P083

Post-metastasis Survival in High-Risk Localised and Locally Advanced Prostate Cancer Patients Undergoing Primary Treatment in the United States: a Retrospective Study

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INTRODUCTION

- For patients with high-risk localised or locally advanced prostate cancer (HR-LPC/LAPC), radical prostatectomy (RP) and radiotherapy (RT), with/without androgen deprivation therapy (RT + ADT or RT only), remain the standard of care treatment options[1,2]
- Patients with HR-LPC/LAPC have a poor prognosis, with increased risk of metastasis, which significantly reduces survival[3]
- There is a lack of evidence on the post-metastasis survival (PMS) of patients with HR-LPC/LAPC following these different treatments, as well as on whether the time to metastasis (TTM) determines their PMS

OBJECTIVES

- Analyse characteristics and PMS of HR-LPC/LAPC patients undergoing RP, RT only, or RT + ADT prior to metastasis
- Assess the impact of TTM on the PMS of HR-LPC/LAPC patients

METHODS

- The ConcertAI Patient360™ database[4] was used for this real-world study
  - The database, which is predominantly derived from medical oncologists in community oncology practices and academic medical centres across the United States, was queried from January 2000 to October 2022 for individuals aged ≥18 years
- Patients with HR-LPC/LAPC (based on National Comprehensive Cancer Network [NCCN] criteria[1]) who underwent RP, RT only, or RT ± ADT (gonadotropin-releasing hormone agonist or antagonist) were identified
- TTM was defined as time from primary treatment with RP, RT only, or RT + ADT to diagnosis of metastatic disease
- PMS was defined as the time from diagnosis of metastatic disease to either death or censoring at the date of last activity in the data for patients without a recorded date of death
- Pre- and post-metastasis survival were analysed using Kaplan-Meier methods
- Hazard ratios of PMS were obtained from Cox models to control for age and evaluate the impact of TTM on PMS

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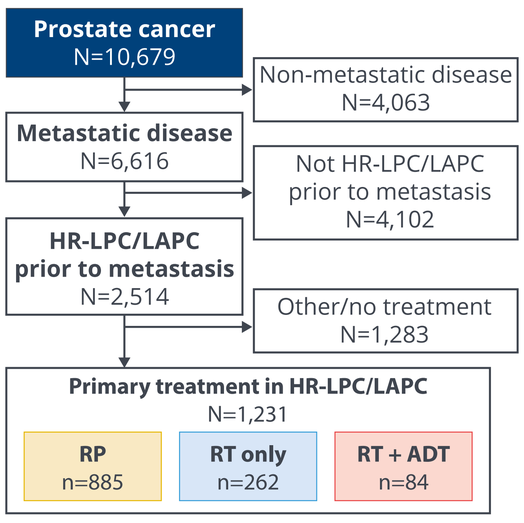
RESULTS

Study sample and cohorts

- The post-metastasis cohort included 1,231 patients with HR-LPC/LAPC who developed metastasis after primary treatment (Figure 1)

FIGURE 1: Patient cohorts



Patients

- Patients who received RP were younger than those who received RT and RT + ADT at time of primary treatment and at metastasis diagnosis, and showed longer PMS (Table 1)
- There was a high level of missingness in important prognostic factors other than age (data not shown)

Post-metastasis survival

- Patients who received RP exhibited longer median PMS than those who received RT and RT + ADT (Figure 2), but these differences lost statistical significance after controlling for age (Model 1 in Table 2)
- The TTM of patients with HR-LPC/LAPC was unrelated to their PMS (Model 2 in Table 2)

TABLE 1: Patient characteristics and PMS

	RP	RT only	RT + ADT
N	885	262	84
Median follow-up, yrs	2.9 (1.5-4.7)	2.7 (1.2-4.4)	2.3 (1.0-3.8)
Median age			
At primary treatment, yrs	63.0 (57.0-68.0)	67.0 (60.0-72.0)	70.0 (64.0-75.0)
At metastasis, yrs	69.0 (64.0-75.0)	73.0 (66.0-78.0)	73.0 (67.0-77.0)
Time to metastasis			
TTM, mos	66.0 (31.2-117.6)	50.4 (31.2-104.4)	34.8 (19.2-54.0)
Post-metastasis survival			
Death, n (%)	444 (50.1)	146 (55.7)	44 (52.3)
Median survival, mos	54.9 (51.3-62.5)	49.8 (40.4-56.8)	40.1 (30.9-68.8)

Parenthetical values are interquartile range unless otherwise noted.

