

		SCT		Controls		Emphysema		Fibrosis		CF/NCFB		Other	
Patients													
	Pre-matching, N (%)	105		9,895		4014 (41)		2368 (24)		1815 (18)		1698 (17)	
	Post-matching, N (%)	105		4,075		1183 (29)		911 (22)		1303 (32)		678 (17)	
	Male, N (%)	66	(63)	2381	(58)	726	(61)	626	(68)	695	(53)	334	(49)
	Age LTx, years	31	21-43	43	27-54	55	49-59	50	41-58	26	21-33	34	23-46
	DLTx, N (%)	89	(85)	3268	(80)	789	(67)	604	(66)	1272	(98)	603	(89)
Status at LTx													
	Elective, N (%)	67	(64)	2919	(72)	1055	(89)	620	(68)	807	(62)	437	(64)
	Urgent, N (%)	15	(14)	127	(3)	35	(3)	33	(4)	44	(3)	15	(2)
	High-Urgent, N (%)	23	(22)	1029	(25)	93	(8)	258	(28)	452	(35)	226	(34)

Table S1: Summary of the control cohort. Demographic data relates to matched controls only. Values are median [interquartile range]

unless otherwise stated. Key: LTx: lung transplantation; DLTx: bilateral lung transplantation; SCT: allogeneic stem cell transplant; CF: cystic fibrosis; NCFB: non-cystic fibrosis bronchiectasis.

Early Sepsis Risk	N	Proportional Hazard	Univariate Analysis			Multivariate Analysis		
			HR	(95% CI)	p	HR	(95% CI)	p
Demographics								
Male	66	0.73	1.08	(0.96-1.21)	0.21	4.26	(1.01-17.97)	0.04
Never-Smoker	89	0.20	1.13	(0.89-1.45)	0.18			
Age per 10y increase	105	0.11	1.14	(0.83-1.57)	0.41			
FEV ₁ per 10% pred loss	105	0.68	1.36	(1.02-3.31)	0.03			
FVC per 10% pred loss	105	0.38	3.61	(1.32-13.91)	0.01			
FEV ₁ /FVC ≥0.7	92	0.83	2.52	(1.71-4.63)	0.05			
TLC ≤90% predicted	16	0.91	0.67	(0.14-3.14)	0.61			
Isolated BO on CT	54	0.55	0.58	(0.16-2.06)	0.40			
Colonized	39	0.25	1.82	(0.29-14.59)	0.57			
- <i>PsA</i>	20	0.46	1.38	(0.09-22.03)	0.82			
- <i>Aspergillus</i>	8	0.99	1.13	(0.84-1.42)	0.98			
eGFR <90ml/min	65	0.57	3.77	(1.03-14.55)	0.04			
Primary Diagnosis								
AML	38	0.89	0.93	(0.83-1.04)	0.32			
ALL	16	0.65	4.61	(1.34-18.74)	0.02			
CML	18	0.19	1.23	(0.24-6.36)	0.68			
CLL	2	0.98	1.83	(0.46-7.31)	0.18			
NHL	6	0.54	1.37	(0.18-10.79)	0.19			
HL	6	0.99	0.90	(0.84-1.04)	0.59			
MDS	7	1.00	0.93	(0.81-1.12)	0.54			
Benign	12	0.99	0.89	(0.73-1.02)	0.42			
Stem Cell Transplant								
BMT	51	0.31	0.55	(0.16-1.95)	0.35			
Multiple SCT	6	1.00	1.10	(0.84-1.21)	0.59			
SCT-LTx 2yrs	15	0.32	2.12	(0.55-8.19)	0.28			
Myeloablation	87	0.71	2.82	(0.35-22.55)	0.33			
- <i>Busulphan</i>	32	0.46	1.06	(0.15-7.54)	0.95			
- <i>Cyclophosphamide</i>	47	0.97	1.85	(0.31-11.09)	0.48			
Total Body Irradiation	46	0.23	2.97	(0.62-14.43)	0.17			
Extra-Pulmonary GvHD								
GvHD Skin	52	0.99	1.02	(0.27-3.86)	0.98			
GvHD GI	31	0.90	0.76	(0.19-3.01)	0.70			
GvHD Eye	33	0.64	3.35	(0.43-26.17)	0.43			
GvHD Mucosa	43	0.51	1.20	(0.30-4.77)	0.79			
Calcineurin Inhibitor <6mts	75	0.57	3.26	(0.78-13.67)	0.11			
Mycophenolate <6mts	31	0.35	0.94	(0.23-3.95)	0.94			
Systemic Steroids <6mts	68	0.63	1.27	(0.26-6.29)	0.77			
Peri-LTx Treatment								
DLTx	89	0.87	0.54	(0.12-2.44)	0.35			
Induction	35	0.30	0.83	(0.21-3.29)	0.79			
Inpatient at LTx	38	0.19	4.93	(1.24-19.07)	0.012			
ICU	23	0.92	4.37	(1.27-15.12)	0.02	5.19	(1.15-23.43)	0.03
MV	14	0.44	6.41	(1.85-22.23)	0.003	6.92	(1.03-46.71)	<0.001
ECMO	5	0.68	5.39	(1.14-25.54)	0.05			
Dual Bridging	4	0.55	13.01	(5.67-56.19)	0.007	7.79	(6.17-98.31)	0.001

Table S2: Uni- and multivariate Cox regression analysis assessing risk factors for early sepsis (≤12 months) after lung transplantation (LTx). Hazard ratio (HR) with 95% confidence intervals (95%CI). Key: FEV₁ – forced expiratory volume in 1s, FVC – forced vital capacity, TLC – total lung capacity, BO – bronchiolitis obliterans, CT – computerized tomography, PsA – *Pseudomonas aeruginosa*, GFR – estimated glomerular filtration rate (calculated using CKD-EPI), AML: acute myeloid leukemia; ALL: acute lymphoblastic leukemia; CML: chronic myeloid leukemia; CLL: chronic lymphocytic leukemia; NHL – non-Hodgkin lymphoma, HL – Hodgkin lymphoma, MDS – myelodysplastic syndrome, BMT – bone marrow transplantation, SCT – stem cell transplantation, TBI – total body irradiation, GvHD – graft vs. host disease, ICU – intensive care unit, MV – mechanical ventilation and ECMO – extracorporeal membranous oxygenation.