

## Supplementary File I

**Supplementary Table S1.** Patient characteristics by adherence to feeding regimen: Subgroup analysis for any complication.

|                                  | No Deviation<br>n = 116 | Deviation Due to<br>Complications<br>n = 31 | p-value      |
|----------------------------------|-------------------------|---------------------------------------------|--------------|
|                                  |                         |                                             |              |
| <b>Age, years</b>                | 65 [9]                  | 64 [7]                                      | 0.769        |
| <b>BMI, kg/m<sup>2</sup></b>     | 26.1 [23.4-29.3]        | 25.6 [23.9-29.7]                            | 0.987        |
| <b>Weight loss, kg</b>           | 0 [0-5]                 | 2 [0-6]                                     | 0.744        |
| <b>Sex, male</b>                 | 99 (85.3)               | 23 (74.2)                                   | 0.142        |
| <b>ASA</b>                       |                         |                                             | <b>0.043</b> |
| II                               | 86 (74.1)               | 17 (54.8)                                   |              |
| III                              | 27 (23.3)               | 14 (45.2)                                   |              |
| IV                               | 3 (2.6)                 | 0                                           |              |
| <b>Smoking history</b>           | 92 (79.3)               | 27 (87.1)                                   | 0.327        |
| Active smoker (or quit <1 year)  | 33 (28.7)               | 12 (38.7)                                   | 0.284        |
| <b>Alcohol consumption</b>       |                         |                                             | 0.920        |
| Daily                            | 38 (33.0)               | 11 (35.5)                                   |              |
| Weekly                           | 18 (15.7)               | 4 (12.9)                                    |              |
| <b>Preoperative Tube feeding</b> | 25 (21.6)               | 10 (32.3)                                   | 0.214        |
| <b>Comorbidity</b>               | 74 (63.8)               | 21 (67.7)                                   | 0.683        |
| Cardiac                          | 17 (14.7)               | 5 (16.1)                                    | 0.838        |
| Pulmonary                        | 23 (19.8)               | 7 (22.6)                                    | 0.735        |
| COPD                             | 13 (11.2)               | 5 (16.1)                                    | 0.458        |
| Vascular                         | 40 (34.5)               | 13 (41.9)                                   | 0.443        |
| Hypertension                     | 36 (31.0)               | 12 (38.7)                                   | 0.418        |
| Diabetes                         | 15 (12.9)               | 4 (12.9)                                    | 0.997        |
| Obesity                          | 25 (21.6)               | 7 (22.6)                                    | 0.902        |
| <b>(c)TNM stage</b>              |                         |                                             | <b>0.017</b> |
| Stage 0                          | 1 (0.9)                 | 0                                           |              |
| Stage I                          | 4 (3.4)                 | 6 (19.4)                                    |              |
| Stage II                         | 22 (19.0)               | 7 (22.6)                                    |              |
| Stage III                        | 61 (52.6)               | 15 (48.4)                                   |              |
| Stage IV                         | 28 (24.1)               | 3 (9.7)                                     |              |

**Legend:** values are absolute numbers (percentage) or medians [lower quartile – upper quartile] means [standard deviation]. BMI body mass index; ASA American Society of Anesthesiologists; (c)TNM clinical TNM staging.

**Supplementary Table S2.** Patient characteristics by adherence to feeding regimen: subgroup analysis for insufficient intake.

