

**Table S1** UNOS Lung Disease Diagnosis Groups.

UNOS Lung Disease Diagnosis Groups	Diagnosis
<b>Group A</b>	Allergic bronchopulmonary aspergillosis
	Alpha-1 antitrypsin deficiency
	Bronchiectasis
	Bronchopulmonary dysplasia
	Chronic obstructive pulmonary disease/emphysema
	Ehlers-Danlos syndrome
	Granulomatous lung disease
	Inhalation burns/trauma
	Kartagener’s syndrome
	Lymphangiomyomatosis
	Obstructive lung disease
	Primary ciliary dyskinesia;
	Sarcoidosis with Pulmonary artery (PA) mean pressure of 30 mm Hg or less
	Sarcoidosis with PA mean pressure missing
Tuberous sclerosis	
Wegener’s granuloma-bronchiectasis	
<b>Group B</b>	Congenital malformation
	CREST-pulmonary hypertension
	Eisenmenger’s syndrome: atrial septal defect (ASD)
	Eisenmenger’s syndrome: multi-congenital anomalies
	Eisenmenger’s syndrome: other specify
	Eisenmenger’s syndrome: patent ductus arteriosus (PDA)
	Eisenmenger’s syndrome: ventricular septal defect (VSD)
	Portopulmonary hypertension
Pulmonary hypertension/pulmonary arterial hypertension	

	Pulmonary capillary hemangiomatosis
	Pulmonary telangiectasia-pulmonary hypertension
	Pulmonary thromboembolic disease
	Pulmonary vascular disease
	Pulmonary veno-occlusive disease
	Pulmonic stenosis
	Right hypoplastic lung
	Scleroderma-pulmonary hypertension
	Secondary pulmonary hypertension
	Thromboembolic pulmonary hypertension
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<b>Group C</b>	Common variable immune deficiency
	Cystic fibrosis
	Fibrocavitary lung disease
	Hypogammaglobulinemia
	Schwachman-Diamond syndrome
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<b>Group D</b>	ABCA3 transporter mutation
	Alveolar proteinosis
	Amyloidosis
	Acute respiratory distress syndrome or pneumonia
	Bronchioloalveolar carcinoma (BAC)
	Carcinoid tumorlets
	Chronic pneumonitis of infancy
	Combined pulmonary fibrosis and emphysema (CPFE)
	Constrictive bronchiolitis
	COVID-19: acute respiratory distress syndrome
	COVID-19: pulmonary fibrosis
	CREST-Restrictive
	Eosinophilic granuloma

Fibrosing Mediastinitis  
Graft versus host disease (GVHD)  
Hermansky Pudlak syndrome  
Hypersensitivity pneumonitis  
Idiopathic interstitial pneumonia, with Acute interstitial pneumonia  
Idiopathic interstitial pneumonia, with Cryptogenic organizing pneumonia/Bronchiolitis obliterans  
with organizing pneumonia (BOOP)  
Idiopathic interstitial pneumonia, with Desquamative interstitial pneumonia  
Idiopathic interstitial pneumonia, with Idiopathic pulmonary fibrosis (IPF)  
Idiopathic interstitial pneumonia, with Nonspecific interstitial pneumonia  
Idiopathic interstitial pneumonia, with Lymphocytic interstitial pneumonia (LIP)  
Idiopathic interstitial pneumonia, with Respiratory bronchiolitis-associated interstitial lung disease  
Idiopathic pulmonary hemosiderosis  
Lung retransplant or graft failure: acute rejection  
Lung retransplant or graft failure: non-specific  
Lung retransplant or graft failure: obliterative bronchiolitis-obstructive  
Lung retransplant or graft failure: obliterative bronchiolitis-restrictive  
Lung retransplant or graft failure: obstructive  
Lung retransplant or graft failure: other specify  
Lung retransplant or graft failure: primary graft failure  
Lung retransplant or graft failure: restrictive  
Lupus  
Mixed connective tissue disease  
Obliterative bronchiolitis: non-retransplant  
Occupational lung disease: other specify  
Paraneoplastic pemphigus associated Castleman's disease  
Polymyositis  
Pulmonary fibrosis: other specify cause

Pulmonary hyalinizing granuloma  
 Pulmonary lymphangiectasia (PL)  
 Pulmonary telangiectasia-restrictive  
 Rheumatoid disease  
 Sarcoidosis with PA mean pressure greater than 30 mm Hg  
 Scleroderma-restrictive  
 Silicosis  
 Sjogren’s syndrome  
 Surfactant protein B deficiency  
 Surfactant protein C deficiency  
 Teratoma  
 Wegener’s granuloma-restrictive

