Table 3. Studies reporting changes in overall survival

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| **Author** | **Number of patients with and without EUS** | **Treatment(s)** | **Comparison Group** | **Length of follow-up** | **Overall Survival** | **Newcastle-Ottawa Score** | **GRADE** |
| Das et al [39] | EUS=303  No EUS=2,527 | EUS vs Non-EUS:  Endoscopic=0 vs 0%; surgery alone=14.7 vs 21.1%; NAT=6.7 vs 11.2%; CRT=23.7 vs 23.8%; chemotherapy only=27.3% vs 27.7%; RT only=61.7% vs 64.0% | Yes | Not specific, but up to 7 years described. | EUS vs No EUS (stratified by stage):  CIS: 2373 days (904-3842) vs 2074 (872-3266). Absolute difference in median survival = 299 days.  Local: 945 days (602-1288) vs 306 (277-335). Absolute difference in median survival = 639 days.  Regional: 517 days (434-600) vs 214 (189-239). Absolute difference in median survival = 303 days.  Distant: 273 days (104-442) vs 120 (110-130). Absolute difference in median survival = 153 days. | 2 | Low |
| Morris et al [46] | EUS=42  No EUS=0 | Radical=13  Palliative=29 | No | NR | One-year survival for EUS-FNA negative and positive patients was 68% and 38%, respectively. | 4 | Low |
| Russell et al [50] | EUS=107  No EUS=106 | EUS vs Non-EUS:  EMR=1 (0.5) vs 5 (2.3), surgery=18 (8.2) vs 10 (4.6), NACT & surgery=67 (30.6) vs 76 (34.7), multi-modal=23 (10.5) vs 19 (8.7) | Yes | Survival times truncated at 1461 days | Overall, EUS group=717 days (95% CI 533 to 901) vs non-EUS group=596 days (95% CI 415 to 777). EUS improved survival adjusted for quality of life with a hazard ratio of 0.705 (95% CI 0.499 to 0.995) and crude survival with a hazard ratio of 0.706 (0.501 to 0.996). Mean absolute difference in survival = 121 days. | 7 | High |
| Schrager et al [51] | EUS=25  No EUS=72 | Total numbers:  Endoscopic=0; Surgical resection=37; NACT=27; definitive chemotherapy=38; definitive radiation therapy=46  \* totals do not add up to sample size | Yes | Mean 18 months +/- 22 (range 0.5-114 months) | CT and EUS staging versus CT staging alone (converted from months to days):  Mean survival 486 days +/- 91 versus 365 days +/- 46  Absolute difference in mean survival = 121 days.  90-day survival: 92% vs. 83%  180-day survival: 84% vs. 67%  365-day survival: 80% vs. 43% | 4 | Low |
| Shimodaira et al [53] | EUS=133  No EUS=0 | CRT&surgery=53, dCRT=47, chemotherapy=14, endoscopic=10, surgery alone=3 | No | Median 23.3 months (95% CI 18.9-34.4) | 2-year OS of EUS-FNA positive versus negative patients was 41% versus 71%, respectively. | 4 | Low |
| Wani et al [55] | EUS=524  No EUS=5,912 | Total numbers:  Endoscopic=135; surgery alone=239; neo-adjuvant therapy=12; dCRT=1689; chemotherapy=2296; radiotherapy=2914  \* totals do not add up to sample size | Yes | NR | EUS vs no EUS (stratified by stage):  CIS: 1566 days (SD 901.5) vs 1303 (1178.7). Absolute difference in mean survival = 263 days.  Local: 1331 days (1071.1) vs 742 (900.6). Absolute difference in mean survival = 589 days.  Regional: 710 days (774.4) vs 509 (690.2). Absolute difference in mean survival = 201 days.  Distant: 431 days (534.1) vs 230 (372.3). Absolute difference in mean survival = 201 days. | 2 | Low |

NACT = neo-adjuvant chemotherapy; CI = confidence intervals; NAT = neo-adjuvant therapy; dCRT = definitive chemoradiotherapy; RT = radiotherapy; CIS=carcinoma in-situ; NR=not reported