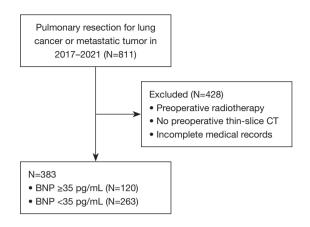
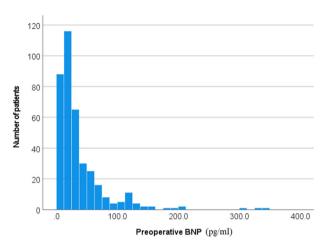
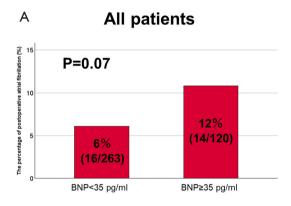
## **Supplementary**



**Figure S1** Flowchart of patient selection. BNP, brain natriuretic peptide; CT, computed tomography.



**Figure S2** Histogram of BNP levels in all patients. Median BNP was 23.7 pg/mL. BNP, brain natriuretic peptide.



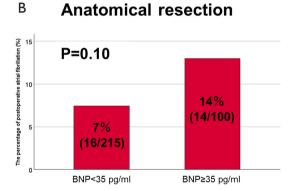
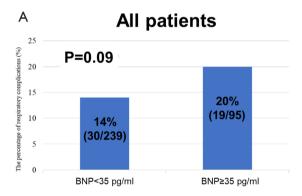


Figure S3 Incidence of POAF according to BNP. (A) Analysis of 383 patients. POAF was observed in 6% of patients with BNP <35 pg/mL and in 12% of patients with BNP  $\geq$ 35 pg/mL. (B) Analysis of 315 patients with anatomical resection (excluding wedge resection). POAF was observed in 7% of patients with BNP <35 pg/mL and in 14% of patients with BNP  $\geq$ 35 pg/mL. BNP, brain natriuretic peptide; POAF, postoperative atrial fibrillation.

**Table S1** Postoperative respiratory complications in patients which performed anatomical pulmonary resection

Complications	BNP ≥35 pg/mL (n=100)	BNP <35 pg/mL (n=215)
Prolonged air leakage	7 [7]	13 [6]
Pneumonia	5 [5]	11 [5]
Pleural effusion	8 [8]	9 [4]
Respiratory failure	5 [5]	4 [2]
Atelectasis	3 [3]	3 [1]
Acute exacerbation of IP	2 [2]	3 [1]
Empyema	2 [2]	1 [0.5]
ARDS	2 [2]	1 [0.5]
Asthma	1 [1]	0
Intrapulmonary hemorrhage	1 [1]	1 [0.5]
Bronchopleural fistula	2 [2]	0

Data are expressed as number [%]. BNP, brain natriuretic peptide; IP, interstitial pneumonia; ARDS, acute respiratory distress syndrome.



## B Anatomical resection 30 25 P=0.06 20 20 15 10 (29/192) BNP<35 pg/ml BNP≥35 pg/ml

Figure S4 Incidence of PRCs according to surgical approach in patients who underwent MIS. (A) Analysis of whole 334 patients. PRCs were observed in 14% of patients with BNP <35 pg/mL and in 20% of patients with BNP  $\geq$ 35 pg/mL (P=0.09). (B) Analysis of patients with anatomical resections (excluding wedge resection). PRCs were observed in 15% of patients with BNP <35 pg/mL and in 25% of patients with BNP  $\geq$ 35 pg/mL (P=0.06). BNP, brain natriuretic peptide; PRCs, postoperative respiratory complications; MIS, minimally invasive surgery.

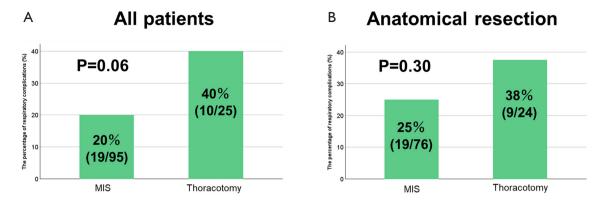


Figure S5 Incidence of PRCs according to surgical approach in patients with BNP  $\geq$ 35 pg/mL. (A) Analysis of whole 120 patients. PRCs were observed in 20% of patients who underwent MIS and in 40% of patients who underwent thoracotomy (P=0.06). (B) Analysis of patients with anatomical resections (excluding wedge resection). PRCs were observed in 25% of patients who underwent MIS and in 38% of patients who underwent thoracotomy (P=0.30). PRCs, postoperative respiratory complications; BNP, brain natriuretic peptide; MIS, minimally invasive surgery.