THE GEORGE WASHINGTON UNIVERSITY

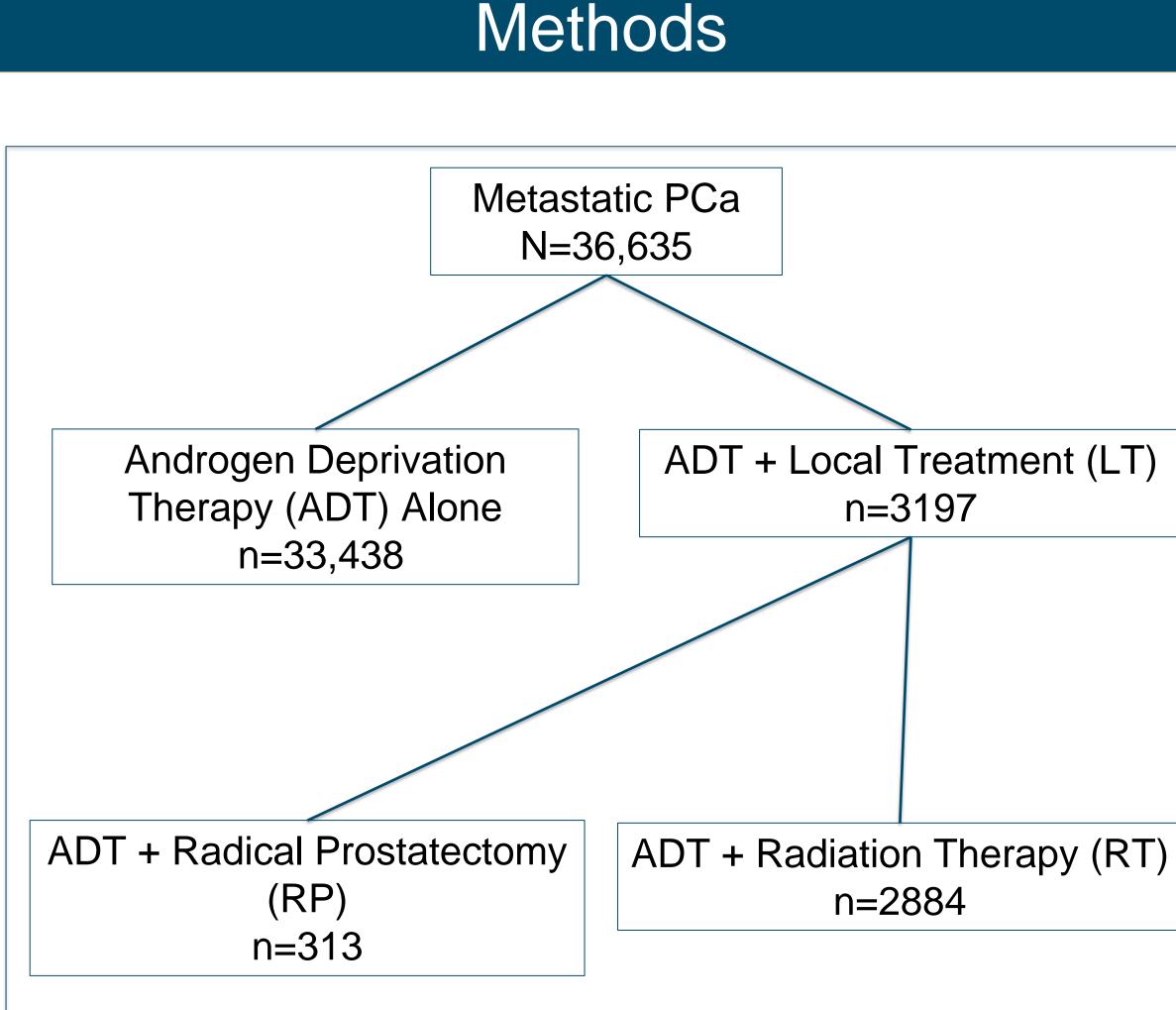
Definitive Local Treatment for Metastatic Prostate Cancer: An NCDB Retrospective Study

WASHINGTON, DC

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Background/Aims

- Current standard of therapy for metastatic prostate cancer (mPCa) is androgen deprivation therapy (ADT) combined with chemohormonal therapy
- Another parallel approach is the use of definitive local treatment (LT) to the prostate via pelvic radiotherapy (RT) or radical prostatectomy (RP)
- **Study Aims:** To compare the use of LT with ADT vs. ADT alone in the setting of metastatic prostate cancer

