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| **Supplementary Table 1. Characteristics of 88 patients according to the presence of complications** |
| Variables | Overall | Pulmonary | Anastomotic leakage |
| Yes(n=48) | No(n=40) | *P* value | Yes(n=18) | No(n=70) | *P* value | Yes(n=20) | No(n=68) | *P* value |
| Age, y Median (range)Sex, maleComorbidity (CCI≥2)Location Lt Mt UtNeoadjuvant chemotherapySurgeryTTETMETissue TypeSCCACpStaging pStage0-I pStageII  pStageIII  pStageIVLymphadenectomy 2 fields 3 fieldsNo. of retrieved LNsMedian (range)Curability, R1-2 | 66 (47-84)35 (72.9)6 (12.5)15 (31.3)29 (60.4)4 (8.3)12 (25.5)18 (37.5)30 (62.5)44 (91.7)4 (8.3)22 (45.8)15 (31.3)11 (22.9)/0 (-)7 (14.6)41 (85.4)68 (19-109)2 (4.2) | 67 (43-82)28 (70.0)2 (5.0)14 (35.0)22 (55.0)4 (10.0)20 (50.0)12 (30.0) 28 (70.0)39 (97.5) 1 (2.5)15 (37.5)10 (25.0)12 (30.0)3 (7.5)6 (15.0)34 (85.0)61 (9-158)1 (2.5) | 0.970.760.21 0.50 0.020.420.220.210.960.210.66 | 69 (55-78)14 (77.8)3 (16.7)4 (22.2)13 (72.2)1 (5.6)5 (27.8)9 (50.0 9 (50.0)16 (88.9)2 (11.1)7 (38.9)6 (33.3)5 (27.8)0 (-)3 (16.7)15 (83.3)58 (27-89)2 (11.1) | 66 (43-84)49 (70.0)5 (7.1)25 (35.7)38 (54.3)7 (10.0)27 (39.1)49 (70.0)21 (30.0)67 (95.7)3 (4.3)30 (42.9)19 (27.1)18 (25.7)3 (4.3)10 (14.3)60 (85.7)65 (9-158)1 (1.4) | 0.97 0.40 0.24 0.07 0.37 0.53 0.30 0.64 0.81 0.64 0.08 | 65 (47-78)15 (75.0)2 (10.0)5 (25.0)13 (65.0)2 (10.0)4 (20.0)15 (75.0)5 (25.0)20 (100)0 (-)10 (50.0)6 (30.0)4 (20.0)0 (-)0 (-)20 (100.0)61 (37-92)1 (5.0) | 67 (43-84)48 (70.6)6 (8.8)24 (35.3)38 (55.9)6 (8.8)28 (41.8)43 (63.2)25 (36.8)63 (92.7)5 (7.3)27 (39.8)19 (27.9)19 (27.9)3 (4.4)13 (19.1)55 (80.9)64 (9-158)2 (2.9) | 0.77 0.69 0.87 0.87 0.07 0.60 0.10 0.58 0.007 0.84 0.67 |
| Abbreviations: CCI, Charlson comorbidity index; TTE, transthoracic esophagectomy; TME. transmediastinal esophagectomy; SCC, squamous cell carcinoma; AC, adenocarcinoma; LN, lymph node |

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| **Supplementary Table 2. Global QOL and functional scales (EORTC QLQ-C30): comparison between patients with and without predefined complications for up to 2 years after esophageal cancer surgery**  |
|  | Time Point of HRQoL measurement |
| Pre | 3 months | 6 months | 1 year | 2 years |
| **Overall complications; yes (n=48) vs. no (n=40)** |
|  Global quality of life  Functions  Physical  Role  Emotional  Cognitive  Social | 0.190.230.550.690.720.83 | 0.530.680.890.440.560.31 | 0.820.990.460.230.120.19 | 0.810.60.890.40.140.42 | 0.910.250.340.170.650.92 |
| **Pulmonary complications; yes (n=18) vs. no (n=70)** |
| Global quality of life  Functions  Physical  Role  Emotional  Cognitive  Social | **0.003****0.006**0.430.70.580.76 | 0.850.210.590.910.330.66  | 0.510.120.370.830.440.87 | 0.740.330.840.480.710.62 | 0.220.320.56**0.006**0.060.84 |
| **Anastomotic leakage; yes (n=20) vs. no (n=68)** |
| Global quality of life  Functions  Physical  Role  Emotional  Cognitive  Social | 0.370.480.450.680.440.71 | 0.160.550.19**0.01**0.99**0.02** | 0.890.780.410.070.190.09 | 0.610.560.890.60.270.22 | 0.160.090.140.690.220.75 |
| \* Data are presented with *P* values for significance of difference between the groups.\*\* HRQoL outcomes that are significantly poorer in patients with than in those without complications are in **bold** type. Abbreviations: HRQoL, health-related quality of life |

