

Tables S1 Full data table of all patients with air leaks, describing demographics, presentation and outcomes

Age, years	Sex	Ethnicity	Smoking	Co-morbid	CFS	BMI	Ht	Ptx/PMN	Symptoms	Ward/ICU	Oxygenation (FIO ₂) at the time of Ptx	Treatment	Outcome	Days from admission to Ptx, pnm	Mode of diagnosis
91	M	White	Ex	Stroke, IHD	6	25.7	1.61	Right Ptx	Cough, fevers, dyspnoea	Ward	0.9	Con	Death	12	Change in condition
75	M	White	Ex	AAA repair	1	25	1.55	Left Ptx	Cough fever	Ward	0.24	Con	Alive	12	Incidental
65	M	White	Ex	COPD, CCF	2	29.8	1.72	Right Ptx	Lethargy, loss of appetite	Ward	CPAP, 0.6	12 Fr	Alive	13	Change in condition
85	M	White	Ex	COPD, AF, BP	4	18.5	1.8	Left Ptx	Cough, fever	Ward	0.9	Con	Death	22	Change in condition
67	M	White	Current	Previous stroke, type 2 DM, emphysema and combined pulmonary fibrosis, previous ptx and pleurodesis	6	23	1.65	Right Ptx	Dyspnoea	Ward	0.28	Con	Alive	1	Seen on admission X-ray
85	M	White	Never	IHD	4	23.2	1.74	Left Ptx	Dyspnoea, pain	Ward	0.21	Con	Alive	1	Admission CTPA
54	M	White	Ex	-	2	-	-	Right Ptx	Cough, pain, haemoptysis	Ward	0.21	Con	Alive	1	Admission CTPA
56	M	White	Never	-	2	22.5	1.82	Left Ptx	Cough	Ward	0.35	12, 20, 24 Fr	Alive	29	Change in condition
54	M	White	Never	-	0	-	-	Right Ptx	Chest pain, cough	Ward	0.21	Con	Alive	120	X-ray
82	M	White	Never	Asthma, hypertension	1	24.3	1.75	Right Ptx	Cough, fever, confusion, SOB	Ward	CPAP, 0.6	12 Fr	Dead	12	Change in condition
32	M	White	Never	-	1	-	-	Right Ptx	Cough, fever	A and E	0.21	Con	Alive	1	Admission Cxr
50	M	White	Never	Asthma	1	24.4	1.9	PMN	Dyspnoea	A and E	0.21	con	Alive	1	Found on CTPA
57	F	White	Never	Asthma	1	23.2	1.7	PMN	Dyspnoea	Ward	0.28	con	Alive	5	Found on CTPA
61	F	White	Ex	-	1	32.7	1.67	PMN	Dyspnoea, fever	ICU	CPAP, 0.65	con	Alive	10	Found on CTPA
49	M	White	Ex	ALD, asthma	2			PMN	Dyspnoea, fever	ICU	CPAP, 0.5	con	-	5	Incidental on cxr
63	M	White	Ex	COPD, asthma	1	27	1.84	PMN	Cough, fevers, dyspnoea	ICU	CPAP, 0.3	Con	Alive	29	Incidental
50	M	White	Never	Asthma	1	26.3	1.9	PMN	Dyspnoea	Ward	0.4	con	Alive	5	Clinical change
76	M	White	Ex	CKD, RA, T2DM, liver fibrosis, UC	2	25.6	1.78	PMN	Fever, dry cough	Ward	0.9	Con	Alive	16	Inpatient CTPA- incidental
61	M	White	Never	-	1	34.1	1.72	PMN and SE	Cough, dyspnoea	Ward	CPAP, 0.9	con	Dead	10	Clinical change
76	F	White	Never	Asthma, CKD, BP, OSA	4	36.2	1.62	PMN and SE	Dyspnoea, cough	Ward	CPAP, 1	con	Dead	4	-
49	M	White	Never	IHD, type 2 DM	2	34.5	1.7	PMN and SE	Chest pain and dyspnoea	ICU	MV	con	Dead	12	Clinical change
74	M	White	Never	BP, diabetes	2	33	1.8	PMN and SE	Dyspnoea, dry cough	ICU	MV	Con	Dead	10	Change in condition
80	M	White	Never	Type 2 DM, CKD	2	26.1	1.59	PMN and SE	Fell down stairs, fever	Ward	CPAP, 0.55	Con	Dead	13	Change in condition
68	M	White	Never	-	2	22.8	1.82	Left Ptx and PMN	Dry cough	ICU	MV	12 Fr	Dead	5	Change in condition
79	M	White	Current	-	2	20.9	1.7	Left Ptx and PMN	Pain	Ward	0.21	Con	Alive	21	Found on CTPA
63	M	White	Ex	Type 2 DM	1	31.1	1.7	Right Ptx and SE	Dyspnoea	ICU	MV	Con	Dead	8	Found when intubated
57	M	White	-	-	1			Left Ptx, PMN and SE	Cough	Ward	CPAP, 0.75	24 Fr, SC and 12 F	Dead	6	Clinical change
76	M	White	Ex	Lung cancer	2	24.8	1.58	Right Ptx, PMN and SE	Facial swelling	Ward	0.21	Con	Dead	1	Seen on admission X-ray
51	M	White	Ex	Aortic stenosis, BP	1	-	-	PMN, SE and bilateral Ptx	Dyspnoea, fever	Ward	Cpap, 0.5	2 SC drains	Dead	5	Clinical change
29	F	White	-	Obesity, pregnant	1	46.7	1.72	PMN, SE and bilateral Ptx	Fever, dyspnoea	ICU	MV	2 24Fr, 2 SC	Dead	3	Cxr on icu post intubation
57	F	White	-	-	2	34.2	1.64	PMN, SE and bilateral Ptx	Cough, chest pain	ICU	MV	12 F tried, 24 F, then 12F	Dead	24	Clinical change
46	M	Asian	Ex	Previous pleural TB	1	23.3	1.66	PMN, SE and bilateral Ptx	Cough	Ward then ICU- required ECMO	0.35	24 Fr, sub cut	Alive	1	Seen on admission X-ray

IHD, ischaemic heart disease; CCF, congestive cardiac failure; COPD, chronic obstructive pulmonary disease; AAA, abdominal aortic aneurysm; AF, atrial fibrillation; BP, blood pressure; DM, diabetes mellitus; Ptx, pneumothorax; PMN, pneumomediastinum; SE, surgical emphysema; ICU, intensive care unit; CKD, chronic kidney disease; RA, rheumatoid arthritis; UC, ulcerative colitis; CTPA, computed tomogram pulmonary angiogram; CXR, chest X-ray; TB, tuberculosis; MV, mechanical ventilation; CPAP, continuous positive airways pressure; CKD, chronic kidney disease; Fr, French gauge; SC, subcutaneous; ECMO, extra-corporal membranous oxygenation.