



Supplement 1. Baseline characteristics of all SARS-CoV-2 vaccinated LTx patients, responders, non-responders and Post-COVID-19 Responders.

Variable n, (%)	All patients 292	Responders 123 (42)	Non- responders 126 (43)	<i>p</i> -value *	Post-COVID-19 Responders # 43 (15)
Age, years	60 (48-66)	58 (40-64)	62 (54-66)	0.004	61 (49-66)
Gender, male (%)	152 (52)	69 (56)	64 (51)	0.402	19 (44)
Caucasian, n (%)	281 (96)	120 (98)	124 (98)	0.549	38 (88)
Transplant indication, n (%)				0.106	
COPD	120 (41)	51 (42)	53 (42)		16 (37)
Fibrosis	63 (21)	23 (19)	32 (25)		8 (19)
Pulmonary hypertension	35 (12)	11 (9)	18 (14)		6 (14)
Cystic fibrosis	43 (15)	23 (19)	17 (14)		3 (7)
Other	31 (11)	15 (12)	6 (5)		10 (23)
Bilateral LTx, n (%)	267 (91)	118 (96)	113 (90)	0.057	36 (84)
Time since transplant **, years	8 (4-12)	9 (5-13)	7 (4-11)	0.047	8 (5-12)
Comorbidities, n (%)					
Hypertension	137 (47)	54 (44)	64 (51)	0.276	19 (44)
Dyslipidemia	236 (81)	101 (82)	100 (79)	0.583	35 (81)
Diabetes Mellitus	99 (34)	42 (34)	46 (37)	0.697	11 (26)
Chronic kidney disease	205 (70)	77 (63)	99 (79)	0.006	29 (67)
Obesitas, BMI> 30	33 (11)	12 (10)	14 (11)	0.727	7 (16)
Heart failure	27 (9)	11 (9)	12 (10)	0.874	4 (9)
Immunosuppression, n (%)					
Tacrolimus	245 (84)	100 (81)	105(83)	0.372	40 (93)
Cyclosporine	10 (4)	5 (4)	3 (2)	0.455	2 (5)
Azathioprine	57 (22)	27 (22)	22 (18)	0.377	8 (19)
Mycophenalte mofetil	199 (76)	80 (65)	85 (68)	0.686	34 (79)
mTORi	12 (5)	5 (4)	6 (5)	0.781	1 (2)
CLAD	86 (30)	33 (27)	41 (33)	0.324	12 (30)
COVID-19, n (%)	146 (50)	49 (40)	54 (43)	0.629	43 (100)
All-cause mortality (%)	20 (7)	3 (2)	17 (14)	0.001	0 (0)
COVID-19 mortality (%)	4 (1)	0 (0)	4 (3)	0.046	0 (0)

Continuous variables are expressed as median (interquartile range).

COPD, chronic obstructive pulmonary disease; LTx, lung transplantation; mTORi, mammalian target of rapamycin inhibitors (everolimus or sirolimus)

Post-COVID-19 responders: Patients with an previously negative vaccine antibody response, but a positive antibody response after a positive SARS-COV-2 antigen test.

* *p*-value for the difference between responders and non-responders

** time between transplant and first vaccination