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| **Supplementary Table 3. General and esophageal-related symptoms: comparison between patients with and without overall complications**  |
|  | Time Point of HRQoL measurement |
| Pre | 3 months | 6 months | 1 year | 2 years |
| **Overall complication; yes (n=48) vs. no (n=40)** |
| EORTC QLQ-C30 Fatigue  Nausea and vomiting  Pain  Dyspnea Insomnia Appetite loss  Constipation Diarrhea Financial difficulties EORTC QLQ-OES18 Eating difficulties Reflux Esophageal Pain Swallowing saliva  Choking when swallowing  Dry mouth Taste abnormality Trouble with coughing Difficulty speaking Dysphagia | 0.940.910.150.650.330.76**0.007**0.350.470.620.790.880.790.160.530.30.790.320.96 | 0.470.60.60.890.630.470.490.980.470.840.820.290.60.720.870.780.840.260.84 | 0.580.970.210.590.860.930.220.860.250.590.640.310.340.730.880.580.54**0.03**0.052 | 0.530.80.510.520.970.630.860.530.260.430.720.390.820.240.910.320.220.110.91 | 0.280.960.880.660.680.390.970.650.910.320.440.430.680.460.160.940.550.930.36 |
| \* Data are represented with *P* values for significance of difference between the groups.\*\* HRQoL outcomes that are significantly poorer in the patients with than in those without complications are in **bold** type. Abbreviations: HRQoL, health-related quality of life |

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| **Supplementary Table 4. Body composition data and nutritional markers: comparison between patients with and without predefined complications for up to 2 years after esophageal cancer surgery**  |
|  | Time Point of measurement |
| Pre | 3 months | 6 months | 1 year | 2 years |
| **Overall complication; yes (n=48) vs. no (n=40)** |
|  Body composition data Body weight BMI Fat mass (%) Skeletal muscle mass (%) Handgrip strength Nutritional markers Albumin Pre-albumin PNI | 0.440.360.420.770.49**0.04**0.990.06 | 0.820.910.590.730.620.620.370.94 | 0.730.910.590.570.520.960.150.55 | 0.440.520.450.660.310.70.070.11 | 0.350.360.390.180.920.260.140.76 |
| **Pulmonary complication; yes (n=18) vs. no (n=70)** |
| Body composition data Body weight BMI Fat mass (%) Skeletal muscle mass (%) Handgrip strength Nutritional markers Albumin Pre-albumin PNI | 0.440.990.890.490.540.380.230.53 | 0.490.540.510.150.090.69**0.049**0.79 | 0.520.870.860.430.320.41**0.01**0.18 | 0.450.690.90.80.380.19**0.02**0.058 | 0.370.510.230.860.230.18**0.008**0.09 |
| **Anastomotic leakage; yes (n=20) vs. no (n=68)** |
| Body composition data Body weight BMI Fat mass (%) Skeletal muscle mass (%) Handgrip strength Nutritional markers Albumin Pre-albumin PNI | 0.130.130.060.280.320.140.790.06 | 0.940.830.930.760.690.990.450.39 | 0.770.80.880.640.490.940.390.79 | 0.340.470.390.910.630.810.070.58 | 0.390.660.410.210.780.810.060.86 |
| \* Data are represented with *P* values for the significance of differences between the groups.\*\* Values that are significantly lower in patients with than in those without complications are in **bold** type. Abbreviations: BMI, body mass index; PNI, prognostic nutritional index |