi-organ recipients. Most donations not covered were liver-kidney and multivisceral transplants (MVT) from donors with KDPI above 85%. Members noted the rapid growth of DCD donors, particularly those aged 18+ with KDPI 35-85%, stressing the need to monitor this group closely. They noted significant changes in donor demographics, with 54% of donors now being DCD, including younger populations, and highlighted the need to reevaluate how these donors contribute to MOTs. A member suggested analyzing isolated kidney transplants for pediatric recipients alongside MOT data to understand competition dynamics. OPTN contractor staff agreed that this data point could be incorporated into future analyses. One member expressed concern about pediatric liver-kidney recipients and requested a breakdown for recipients under 17, staff confirmed could be stratified for further investigation. Members expressed interest in potentially developing additional allocation tables, especially for DCD donors aged 18+ with KDPI 35-85%.

Next Steps:

The Committee will continue to analyze the data and discuss potential development of additional allocation tables, especially for DCD donors aged 18+ with KDPI 35-85%.

3. Update on Lung CAS thresholds

OPTN contractor staff provided a brief update on the work of the Lung-MOT workgroup.

Presentation summary:

The Lung-MOT workgroup has undertaken analysis examining lung transplant acceptance patterns and candidate characteristics by donor group, blood type, and urgency. Sequence numbers for lung acceptance are evaluated across donor types (DCD or DBD) and blood groups, highlighting patterns in allocation. The data identifies the number of candidates above and below acceptance thresholds by blood type, age group, and registration type (lung-alone or multi-organ), revealing allocation disparities. Additionally, medical urgency points (mean and median) are assessed for adult candidates in various positions relative to the threshold, such as those above, below, and at the transition point, providing insights into how urgency influences allocation decisions. Lastly, it identifies donor groups where no adult candidates meet the threshold, emphasizing gaps in allocation processes.

The workgroup has identified Lung CAS thresholds for further analysis:

- O donors: higher threshold of 39; lower threshold of 35
- A, B, AB donors: higher threshold of 34; lower threshold of 31
- All blood types: no higher threshold; lower threshold of 31

Summary of discussion:

The Committee did not make any decisions

There was no discussion due to lack of time.

Next Steps:

The potential Lung CAS thresholds noted above will be included in the Request for Feedback and the workgroup will continue analyzing appropriate thresholds in preparation for the policy proposal.

Upcoming Meetings

- January 8, 2025

Attendance

- **Committee Members**
 - Lisa Stocks, Co-Chair
 - Zoe Stewart Lewis, Co-Chair
 - Chris Curran
 - Rocky Daly
 - Rachel Engen
 - Jonathan Fridell
 - Shelley Hall
 - Precious McCowan
 - Heather Miller Webb
 - Shunji Nagai
 - Oyedolamu Olaitan
 - Deanna Santana
 - Chris Sonnenday
 - Nicole Turgeon
- **SRTR Staff**
 - Katie Audette
 - Jon Miller
- **UNOS Staff**
 - Viktoria Filatova
 - Katrina Gauntt
 - Sara Langham
 - Kelsi Lindblad
 - Sarah Roache
 - Kaitlin Swanner
 - Susan Tlusty
 - Ross Walton
 - Ben Wolford