Supplementary

Table S1 Baseline characteristics of patients with and without neoadjuvant treatment before and after matching

| Variables | Before PSM |  |  | After PSM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NAT (+) ( $\mathrm{n}=68$ ) | NAT (-) ( $\mathrm{n}=473$ ) | $P$ value | NAT (+) ( $\mathrm{n}=68$ ) | NAT ( - ) $(\mathrm{n}=68$ ) | $P$ value |
| Age (years) | $62.1 \pm 6.5$ | $64.6 \pm 7.7$ | 0.010 | $62.1 \pm 6.5$ | $64.9 \pm 8.1$ | 0.027 |
| BMI (kg/m ${ }^{2}$ ) | $22.0 \pm 3.0$ | $22.8 \pm 3.0$ | 0.041 | $22.0 \pm 3.0$ | $22.4 \pm 3.3$ | 0.479 |
| Gender |  |  | 0.88 |  |  | 0.82 |
| Male | 57 (16.2) | 393 (16.9) |  | 57 (83.8) | 56 (82.4) |  |
| Female | 11 (83.8) | 80 (83.1) |  | 11 (16.2) | 12 (17.6) |  |
| Tumor location |  |  | 0.10 |  |  | >0.99 |
| Middle thoracic | 49 (72.1) | 275 (58.1) |  | 49 (72.1) | 48 (70.6) |  |
| Upper thoracic | 9 (13.2) | 88 (18.6) |  | 9 (13.2) | 10 (14.7) |  |
| Lower thoracic | 10 (14.7) | 110 (23.3) |  | 10 (14.7) | 10 (14.7) |  |
| cT stage |  |  | 0.004 |  |  | 0.001 |
| T1 | 1 (1.5) | 67 (14.2) |  | 1 (1.5) | 7 (10.3) |  |
| T2 | 17 (25.0) | 134 (28.3) |  | 17 (25.0) | 3 (4.4) |  |
| T3 | 48 (70.6) | 259 (54.8) |  | 48 (70.6) | 55 (80.9) |  |
| T4 | 2 (2.9) | 13 (2.7) |  | 2 (2.9) | 3 (4.4) |  |
| cN stage |  |  | 0.002 |  |  | 0.46 |
| NO | 7 (10.3) | 112 (23.7) |  | 7 (10.3) | 3 (4.4) |  |
| N1 | 34 (50.0) | 259 (54.8) |  | 34 (50.0) | 36 (52.9) |  |
| N2 | 26 (38.2) | 101 (21.4) |  | 26 (38.2) | 29 (42.6) |  |
| N3 | 1 (1.5) | 1 (0.2) |  | 1 (1.5) | 0 |  |
| cStage |  |  | 0.000 |  |  | >0.99 |
| cl | 7 (10.3) | 66 (14.0) |  | 7 (10.3) | 7 (10.3) |  |
| cll | 0 | 142 (30.0) |  | 0 | 0 |  |
| clll | 58 (85.3) | 252 (53.3) |  | 58 (85.3) | 58 (85.3) |  |
| cIV | 3 (4.4) | 13 (2.7) |  | 3 (4.4) | 3 (4.4) |  |

Data are presented as mean $\pm$ SD or n (\%). NAT, neoadjuvant treatment; BMI in accordance with the Asia-Pacific standards. BMI, body mass index; AJCC, American Joint Committee on Cancer; TNM, tumor-node-metastasis; AJCC, American Joint Committee on Cancer; TNM, tumor-node-metastasis.


Figure S1 The survival of pStage II-III (AJCC $8^{\text {th }}$ edition) ESCC patients who received different esophagectomy techniques. (A) The OS of pStage II-III (AJCC $8^{\text {th }}$ edition) ESCC patients who received different esophagectomy techniques; (B) The CSS of pStage II-III (AJCC $8^{\text {th }}$ edition) ESCC patients who received different esophagectomy techniques; OS, overall survival; CSS, cancer specific survival; RAE, robotassisted esophagectomy; MIE, minimal invasive esophagectomy; AJCC, American Joint Committee on Cancer; ESCC, esophageal squamous cell carcinoma.

