

Table S1 Individual respiratory characteristics following LT

Characteristics	LT patients						
	#1	#2	#3	#4	#5	#6	#7
Sex	M	M	M	M	M	F	M
Age at TS, years	63	64	67	66	57	54	64
Site of TS	N	N	N	T	T	N	T
CLAD prior to TS	Yes	Yes	No	Yes	Yes	Yes	No
Treatment for BOS	Azithromycin	Azithromycin, PCT, ECP	No	Azithromycin	Azithromycin	PCT	No
Type of resection	PneumoX	PneumoX	PneumoX	SegmentX	SegmentX	Non-anatomic	Non-anatomic
First PFT after TS							
Months after TS	0.30	2.30	0.50	0.80	0.60	NA	NA
FVC, L	1.27	1.32	2.69	2.33	1.86		
FEV ₁ , L	0.84	0.81	1.52	1.64	0.96		
TLC, % predicted	52.00	66.50	68.80	66.00	88.60		
RV, % predicted	92.20	126.20	48.60	75.40	143.30		
DLCO/VA, % predicted	NA	53.60	91.40	70.90	86.50		
Last PFT after TS							
Months after TS	11.00	NA	7.30	61.90	73.10		
FVC, L	1.08		2.63	2.94	1.60		
FEV ₁ , L	0.68		1.82	2.20	0.58		
TLC, % predicted	53.300		64.70	58.10	67.60		
RV, % predicted	82.60		64.70	58.10	107.30		
DLCO/VA, % predicted	NA		75.80	85.70	106.00		
Difference between last and first PFT after TS							
Delta FVC, L	-0.19	NA	-0.06	+0.61	-0.26		
Delta FEV ₁ , L	-0.16		+0.30	+0.56	-0.38		
Delta TLC, % predicted	+1.30		-4.10	-7.90	-21.00		
Delta RV, % predicted	-9.60		+16.10	-17.30	-36.00		
Delta DLCO/VA, % predicted	NA		-15.60	+14.80	+19.50		

The difference between last and first postoperative PFT is given in absolute or relative values. Patient #2 was in no condition to show up for another visit in the outpatient clinic; #6 and #7 deceased during the hospital stay of TS. LT, lung transplantation; M, male; F, female; N, native lung; T, transplant lung; TS, thoracic surgery; CLAD, chronic lung allograft dysfunction; BOS, bronchiolitis obliterans syndrome; PCT, pulse corticosteroid therapy; ECP, extracorporeal photopheresis; PneumoX, pneumonectomy; SegmentX, segmentectomy; PFT, pulmonary function test; NA, not available; FVC, forced vital capacity; FEV₁, forced expiratory volume in 1 second; TLC, total lung capacity; RV, residual volume; DLCO/VA, diffusion capacity for carbon monoxide related to alveolar volume (diffusion coefficient).

Table S2 Median change in respiratory characteristics following LT (n=7)

Characteristic	Site of TS	
	Native lung (n=4)	Transplant lung (n=3)
Preoperative testing to TS time, days	25 (5; 75)	
TS – postoperative testing time, days	17 (7; 63)	
Perioperative testing time, days	33 (22; 95)	
PFT		
Δ FVC, % predicted	-22 (-22; -20) ^a	-26 (-29; -24)
Δ FEV ₁ , % predicted	-14 (-21; -13)	-2 (-34; -19)
Δ TLC, % predicted	-13 (-14; -13) ^a	-2 (-31; -18)
Δ RV, % predicted	-17 (-29; -1)	-29 (-41; -18)
Δ DLCO, % predicted	-10	-24 (-40; -9)
ABG analysis		
Δ PaCO ₂ , mmHg	7.2 (2.1; 8.4)	3.1 (2.5; 3.6)
Δ PaO ₂ /FiO ₂ , mmHg	-34 (-91; -24) ^a	-77 (-92; 61)
Δ SaO ₂ , %	-0.4 (-1.5; 2.3)	-1.6 (-1.9; -1.4)
Exercise capacity		
Δ 6MWD, m	-180	-40
Δ Borg score	4	1

Data are shown as numbers or median (minimum; maximum); Δ, delta designates median difference between postoperative and preoperative test results. ^a, Statistically significant differences between postoperative and preoperative characteristics (P<0.05). Testing comprised assessment through PFT, ABG analysis, and 6MWD test. LT, lung transplantation; TS, thoracic surgery; PFT, pulmonary function test; FVC, forced vital capacity; FEV₁, forced expiratory volume in 1 second; TLC, total lung capacity; RV, residual volume; DLCO, diffusion capacity for carbon monoxide; ABG, arterial blood gas; PaCO₂, arterial carbon dioxide tension; PaO₂, arterial oxygen tension; FiO₂, inspiratory oxygen fraction; SaO₂, arterial oxygen saturation; 6MWD, 6-minute walking distance.

Table S3 Comparison of survival of lung cancer patients with or without prior lung transplantation

Tumor stage	Histopathology	With prior LT			Without prior LT			
		Patient #	1-year survival rate	(%)	Overall survival (months)	1-year survival rate	(%)	Overall survival (months)
IA	SCLC	#1	1	100	24.6	0/1	0	3.6
IA	SCC	#4	1	100	64.3	6/9	67	15.8
IIB	SCC	#5	1	100	76.7	24/42	57	21.9
IIIB	SCC	#2	0	0	5.2	8/13	62	26.5
IVA	SCC	#3	0	0	10.5	1/3	33	5.3
IVA	ADC	#6	0	0	0.4	4/15	27	11.9
Total			3/6	50	17.6	44/83	53	13.9

Of 2,856 lung cancer patients, 83 lung cancer patients matched to tumor stage and histopathology of those lung cancer patients who had undergone prior LT. LT, lung transplantation; SCLC, small cell lung cancer; SCC, squamous cell carcinoma; ADC, adenocarcinoma.