|                                  | No Deviation<br>n = 116 | Deviation Due to<br>Insufficient Intake |  | <i>p</i> -value |
|----------------------------------|-------------------------|-----------------------------------------|--|-----------------|
|                                  |                         | n = 18                                  |  |                 |
| <b>Age, years</b>                | 65 [9]<br>[23.4-        | 64 [9]                                  |  | 0.595           |
| <b>BMI, kg/m<sup>2</sup></b>     | 26.1 29.3]              | 24.8 [23.2-29.1]                        |  | 0.395           |
| <b>Weight loss, kg</b>           | 0 [0-5]                 | 4 [0-8]                                 |  | 0.275           |
| <b>Sex, male</b>                 | 99 (85.3)               | 9 (50.0)                                |  | <0.001          |
| <b>ASA</b>                       |                         |                                         |  |                 |
| II                               | 86 (74.1)               | 15 (83.3)                               |  | 0.624           |
| III                              | 27 (23.3)               | 3 (16.7)                                |  |                 |
| IV                               | 3 (2.6)                 | 0                                       |  |                 |
| <b>Smoking history</b>           | 92 (79.3)               | 13 (72.2)                               |  | 0.497           |
| Active smoker (or quit <1 year)  | 33 (28.7)               | 5 (27.8)                                |  | 0.936           |
| <b>Alcohol consumption</b>       |                         |                                         |  | 0.229           |
| Daily                            | 38 (33.0)               | 4 (22.2)                                |  |                 |
| Weekly                           | 18 (15.7)               | 1 (5.6)                                 |  |                 |
| <b>Preoperative Tube feeding</b> | 25 (21.6)               | 6 (33.3)                                |  | 0.270           |
| <b>Comorbidity</b>               | 74 (63.8)               | 11 (61.1)                               |  | 0.826           |
| Cardiac                          | 17 (14.7)               | 3 (16.7)                                |  | 0.824           |
| Pulmonary                        | 23 (19.8)               | 4 (22.2)                                |  | 0.814           |
| COPD                             | 13 (11.2)               | 2 (11.1)                                |  | 0.990           |
| Vascular                         | 40 (34.5)               | 4 (22.2)                                |  | 0.303           |
| Hypertension                     | 36 (31.0)               | 4 (22.2)                                |  | 0.447           |
| Diabetes                         | 15 (12.9)               | 0                                       |  | 0.105           |
| Obesity                          | 25 (21.6)               | 3 (16.7)                                |  | 0.635           |
| <b>(c)TNM stage</b>              |                         |                                         |  | 0.082           |
| Stage 0                          | 1 (0.9)                 | 1 (5.6)                                 |  |                 |
| Stage I                          | 4 (3.4)                 | 3 (16.7)                                |  |                 |
| Stage II                         | 22 (19.0)               | 2 (11.1)                                |  |                 |
| Stage III                        | 61 (52.6)               | 8 (44.4)                                |  |                 |
| Stage IV                         | 28 (24.1)               | 4 (22.2)                                |  |                 |

**Legend:** values are absolute numbers (percentage) or medians [lower quartile – upper quartile] means [standard deviation]. BMI body mass index; ASA American Society of Anesthesiologists; (c)TNM clinical TNM staging.

