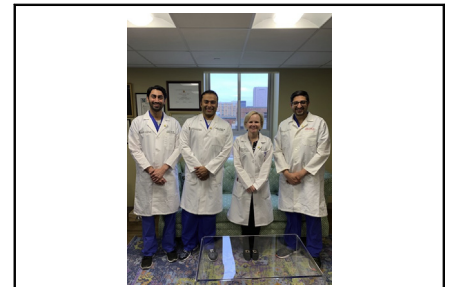


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Commentary: Does an expeditious evaluation for high-acuity lung transplant recipients make a difference?

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CENTRAL MESSAGE

Urgently listed lung transplant recipients may have equivalent outcomes to similar acuity electively listed patients in high-volume centers willing to perform transplantation in high-risk patients.

For patients with end-stage lung disease, lung transplantation remains the only durable treatment option, with a median survival of 5.8 years.^{1,2} Despite an increasing number of lung transplants performed in the United States over the past decade, wait-list mortality in 2018 was still 10%.³ Given organ scarcity, recipient selection remains crucial. Outcomes for recipients designated as “high risk” have been variable, with reported 1-year survival of approximately 57% to equivalent long-term outcomes as low-risk cohorts.⁴⁻⁶

In this issue of the *Journal*, Tang and colleagues⁷ compare the outcomes of 201 patients who were urgently listed for lung transplantation with those who were electively listed (N = 1423). In the urgently listed group, at 1 month, mortality on the waitlist was 26%, and 58% underwent transplantation. Comparatively, in the electively listed group, at 1 month, mortality on the waitlist was 2.1%, and 20% underwent transplantation. To compare outcomes, the 2 groups were propensity matched after transplantation, resulting in a slightly less sick urgently listed group (Lung Allocation Score: 82 to 78, preoperative ventilator use: 35% to 24%, preoperative extracorporeal membrane oxygenation: 25% to 14%) and a dramatically more sick electively listed group (Lung Allocation Score: 47 to 79, preoperative ventilator use: 3.4% to 25%, preoperative extracorporeal membrane oxygenation: 2% to 15%). After matching, both in-hospital and long-term outcomes were equivalent. Tang and colleagues’ take-home

message is that morbidity, long-term survival, and allograft function are similar for urgently and electively listed patients.

Although the study by Tang and colleagues⁷ is an interesting and meaningful contribution on the high-risk subset of lung transplant recipients, their conclusions should be interpreted with caution. By propensity matching the urgently and electively listed patients after transplantation, the groups being compared are urgently listed patients who are in acute, fulminant pulmonary failure often with multi-organ dysfunction at the time of presentation, with a minority of electively listed patients who have a high Lung Allocation Score and are further decompensated than most electively listed patients. In fact, overall median survival from the time of listing was approximately 1.8 years in the urgently listed group compared with approximately 5.2 years in the electively listed group. Unfortunately, Tang and colleagues do not provide details on survival after transplant in the 2 groups before propensity matching, which may prove helpful to other centers in an environment where 1-year outcomes are highly scrutinized. In matching the 2 subsets of patients, Tang and colleagues help answer the question of whether the process of an expeditious evaluation and urgent listing itself contributes to the morbidity of transplant compared with patients who had an elective listing process with appropriate time to undergo evaluation. However, lung transplant centers considering whether to

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take on the risk of urgently listed patients should not conclude that outcomes are, in fact, equivalent to the common electively listed patient.

Still, Tang and colleagues⁷ provide granular characteristics on those patients who not only underwent transplantation but also were listed, which offers those in similar centers an opportunity to reevaluate and potentially improve recipient selection in this high-risk patient population.

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Commentary: Donor lungs allocated to critically ill patients listed urgently: No longer a waste of precious organs?

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In their white paper on “Ethical Principles in the Allocation of Human Organs,” reviewed and updated in 2015, the Ethics Committee of the Organ Procurement and Transplantation Network identified 3 principles of primary importance in the equitable allocation of scarce human organs for transplantation: (1) utility; (2) justice; and (3) respect for persons (including respect for autonomy).¹ Strong factors that affect access to transplant waiting list,

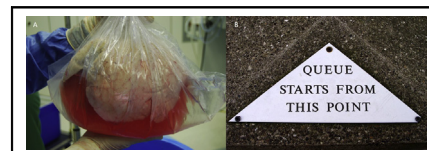
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A, Set of donor lungs bagged for transport. B, Who do we now call in for the transplant?

CENTRAL MESSAGE

Well-selected patients urgently listed for LTx because of acute respiratory failure have similar outcomes as those of electively listed patients with comparable disease severity and urgency.

such as patient and graft survival, quality of life, availability of alternative treatments, and age should also be considered within the context and balance of these 3 ethical principles, in particular utility.

Lung transplantation (LTx) programs across the world are regularly consulted for patients admitted elsewhere developing de novo acute respiratory deterioration with no further treatment options beside urgent and unplanned LTx. Mechanical ventilation or extracorporeal life support