Appendix 1

We performed a propensity score matching analysis. We used the R-programming language (version 3.6.1.; Vienna, R Project) and R package for propensity score matching called MatchIt. We set the method of propensity score matching as "nearest". We matched individuals who underwent right *vs.* left pneumonectomy and adjusted matching for common risks of BPF: sex, age, suffering from diabetes, chronic obstructive pulmonary disease, and/or coronary artery disease. The matched subset was used to compare the population who underwent right *vs.* left pneumonectomy.

We matched n=158 individuals who underwent right pneumonectomy and n=158 who underwent left pneumonectomy. Then we performed a further univariate analysis in these groups, comparing tissue buttressing, stapler or manual suture closure, the most critical complications, and their potential influence on the bronchopleural fistula occurrence. Categorical data were analyzed using the χ^2 test. An unpaired *t*-test was used to analyze the data with normal distribution and homogeneous variances. The normality of the distribution was tested using the Shapiro-Wilk test, and the equality of variances was checked with Levene's test. Data that did not follow a Gaussian distribution were analyzed using the Mann-Whitney U test. Statistical significance was set at P<0.05. The results were not statistically significant. The results are presented in *Table S1*.

Table S1 The table presents the propensity score-matched data results performed in the right *vs.* left pneumonectomy group. The patients from these groups are divided into those who developed the bronchopleural fistula and who did not develop the bronchopleural fistula

Features	Developed bronchopleural fistula, n=27 (100%)	Did not develop bronchopleural fistula, n=289 (100%)	P value
Males	21 (77.8%)	218 (75.4%)	0.786
Age (years)	61.0 (55.0-66.0)	60.0 (56.0-65.0)	0.728
Diabetes	2 (7.4%)	29 (10.0%)	>0.99
Chronic obstructive pulmonary disease	6 (22.2%)	55 (19.0%)	0.688
Past myocardial infarction	0	3 (1.03%)	>0.99
Coronary artery disease	0	1 (0.3 %)	>0.99
Arterial hypertension	14 (51.9%)	114 (39.4%)	0.209
Past stroke	0	1 (0.3%)	>0.99
Operation years: 2006–2012	10 (37.0%)	110 (38.1%)	0.916
Operation years: 2013–2017	17 (62.7%)	179 (61.9%)	0.916
Extended pneumonectomy	8 (29.6%)	86 (29.8%)	0.989
Manual suture	15 (55.6%)	166 (57.4%)	0.85
Stapler	15 (55.6%)	153 (52.9%)	0.795
Tissue buttressing	13 (48.1%)	129 (44.6%)	0.726
Pleural flap	3 (11.1%)	25 (8.7%)	0.720
Pericardial fat pad	7 (25.9%)	61 (21.1%)	0.56
Intercostal muscle flap	6 (22.2%)	56 (19.4%)	0.722
Cardiac arrhythmia	13 (48.1%)	101(35%)	0.172
Hemorrhage requiring intervention	0	11 (3.8%)	0.608
Postoperative wound infection	1 (3.7%)	4 (1.38%)	0.68
Acute kidney injury	0	6 (2.08%)	>0.99