**Table S2** Main Infections that Contributed to Readmission.

<b>Infection Type</b>	<b># of Infection Readmissions</b>	<b># of Unique Patients</b>	<b>% of Infection Readmissions</b>
COVID-19	11	9	18.33%
Aspiration/Anaerobes	7	7	11.67%
Sepsis due to unspecified organism	6	6	10.00%
Pseudomonas	4	4	6.67%
Sepsis due to Escherichia coli (e. coli)	3	3	5.00%
Aspergillus	3	3	5.00%
Acute rejection	2	2	3.31%
Other gram-negative sepsis	2	1	3.31%
Cytomegaloviral disease-unspecified	2	1	3.31%
Other cytomegaloviral diseases	1	1	1.67%
Pneumonia due to Serratia marcescens	1	1	1.67%
Pneumonia due to Escherichia coli	1	1	1.67%
Acute upper respiratory infection-unspecified	1	1	1.67%

Mycobacteriodes abscesses infection	1	1	1.67%
Bloodstream infection due to central venous catheter-initial encounter	1	1	1.67%
Cutaneous abscess of chest wall	1	1	1.67%
Candidal esophagitis	1	1	1.67%
Pneumonia due to Penicillium	1	1	1.67%
Stenotrophomonas maltophilia	1	1	1.67%
Acute sinusitis-unspecified	1	1	1.67%
Rectal abscess	1	1	1.67%
Haemophilus influenzae pneumonia	1	1	1.67%
Sepsis due to Pseudomonas	1	1	1.67%
Hand, Foot and Mouth	1	1	1.67%
Staph lugdunensis pneumonia	1	1	1.67%
Infection following a procedure-deep incisional surgical site	1	1	1.67%
Urinary tract infection-site not specified	1	1	1.67%
Influenza due to unidentified influenza virus with other respiratory manifestations	1	1	1.67%
MRSA pneumonia	1	1	1.67%

**Table S3** Reasons for Readmission by UNOS Disease Groups.

UNOS Disease Group	Reason for Readmission	# of Readmissions	# of Unique Patients	Median LOS	IQR LOS	MIN LOS	MAX LOS
Group A	Infection	15	7	4.52	2.47-9.56	0.94	17.24
	Transplant Related	4	4	2.69	2.34-8.88	1.94	26.85
	GI Related	4	3	5.08	4.76-5.37	3.86	6.18
	Pulmonary	2	2	1.00	1-1.01	0.99	1.01
	Renal	2	2	4.05	2.67-5.44	1.28	6.82
	Cardiovascular	2	2	5.09	4.15-6.03	3.21	6.97

	Pain, Specified or Unspecified	1	1	2.88	2.88-2.88	2.88	2.88
	Methemoglobinemia	1	1	1.89	1.89-1.89	1.89	1.89
	Neurological	1	1	4.07	4.07-4.07	4.07	4.07
Group B	GI Related	13	10	2.37	2.12-3.23	1.22	5
	Transplant Related	7	5	3.86	1.46-5.73	0.17	9.35
	Infection	5	4	2.92	2.5-3.9	0.95	10.36
	Cardiovascular	1	1	13.55	13.55-13.55	13.55	13.55
Group C	Transplant Related	6	3	3.47	1.8-3.55	0.97	5.24
	Infection	3	3	4.95	3.45-8.75	1.95	12.56
	GI Related	2	2	2.31	2.3-2.33	2.28	2.34
Group D	Infection	38	21	6.85	3.93-12.54	1.42	34.63
	Transplant Related	27	17	5.10	3.1-7.82	1.20	16.66
	GI Related	21	18	3.30	2.23-4.32	0.94	21.22
	Renal	6	4	4.91	3.61-7	0.38	9.54
	Cardiovascular	6	6	1.92	1.82-2.07	1.19	7.26
	Metabolic	4	4	3.82	3.06-4.43	2.19	4.85
	Psychosocial	4	2	2.53	1.78-3.38	1.47	3.98
	Hematological	4	1	5.86	2.58-8.74	1.03	9.09
	Pulmonary	2	2	2.46	2.27-2.65	2.09	2.83
	Neurological	2	2	6.33	4.79-7.86	3.25	9.40
	Pain, Specified or Unspecified	1	1	1.96	1.96-1.96	1.96	1.96
Musculoskeletal	1	1	2.46	2.46-2.46	2.46	2.46	