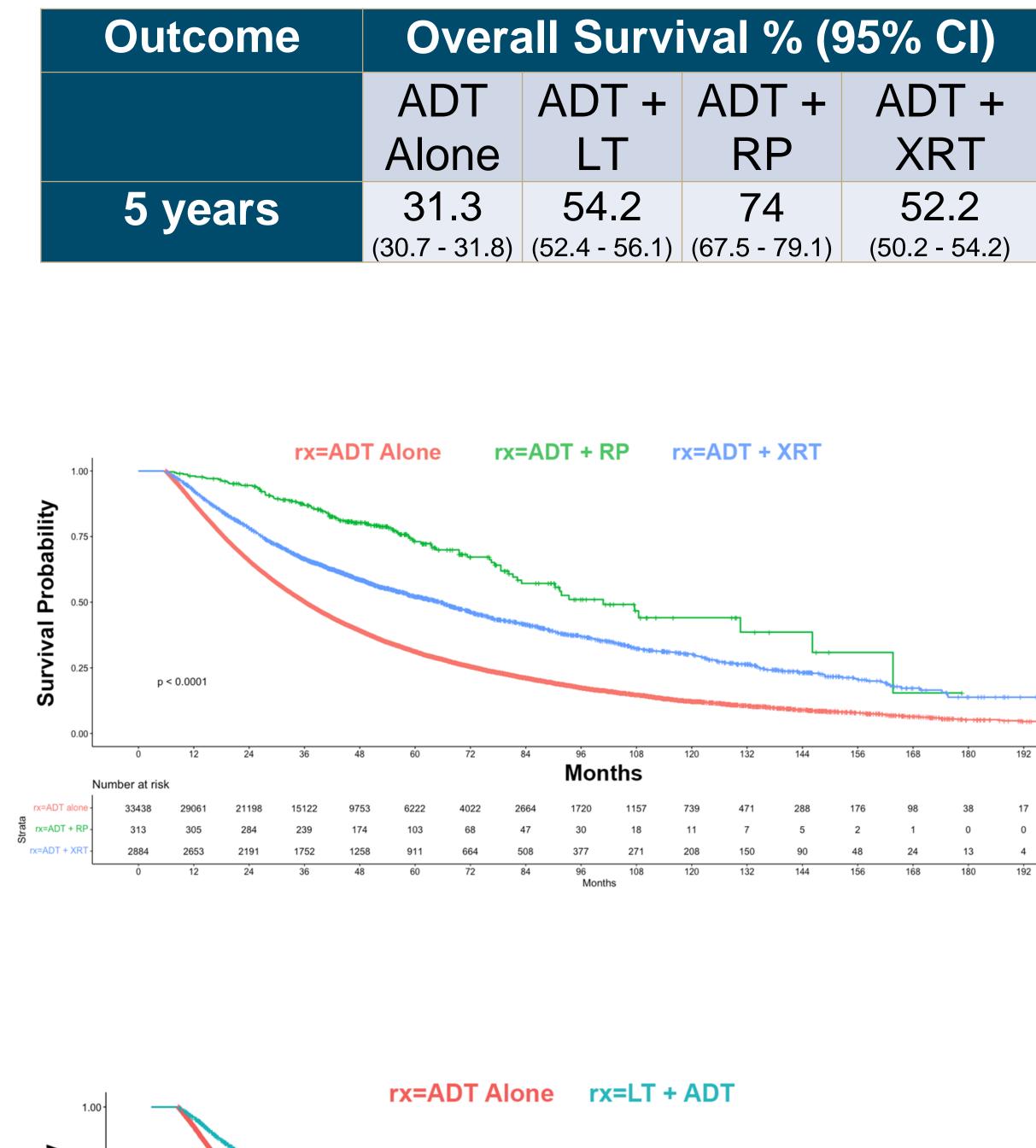


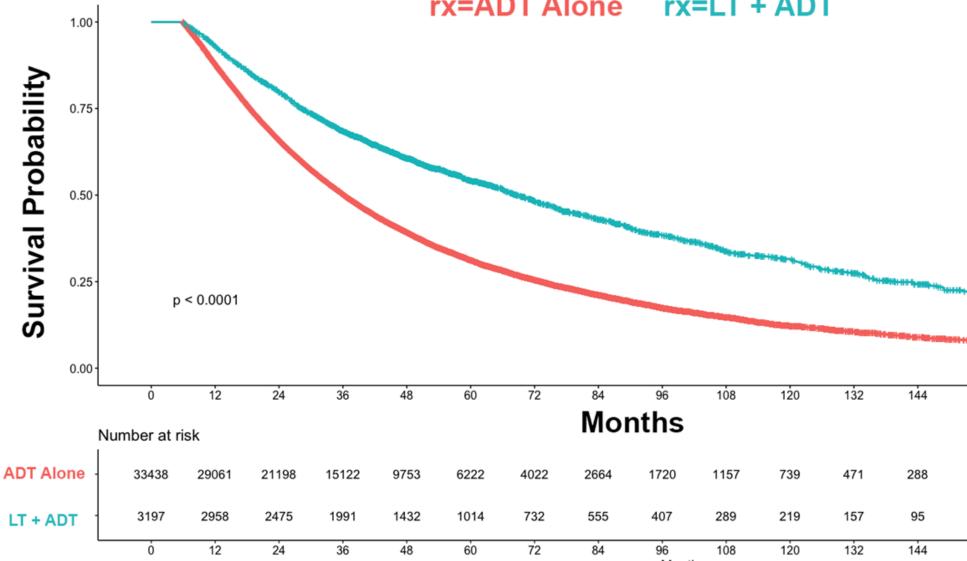
- The National Cancer Database (NCDB) was queried from 2004-2017 to conduct a retrospective cohort analysis of cTanyNanyM1 PCa who received LT + ADT vs. ADT alone.
- Patients with less than 6 months of follow-up, treatment history of orchiectomy or palliative care were excluded.
- Clinicopathologic variables were compared using appropriate statistical tests of comparison for continuous or categorical variables.
- Cox Proportional Hazards Model was used to identify predictors of Overall Survival (OS). The Kaplan-Meier (KM) method and log rank test were used to compare OS for LT+ADT vs. ADT alone.