FIGURE 2: PMS for patients with HR-LPC/LAPC by treatment

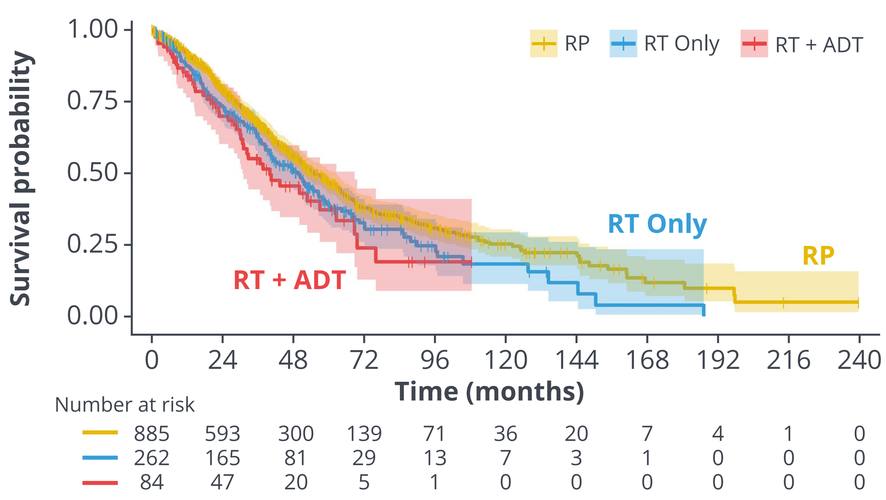


TABLE 2: Cox model HRs for PMS

		Unadjusted HR (95% CI)	Age-adjusted HR (95% CI)
Model 1	HR-LPC/LAPC with RP vs:		
	RT	1.26 (1.04-1.52)	1.19 (0.98-1.43)
	RT + ADT	1.47 (1.08-2.00)	1.32 (0.97-1.81)
Model 2	TTM in HR-LPC/LAPC, yrs	1.01 (0.99-1.03)	0.99 (0.98-1.01)

CI, confidence interval; HR, hazard ratio.

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KEY TAKEAWAY

PMS was unrelated to TTM, suggesting that PMS may be a constant length of time regardless of how one gets to metastases. Thus, the results suggest that treatment with agents that delay the development of metastasis may improve overall survival of patients with HR-LPC/LAPC

CONCLUSIONS

This study shows that prevalent treatment approaches for HR-LPC/LAPC do not seem to influence PMS, and that therapies delaying the development of metastases may improve overall survival in this patient population

This real-world data study showed that in patients with HR-LPC/LAPC, RP was associated with longer PMS than RT + ADT and RT only, a finding not maintained with adjustment for age

Future research is warranted to explore data sources with higher urology practice representation, and detailed information on prognostic factors (eg, disease volume, treatment received) and castration resistance

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DISCLOSURES

The authors report relationships/financial interest in/relative to as follows: **SF:** Astellas Pharma, AstraZeneca, Janssen Biotech, Bayer, Pfizer, Sanofi, Myovant Sciences, Merck, and Exact Sciences; **CM:** Great Debates & Updates in Genitourinary Oncology HMP Global Learning Network and European Association of Urology; **LF**, **FS**, **NB**, **SM**, **SMc**, **DL**, **LY**, and **FP** are employees of Janssen and may hold stock in Johnson & Johnson.

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