

Background

- There is uncertainty regarding the extent of lymphadenectomy in solid tumors.
- To review the literature to compare the outcomes of **Extended** Lymph Node Dissection (**ELND**) versus **Standard** Lymphadenectomy (**SLND**) in various genitourinary (GU) and other solid tumors with high mortality.

Materials and Methods

- Obtained the list of high mortality solid tumors from American Cancer Society (ACS) Information 2019, including
 - Prostate
 - Bladder
 - Lung
 - Breast
 - Colorectal
 - Pancreas
 - Liver
 - Endometrial
 - Ovarian
 - Esophageal cancers
- Search strategy:
 - randomized controlled trials
 - in PubMed, Google Scholar, Ovid and Cochrane library
- The primary endpoint: overall survival
- secondary endpoints: Progression-free survival, estimated blood loss, operative time and complications.

Results

- Total of **1696 studies** in database search.
- **26 full-text** articles were reviewed in depth and included.
- **Prostate Ca:** 2 trials; ELND ~ no oncological benefits; more intraoperative complications
- **Bladder Ca:** 2 studies; ELND ~ no overall survival benefit (Results of SWOGS1011 is pending)
- **Lung Ca:** 4 trials; Mediastinal Lymph node dissection effect varied significantly
- **Breast Ca:** 7 trials, no significant overall survival benefit was found between Axillary and sentinel lymph node dissection; more complications.
- **Pancreatic Ca:** 6 trials. ELND ~ decreased overall survival
- **Endometrial Ca:** 2 trials did not favor ELND
- **Ovarian Ca:** 2 RCTs; pelvic vs. para aortic LND ~ improved progression-free survival, but no overall survival benefit
- **Hepatic Ca:** No definitive role for LND. lymphadenectomy may not improve survival
- **Colorectal Ca:** No definitive role for LND
- **Esophageal Ca:** 2 RCTs; transthoracic esophagectomy with lymph node dissection ~ No survival benefit

Conclusions

- This is the **first systemic review** of its kind
- **Overall survival has not improved with ELND** as compared to **SLND** in **bladder and prostate cancer**
- Extended LND does not improve overall survival in the **majority of other solid-organ** cancers
- ELND is also associated with **more post-op complications**

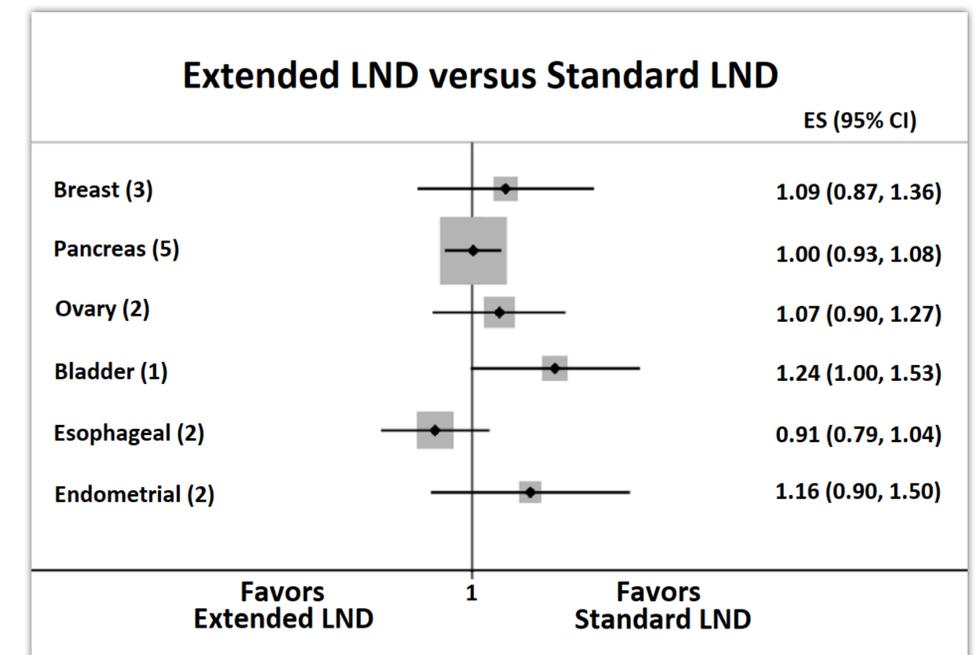


Figure. Comparison of extended vs. standard lymphadenectomy in commonly diagnosed genitourinary and other solid-organ malignancies