

Supplementary file 3 – Expected complication rates in case (part of) LND was omitted

Estimated complicate rates in case (part of) LND omitted. Participants were asked if they expected a change in complications in case only thoracic or abdominal LND was performed or LND was omitted. If no change was expected the standard complication rate based on literature was used to calculate the expected complicate rate. The standard complication rate given was 18.5% for anastomotic leakage[1], 7.6% for chyle leakage[1], 43.8% for pneumonia[1], 0.5% for tracheal injury[2], 6.5% for laryngeal nerve paresis[3], 2.5% for post-operative bleeding[3], 3 (1-134) days for length of stay IC[1], 13 (5 – 148) length of stay hospital (including IC) [1] and 7.10% for mortality[1].

	<i>Thoracic LND, median (IQR)</i>	<i>Abdominal LND, median (IQR)</i>	<i>No LND, median (IQR)</i>
<i>Percentage of patients experiencing anastomotic leakage</i>	18.5% (18.5-18.5)	18.5% (18.5-18.5)	18.5% (16.6-18.5)
<i>Percentage of patients experiencing chyle leakage</i>	7.6% (7.6-7.6)	2.9% (1.2-7.6)	2.1% (0.5-4.0)
<i>Percentage of patients experiencing pneumonia</i>	43.8% (43.8-43.8)	35.5% (25.0-43.8)	30.2% (20.0-43.8)
<i>Percentage of patients experiencing tracheal injury</i>	0.5% (0.5-0.5)	0.5% (0.2-0.5)	0.4% (0.1-0.5)
<i>Percentage of patients experiencing laryngeal nerve paresis</i>	6.5% (6.5-6.5)	4.0% (1.0-6.5)	2.8% (1-6.5)
<i>Percentage of patients experiencing postoperative bleeding</i>	2.5% (2.0-2.5)	2.5% (1.5-2.5)	2.4% (1.0-2.5)
<i>Total length of stay</i> • <i>days on ICU</i>	13 (13-13) 3 (3-3)	13 (11-13) 3 (2-3)	13 (10-13) 3 (2-3)
<i>Percentage of deaths 90-days postoperative</i>	7.1% (7.1-7.1)	7.1% (5.1-7.1)	7.1% (4.9-7.1)
<i>Reduction in procedure time</i>	30 min (30-50)	40 min (30-60)	60 min (50-100)

References:

1. van Workum F, et al. McKeown or Ivor Lewis totally minimally invasive esophagectomy for cancer of the esophagus and gastroesophageal junction: systematic review and meta-analysis. *J Thorac Dis* 2017;9:S826-S33.
2. Dutch Upper GI Cancer Audit (DUCA), Annual report 2017. 2017.
3. Goense L, et al. Hospital costs of complications after esophagectomy for cancer. *Eur J Surg Oncol* 2017;43:696-702.