**Table S2** Comparison of short-term outcomes postoperative complications between LATG group and TLTG-overlap group

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characteristics | All patients (n =175) | P value | Patient propensity matching(n=44)  | P value |
| LATG(n=153) | TLTG-ov(n=22) | LATG(n=22) | TLTG-ov(n=22) |
| Operative time (min) | 203.37±37.944 | 239.14±59.110 | <0.001 | 198.95±35.171 | 239.14±59.110 | 0.009 |
| Blood loss (ml) | 169.29±45.558 | 113.64±63.512 | <0.001 | 175.09±46.643 | 113.64±63.512 | 0.001 |
| Incision length (cm) | 12.27±1.187 | 5.14±0.775 | <0.001 | 12.40±0.953 | 5.14±0.775 | <0.001 |
| Analgesic drugs use | 5.29±1.286 | 5.00±1.633 | 0.345 | 5.36±1.364 | 5.00±1.633 | 0.427 |
| Number of harvested lymph nodes | 44.53±12.662 | 41.55±7.424 | 0.122 | 41.05±11.850 | 41.55±7.424 | 0.868 |
| Gas-passing (days) | 2.95±0.972 | 3.36±1.049 | 0.065 | 3.00±0.873 | 3.36±1.049 | 0.218 |
| Start of liquid diet (days) | 4.47±2.230 | 7.55±5.974 | 0.026 | 4.68±3.578 | 7.55±5.974 | 0.061 |
| Start of soft diet(days) | 5.97±2.987 | 8.50±5.982 | 0.064 | 6.14±4.754 | 8.50±5.982 | 0.154 |
| Drainage-tube removing (days) | 9.02±6.072 | 11.59±11.005 | 0.295 | 8.50±5.125 | 11.59±11.005 | 0.242 |
| Postoperative hospital stay (days) | 11.92±7.329 | 13.82±11.304 | 0.451 | 10.36±5.019 | 13.82±11.304 | 0.200 |
| Overall complications | 18 (11.76％)  | 4(18.18%) | 0.614 | 2(9.90%) | 4(18.18%) | 0.660 |
| Abdominal infection | 3(1.96%) | 1(4.45%) | 0.419 | 1(4.45%) | 1(4.45%) | 1.000 |
| Intra-abdominal bleeding | 1(0.65%) | 0(0.00%) | 1.000 | 0(0.00%) | 0(0.00%) | 1.000 |
| Anastomotic leakage | 4(2.61％) | 3(13.63%) | 0.044 | 1(4.45%) | 3(13.63%) | 0.600 |
| Anastomotic stenosis | 1(0.65%) | 0(0.00%) | 1.000 | 0(0.00%) | 0(0.00%) | 1.000 |
| Intestinal obstruction | 2(1.31%) | 0(0.00%) | 1.000 | 0(0.00%) | 0(0.00%) | 1.000 |
| Incision-related complications | 4(2.61％) | 0(0.00%) | 1.000 | 0(0.00%) | 0(0.00%) | 1.000 |
| Pneumonia | 3(1.96%) | 0(0.00%) | 1.000 | 0(0.00%) | 0(0.00%) | 1.000 |