

## Introduction and Objectives

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

## Methods

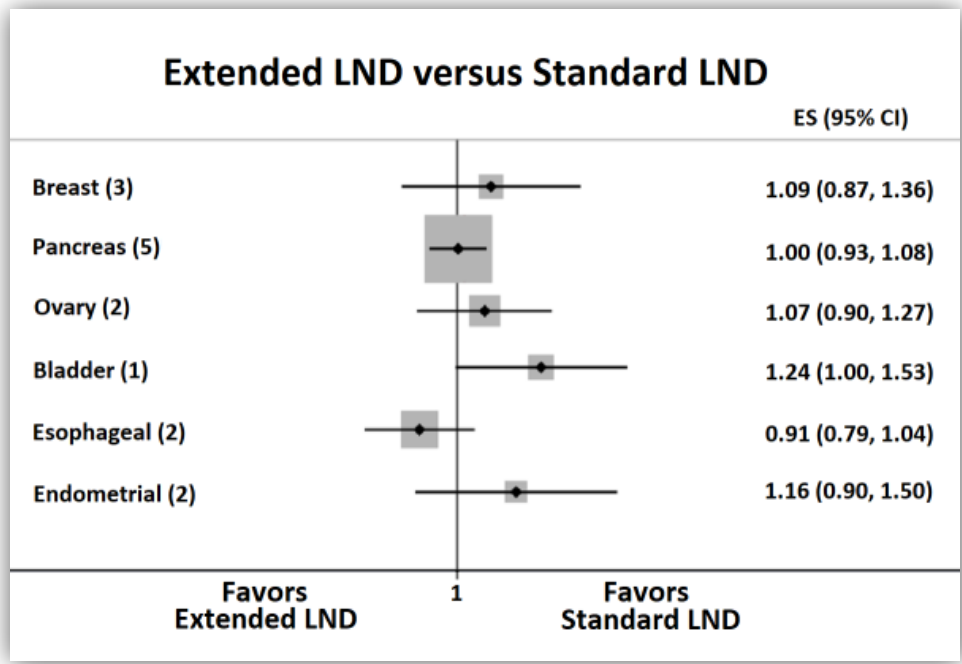
- Obtained the list of high mortality solid tumors from American Cancer Society (ACS) Information 2019, including:
  - Prostate, Bladder, Lung, Breast, Colorectal, Pancreas, Liver, Endometrial, Ovarian, Esophageal cancers
- Search strategy:
  - randomized controlled trials (RCTs)
  - in PubMed, Google Scholar, Ovid and Cochrane
- 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

Results (cont'd)

- **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



Conclusion

- 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
- More randomized studies are needed to further evaluate the outcomes of ELND.

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