

## 1 **Online supplemental information**

### 3 **Post-LTx pulmonary rehabilitation (PR) programme**

4 During hospitalization after LTx, the recipients underwent five PR sessions a week. Each session  
5 was supervised and lasted 40-60 min. The exercise training included deep breathing, resistance  
6 training for the upper and lower limbs, cycling, walking and stair climbing. The training intensity  
7 was set at approximately 60% of the maximal workload for cycling and 80% of the average walking  
8 speed during a 6MWD test for treadmill walking. The workload increased every two weeks based on  
9 symptoms, targeting a modified Borg score of 3-4, as well as the results of 6MWD retests and  
10 ergometry cycling. In addition, to improve the upper and lower extremity muscle force, the recipients  
11 performed three sets of 10 repetitions using weight, with the load set at approximately 70% of the  
12 one-repetition maximum. After hospital discharge, the recipients underwent three sessions a week at  
13 our hospital and follow-up evaluations 3 months after LTx. Subsequently, the recipients were  
14 instructed to maintain or increase their physical activities and perform daily exercise training.

15 Similar to the recipients, the living-donors underwent five PR sessions weekly during  
16 hospitalization only. Each session included deep breathing, cycling and walking and lasted for 40  
17 min. In contrast to the recipients, the living-donors did not receive PR sessions after discharge, but  
18 they were also instructed to maintain their physical activities.

19 All participants obtained information and feedback regarding the 6MWD and other functioning  
20 tests with advice regarding the importance of daily exercise training.

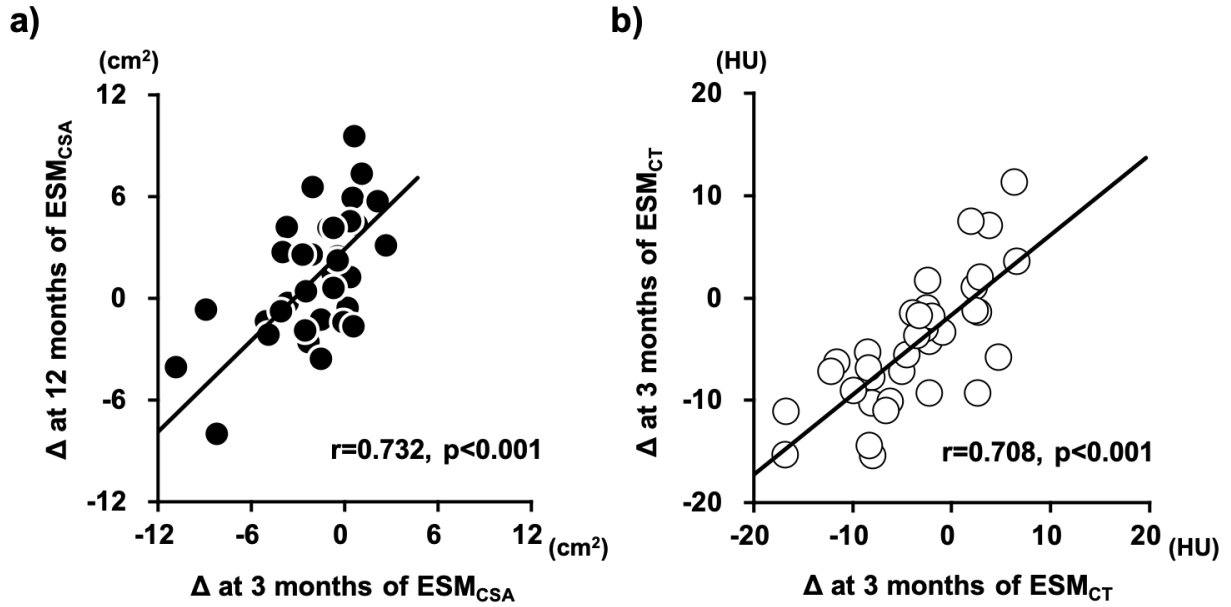
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25 **Figure S1. Association between the changes ( $\Delta$ ) at 3 months and 12 months after LDLLT in**  
26 **the ESM<sub>CSA</sub> and ESM<sub>CT</sub>.**



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28 Association between the  $\Delta$  at 3 months (x-axis) and the  $\Delta$  at 12 months (y-axis) in ESM<sub>CSA</sub> (a) and  
29 ESM<sub>CT</sub> (b) from the baseline periods. The  $\Delta$  at 3 months and at 12 months of ESM<sub>CSA</sub> and ESM<sub>CT</sub>

30 were calculated by subtracting the values at baseline. r: Pearson's correlation coefficient.

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