

Table S1 Comparisons of perioperative outcomes between sleeve lobectomy and pneumonectomy after neoadjuvant treatment

| Variables | Sleeve lobectomy (N=41) | Pneumonectomy (N=14) | P value |
|---|-------------------------|----------------------|---------|
| Age (years), mean \pm SD | 61.1 \pm 7.1 | 59.9 \pm 6.9 | 0.592 |
| Gender, n (%) | | | 0.601 |
| Male | 36 (87.8) | 13 (92.9) | |
| Female | 5 (12.2) | 1 (7.1) | |
| Radiologic tumor size (cm), mean \pm SD | | | |
| Before neoadjuvant treatment | 4.5 \pm 2.0 | 4.8 \pm 1.7 | 0.708 |
| Before surgery | 3.3 \pm 1.8 | 3.4 \pm 1.4 | 0.951 |
| Clinical TNM stage | | | 0.453 |
| I | 3 (7.3) | 0 (0) | |
| II | 3 (7.3) | 2 (14.3) | |
| III | 35 (85.4) | 12 (85.7) | |
| Neoadjuvant agents | | | 0.646 |
| ICI plus chemotherapy | 14 (34.1) | 3 (21.4) | |
| EGFR-TKI | 6 (14.6) | 2 (14.3) | |
| Chemotherapy alone | 21 (51.2) | 9 (64.3) | |
| Surgical approach | | | 0.066 |
| VATS | 29 (70.7) | 5 (35.7) | |
| Thoracotomy | 9 (22.0) | 7 (50.0) | |
| VATS convert to thoracotomy | 3 (7.3) | 2 (14.3) | |
| Number of total examined LNs, mean \pm SD | 18.3 \pm 7.1 | 17.6 \pm 6.0 | 0.778 |
| Examined N1 nodes | 8.5 \pm 4.6 | 7.2 \pm 4.5 | 0.392 |
| Examined N2 nodes | 9.8 \pm 5.4 | 10.4 \pm 4.7 | 0.698 |
| Surgical time (minutes), median (IQR) | 212 (160–240) | 141 (120–195) | 0.079 |
| Estimated blood loss (mL), median (IQR) | 100 (50–200) | 100 (50–300) | 0.845 |
| Required for postoperative transfusion, n (%) | 5 (12.2) | 5 (35.7) | 0.049 |
| Postoperative stay (days), median (IQR) | 6 (4–7) | 8 (7–12) | 0.009 |
| Perioperative mortality, n (%) | 2 (4.9) | 1 (7.1) | 0.747 |
| Postoperative complications, n (%) | | | |
| Any complications | 11 (26.8) | 5 (35.7) | 0.527 |
| Bronchopleural fistula | 2 (4.9) | 0 (0) | 0.400 |
| Hemothorax | 1 (2.4) | 0 (0) | 0.555 |
| Chylothorax | 1 (2.4) | 1 (7.1) | 0.417 |
| Prolonged air leak | 2 (4.9) | 0 (0) | 0.400 |
| Pneumonia | 5 (12.2) | 4 (28.6) | 0.153 |

SD, standard deviation; TNM, tumor, node, metastasis; ICI, immune checkpoint inhibitor; EGFR-TKI, epidermal growth factor receptor tyrosine kinase inhibitors; VATS, video-assisted thoracoscopic surgery; LN, lymph node; IQR, interquartile range.