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Results

- Patients treated with ADT alone were more likely to be older and have a higher PSA score (P < 0.001)
- The proportion of LT increased over the study period from 3.3% in 2004 to 15.4% in 2017
- Median follow-up was 2.8 years





Age	(N=36635)	1.02	Improve
•	. ,	(1.02 - 1.02)	
Race/Ethnicity	Non-Hispanic White (N=24909) Non-Hispanic Black	reference 0.94	
	(N=6786)	(0.91 - 0.98)	
	Other/unknown (N=4940)	0.85 (0.82 - 0.88)	
CCI	0 (N=28490)	reference	
	1 (N=5435)	(1.19) (1.15 - 1.23)	
	(M=2710)	1.43 (1.36 - 1.49)	
Median income of Zip Code	\$63,000 or more	reference	
	\$62,999-48,000	1.04	
	\$62,999-48,000 (N=7755) \$47,999-38,000 (N=7143)	(1.00 - 1.08) 1.11	
	Less than \$38,000	(1.06 - 1.16) 1.16	
	(N=6875) Unknown	(1.11 - 1.22) 0.95	
	(N=3969) Less than 6.3%	(0.69 - 1.30)	
Zipcode w/o HS diploma	(N=8111)	reference	
	6.3-10.8% (N=8793)	(0.97 - 1.05)	
	10.9–17.5% (N=8389)	1.00 (0.96 - 1.05)	
	17.6% or more (N=7435)	0.99 (0.94 - 1.04)	
	Unknown (N=3907)	1.01 (0.73 - 1.39)	
Insurance Status	Private (N=10110)	reference	
	(N=21038)	1.06	
	Medicaid	(1.02 - 1.09) 1.13	
	(N=2667) Other/unknown	(1.07 - 1.19) 1.10	
224	(N=2820) <10.0	(1.05 - 1.16)	
PSA	(N=4175)	reference 1.03	
	10.0-20.0 (N=4223)	(0.97 - 1.08)	
	>20.0 (N=25673)	(1.18 (1.13 - 1.23) 1.27	
	Unknown (N=2564)	1.27 (1.19 - 1.34)	
Clinical T Stage	T1 (N=9424)	reference	
	T2 (N=8292)	1.00 (0.96 - 1.03)	
	T3 (N=4649)	1.00 (0.95 - 1.04)	
	Ť4	1.31	
	(N=4644) Unknown	(1.26 - 1.37) 1.12 (1.08 - 1.16)	
Gleason Grade	(N=9626) 6	(1.08 - 1.16) reference	
Gleason Glade	(N=256) 7	0.94	
	(N=2550) 8-10	(0.79 - 1.11)	
	(N=17401) Unknown	1.33 (1.12 - 1.57)	
	(N=16120)	1.64 (1.20 1.04)	
Treatment Group	(N=33438)	reference	
	ADT + RP (N=313)	0.43 (0.35 - 0.53)	
	ADT aloné (N=33438) ADT + RP (N=313) ADT + XRT (N=2884)	0.66 (0.63 - 0.70)	-
# Events: 25301; Global p-value (Log-Rank):	0	(0.00 0.10)	

Results (Cont.)

- For ADT alone, 5-year OS was 31.3% (CI= 30.7-31.8%) vs. 54.2%. (CI= 52.4-56.1%) for LT+ADT.
- Furthermore, comparing the type of LT on KM analysis: RP + ADT showed better 5-yr OS, 74.0% (CI= 67.5-79.1%) vs. 52.2% (CI= 50.2-54.2%) for XRT+ADT (p<0.001).

Conclusions

- Definitive local treatment in addition to ADT significantly improves 5-year OS for patients with metastatic prostate cancer.
- There is a significant improvement in patient outcomes for those who are treated with RP vs RT.
- These findings support multimodal treatment for metastatic prostate cancer, and further studies are needed to optimize the choice of definitive LT in this setting.

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56	168	180	192	204