**Supplementary Table S3.** Patient characteristics by anastomotic leakage.

|                                  | Uncomplicated<br>n = 77 | Anastomotic<br>Leakage<br>n = 15 | <i>p</i> -value |
|----------------------------------|-------------------------|----------------------------------|-----------------|
|                                  |                         |                                  |                 |
| <b>Age, years</b>                | 65 [56-71]              | 60 [56-66]                       | 0.186           |
| <b>BMI, kg/m<sup>2</sup></b>     | 26.0 [23.7-29.9]        | 25.7 [23.9-33.0]                 | 0.845           |
| <b>Weight loss, kg</b>           | 0 [0-5]                 | 3 [2-6]                          | 0.158           |
| <b>Sex, male</b>                 | 64 (83.1)               | 13 (86.7)                        | 0.733           |
| <b>ASA</b>                       |                         |                                  | <b>0.001</b>    |
| II                               | 59 (76.6)               | 5 (33.3)                         |                 |
| III                              | 18 (23.4)               | 10 (66.7)                        |                 |
| <b>Smoking history</b>           | 58 (75.3)               | 15 (100)                         | <b>0.031</b>    |
| Active smoker (or quit <1 year)  | 14 (18.4)               | 6 (40.0)                         | 0.065           |
| <b>Alcohol consumption</b>       |                         |                                  | 0.611           |
| Daily                            | 21 (27.3)               | 6 (40.0)                         |                 |
| Weekly                           | 13 (16.9)               | 2 (13.3)                         |                 |
| <b>Preoperative Tube feeding</b> | 15 (19.5)               | 5 (33.3)                         | 0.234           |
| <b>Comorbidity</b>               | 49 (63.6)               | 12 (80.0)                        | 0.220           |
| Cardiac                          | 9 (11.7)                | 3 (20.0)                         | 0.382           |
| Pulmonary                        | 17 (22.1)               | 4 (26.7)                         | 0.698           |
| COPD                             | 8 (10.4)                | 3 (20.0)                         | 0.294           |
| Vascular                         | 24 (31.2)               | 7 (46.7)                         | 0.245           |
| Hypertension                     | 23 (29.9)               | 6 (40.0)                         | 0.440           |
| Diabetes                         | 11 (14.3)               | 2 (13.3)                         | 0.923           |
| Obesity                          | 17 (22.1)               | 4 (26.7)                         | 0.698           |
| <b>(c)TNM stage</b>              |                         |                                  | 0.444           |
| Stage 0                          | 1 (1.3)                 | 0                                |                 |
| Stage I                          | 5 (6.5)                 | 2 (13.3)                         |                 |
| Stage II                         | 12 (15.6)               | 4 (26.7)                         |                 |
| Stage III                        | 40 (51.9)               | 8 (53.3)                         |                 |
| Stage IV                         | 19 (24.7)               | 1 (6.7)                          |                 |

**Legend:** values are absolute numbers (percentage) or medians [lower quartile – upper quartile] means [standard deviation]. BMI body mass index; ASA American Society of Anesthesiologists; (c)TNM clinical TNM staging.

**Supplementary Table S4.** Patient characteristics by pneumonia (UPS).

|                                  | Uncomplicated<br>n = 77 | Pneumonia<br>n = 36 | p-value      |
|----------------------------------|-------------------------|---------------------|--------------|
| <b>Age, years</b>                | 63 [10]                 | 65 [7]              | 0.190        |
| <b>BMI, kg/m<sup>2</sup></b>     | 26.8 [4.4]              | 26.4 [4.7]          | 0.664        |
| <b>Weight loss, kg</b>           | 0 [0-5]                 | 2 [0-6]             | 0.498        |
| <b>Sex, male</b>                 | 64 (83.1)               | 9 (25.0)            | 0.310        |
| <b>ASA</b>                       |                         |                     | <b>0.023</b> |
| II                               | 59 (76.6)               | 20 (55.6)           |              |
| III                              | 18 (23.4)               | 16 (44.4)           |              |
| <b>Smoking history</b>           | 58 (75.3)               | 34 (94.4)           | <b>0.015</b> |
| Active smoker (or quit <1 year)  | 14 (18.4)               | 19 (52.8)           | <0.001       |
| <b>Alcohol consumption</b>       |                         |                     | <b>0.030</b> |
| Daily                            | 21 (27.3)               | 17 (47.2)           |              |
| Weekly                           | 13 (16.9)               | 1 (2.8)             |              |
| <b>Preoperative Tube feeding</b> | 15 (19.5)               | 12 (33.3)           | 0.108        |
| <b>Comorbidity</b>               | 49 (63.6)               | 26 (72.2)           | 0.368        |
| Cardiac                          | 9 (11.7)                | 5 (13.9)            | 0.741        |
| Pulmonary                        | 17 (22.1)               | 8 (22.2)            | 0.986        |
| COPD                             | 8 (10.4)                | 8 (22.2)            | 0.093        |
| Vascular                         | 24 (31.2)               | 15 (41.7)           | 0.274        |
| Hypertension                     | 23 (29.9)               | 11 (30.6)           | 0.941        |
| Diabetes                         | 11 (14.3)               | 3 (8.3)             | 0.371        |
| Obesity                          | 17 (22.1)               | 8 (22.2)            | 0.986        |
| <b>(c)TNM stage</b>              |                         |                     | 0.549        |
| Stage 0                          | 1 (1.3)                 | 0                   |              |
| Stage I                          | 5 (6.5)                 | 3 (8.3)             |              |
| Stage II                         | 12 (15.6)               | 10 (27.8)           |              |
| Stage III                        | 40 (51.9)               | 15 (41.7)           |              |
| Stage IV                         | 19 (24.7)               | 8 (22.2)            |              |

