

INTRODUCTION

- Ductal adenocarcinoma is considered a rare histological variant of prostate adenocarcinoma (PCa) according to the American Joint Committee on Cancer (AJCC).
- Of the rare variants of PCa according to the AJCC, ductal is the most common subtype.
- However, given the rarity of this subtype still, optimal treatment strategies for men with nonmetastatic ductal PCa is largely unknown.
- We aimed to describe the impact of surgery, radiotherapy, and systemic therapy on overall survival (OS) in men with nonmetastatic ductal PCa.

METHODS

- We retrospectively selected 2209 cases of ductal PCa, diagnosed between 2004 and 2015, within the National Cancer Database (NCDB).
- Exclusion of patients with metastatic disease at presentation yielded a total sample of 1993 individuals.
- Covariates included age, race, Charlson comorbidity score (CCI), clinical T stage, biopsy Gleason score, serum prostate specific antigen (PSA), and income.
- Cox regression analysis tested the impact of treatment (surgery, radiotherapy, systemic therapy and no treatment) on OS, after adjusting for all aforementioned covariates.
- Adjusted Kaplan-Meier estimates were used to visualize the impact of treatment modality on OS.

METHODS

Prostate Adenocarcinoma – n = 1345618



Ductal Prostate Adenocarcinoma – n = 2209



Localized Ductal Prostate Adenocarcinoma – n = 1993

KEY RESULTS

- In men with nonmetastatic ductal PCa, median (IQR) age and PSA were 67 (61-74) years and 6.3 (4.3-10.8) ng/mL, respectively.
- 9.8% (n=195) of patients presented with cT3 disease or higher.
- 3.4% (n=68) presented a CCI score ≥ 4
- 40.6% (808) presented with a Gleason biopsy score ≥ 4
- 1212 (60.8%) patients were treated surgically, 406 (20.4%) with radiotherapy, 102 (5.1%) with systemic therapies, and 273 (13.7%) received no/other treatment.
- Multivariable analysis showed that in comparison to men treated surgically, OS was significantly lower for patients receiving radiotherapy (HR 2.6; 95% CI 1.7-4.0) and systemic therapies (HR 9.1; 95% CI 5.0-16.5).

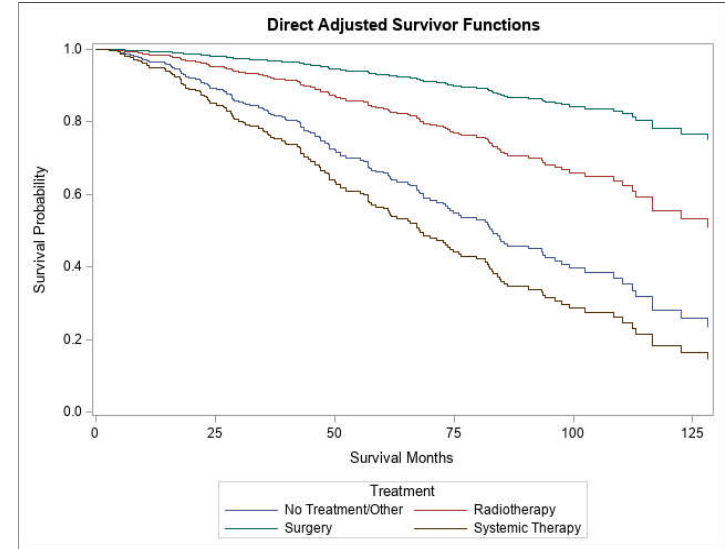


Figure 1. Kaplan-Meier overall survival estimates of 1993 nonmetastatic ductal prostate adenocarcinoma patients, diagnosed between 2004 and 2015, within the National Cancer Database, stratified based on treatment method.

CONCLUSION

- In the rare ductal PCa variant, starting treatment with surgery offers more favorable long-term OS outcomes than radiotherapy and systemic therapies.
- While residual selection bias might persist after adjustment, the rarity of this disease precludes the possibility of a future trial, and the presented data represents the best available level of evidence on this topic to date.