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# Response to Comment on "Lung Transplantation for Elderly Patients With Endstage COVID-19 Pneumonia"

#### Reply:

We are grateful for the opportunity to respond to this comment and to provide further explanation of the findings presented in our publication.1

First, we would like to point out that lung transplantation for elderly patients with end-stage COVID-19 pneumonia was approved by the Ethics Committee of the First Affiliated Hospital, School of Medicine, Zhejiang University (supplemental Data File 1, http://links.lww.com/SLA/ C533). Our lung transplantation program follows the standard recommendations with respect to donor selection and management proto-cols.2,3 After receiving informed consent from family members (Supplemental Data File 2, http://links. lww.com/SLA/C534), we entered the relevant patient information into the China Organ Transplant Response (COTRS). All donor lungs used in our transplantation protocols were allocated by the

COTRS system (Supplemental Data File 3, http://links.lww.com/SLA/C535).

It is also important to note that, at the end of 2018, 6302 donated organs were available in China. However, only 5.5% of available donor lungs were used in transplant procedures; this fraction is significantly lower than that reported globally.2,4 Furthermore, given the quarantine measures put in place to prevent the extensive spread of COVID-19 in China, many patients who would otherwise be provided with lung transplants were unable to travel to a hospital to undergo this procedure. Moreover, most doctors in China were involved in critical COVID-19-associated functions at this time; this resulted in the suspension of many organ transplant programs. Indeed, only thirty lung transplants were performed in all of China between February and March, 2020. During this time, most of the available medical resources were deployed to address the COVID-19 pandemic. As such, the 2 patients included in our report were quickly assigned donor lungs through the COTRS system. Both patients underwent successful lung transplantation.

Since 2015, the only source of lungs for transplantation in China is via donations from individuals who have succumbed to cardiac arrest or brain death.<sup>3,5</sup> The patients in our report were transplanted with lungs from donors with documented brain death (Supplemental Data File 4, http://link-s.lww. com/SLA/C536).

Among the 104 patients diagnosed with COVID-19 pneumonia who were treated at our center, 45 were classified as severe, and 33 as critical; of these, 20 patients required mechanical ventilation and 11 patients required extracorporeal membrane oxygenation for life support. However, only 2 patients underwent bilateral lung transplantation. A multidisciplinary assessment was carried out before surgery to identify those patients in critical condition with no possibility of recovery secondary to pulmonary pathology but whose other organs were functioning normally; these patients were judged most likely to benefit from and to be able to tolerate the lung transplantation procedure. Postoperative pathology reports confirmed severe and irreversible lung damage, consistent with our preoperative judgment; indeed, lung transplantation was the only conceivable option in both cases. It is now 3 months post-transplantation; both recipients are gradually improving (Fig. 1). Taken together, our experience indicates that lung transplantation may be an effective treatment option in end-stage COVID-19 even for elderly patients.





FIGURE 1. Status of lung transplant recipients at 11 wk after the procedure. (A) Patient #1 (B) Patient #2.

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Comment on the Article, "Randomized Comparison of Gastric **Tube Reconstruction With** and Without Duodenal Diversion Plus Roux-en-Y **Anastomosis After** Esophagectomy"

#### To the Editor:

e read with interest the article, "Randomized comparison of gastric tube reconstruction with and without duodenal diversion plus roux-en-Y anastomosis after esophagectomy," by Yano et al, 1 published in

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