**Legend:** values are absolute numbers (percentage) or medians [lower quartile – upper quartile] means [standard deviation]. BMI body mass index; ASA American Society of Anesthesiologists; (c)TNM clinical TNM staging.

**Supplementary Table S5.** Patient characteristics by histological subtype.

|                                  | <b>AC and Other</b> | <b>SCC</b>      | <i>p</i> -value |
|----------------------------------|---------------------|-----------------|-----------------|
|                                  | n = 145             | n = 20          |                 |
| <b>Age, years</b>                | 64[9]               | 66[7]           | 0.304           |
| <b>BMI, kg/m<sup>2</sup></b>     | 26.0[23.5-29.8]     | 24.6[22.8-27.6] | 0.226           |
| <b>Weight loss, kg</b>           | 1.0[0-6.0]          | 1.5[0-5.8]      | 0.934           |
| <b>Sex, male</b>                 | 119(82.1)           | 12(60.0)        | <b>0.022</b>    |
| <b>ASA</b>                       |                     |                 | 0.265           |
| II                               | 102(70.3)           | 16(80.0)        |                 |
| III                              | 41(28.3)            | 3(15.0)         |                 |
| IV                               | 2(1.4)              | 1(5.0)          |                 |
| <b>Smoking history</b>           | 115(79.3)           | 17(85.0)        | 0.551           |
| Active smoker (or quit <1 year)  | 44(30.6)            | 6(30.0)         | 0.960           |
| <b>Alcohol consumption</b>       |                     |                 | 0.093           |
| Daily                            | 43(29.7)            | 10(52.6)        |                 |
| Weekly                           | 20(13.8)            | 3(15.8)         |                 |
| <b>Preoperative tube feeding</b> | 35(24.1)            | 6(30.0)         | 0.570           |
| <b>Comorbidity</b>               | 96(66.2)            | 10(50.0)        | 0.156           |
| Cardiac                          | 21(14.5)            | 4(20.0)         | 0.519           |
| Pulmonary                        | 31(21.4)            | 3(15.0)         | 0.508           |
| COPD                             | 17(11.9)            | 3(15.0)         | 0.803           |
| Vascular                         | 53(36.6)            | 3(15.0)         | 0.056           |
| Hypertension                     | 49(34.3)            | 3(15.0)         | 0.139           |
| Diabetes                         | 19(13.1)            | 0               | 0.085           |
| Obesity                          | 33(22.8)            | 2(10.0)         | 0.191           |
| <b>(c)TNM stage</b>              |                     |                 | <b>0.026</b>    |
| 0                                | 2(1.4)              | 0-              |                 |
| I                                | 9(6.2)              | 4(20.0)         |                 |
| II                               | 24(16.6)            | 7(35.0)         |                 |
| III                              | 76(52.4)            | 8(40.0)         |                 |
| IV                               | 32(23.4)            | 1(5.0)          |                 |
| <b>Surgical lymph node yield</b> | 27[21-32]           | 29[21-33]       | 0.740           |

**Legend:** values are absolute numbers (percentage) or medians [lower quartile – upper quartile] means [standard deviation]. BMI body mass index; ASA American Society of Anesthesiologists; (c)TNM clinical TNM staging.