



Figure S1 Patterns of pneumothorax episodes and operative procedures in patients with (A) ipsilateral recurrences, (B) contralateral recurrences, and (C) index episodes during follow-up. Occurrence signifies a pneumothorax episode, regardless of laterality. Recurrence denotes a postsurgical pneumothorax episode. Censoring indicates institutional acquisition of last available chest X-ray or simply loss of follow-up (last identified survival dates not included).

Table S1 Patient characteristics according to the presence of index episodes

Variables	Index + (n=136)	Index – (n=24)	P value
BMI (mg/kg ²)	21.95±3.60	22.61±3.29	0.290
BSA (m ²)	1.706±0.161	1.709±0.208	0.943
Comorbidities			
Diabetes	14 (10.3)	1 (4.2)	0.473
Hypertension	55 (40.4)	10 (41.7)	>0.99
Dyslipidemia	21 (15.4)	4 (16.7)	>0.99
Tuberculosis	58 (42.6)	8 (33.3)	0.529
Asthma	15 (11.0)	3 (12.5)	0.736
Rheumatologic disease	6 (4.4)	3 (12.5)	0.135
COPD	105 (77.2)	9 (37.5)	<0.001
ILD	15 (11.0)	6 (25.0)	0.094
Cystic lung disease	8 (5.9)	3 (12.5)	0.216
Immune-related	4 (2.9)	3 (12.5)	0.069
Pneumoconiosis	11 (8.1)	3 (12.5)	0.444
Medication			
Inhalator	23 (16.9)	7 (29.2)	0.164
Steroid	9 (6.6)	3 (12.5)	0.392
Smoking history			
Current	33 (24.3)	2 (8.3)	0.134
Ex	79 (58.1)	15 (62.5)	
Never	19 (14.0)	7 (29.2)	
Unknown	5 (3.7)	0 (0.0)	
Smoke pyrs	34.59±18.31	44.08±30.24	0.639
Preoperative lab data			
Hct	42.02±4.70	41.08±5.17	0.344
Albumin	4.12±0.48	4.09±0.29	0.484
pH	7.404±0.076	7.410±0.045	0.875
PaCO ₂	44.39±46.84	39.08±3.98	0.245
PaO ₂	84.72±28.16	93.53±44.97	0.816
No. of previous episode	0.42±0.68	2.38±1.71	<0.001
Approach			
Thoracotomy	27 (19.9)	3 (12.5)	0.572
VATS	109 (80.1)	21 (87.5)	
Main procedure			
Diaphragm resection	0 (0.0)	1 (4.2)	0.005
Lobectomy	1 (0.7)	0 (0.0)	
Pleurodesis	6 (4.4)	2 (8.3)	
Plication	3 (2.2)	3 (12.5)	
Segmentectomy	0 (0.0)	1 (4.2)	
Wedge	126 (92.6)	17 (70.8)	
Intraop. pleurodesis (Y)	15 (11.0)	6 (25.0)	
Additional procedure			
Diaphragm resection	2 (1.5)	2 (8.3)	0.035
None	118 (86.8)	16 (66.7)	
Pleurodesis	15 (11.0)	6 (25.0)	
Plication	1 (0.7)	0 (0.0)	
Intraop. talc pleurodesis	10 (7.4)	3 (12.5)	0.416
Postop. pleurodesis	7 (5.1)	0 (0.0)	0.596
Previous pleurodesis before reference pneumothorax	20 (14.7)	8 (33.3)	0.039
Side of reference pneumothorax			
Left	54 (39.7)	7 (29.2)	0.370
Right	82 (60.3)	17 (70.8)	

The meaning of index + refers to the group of patients who had an index episode, and index – refers to patients who did not have an index episode. BMI, body mass index; BSA, body surface area; COPD, chronic obstructive pulmonary disease; ILD, interstitial lung disease; pyrs, pack-years; Hct, hematocrit; pH, potential of hydrogen; PaCO₂, partial pressure of carbon dioxide; PaO₂, partial pressure of oxygen; No., number; VATS, video-assisted thoracoscopic surgery; Intraop., intraoperative; Y, yes; Postop., postoperative.