

Code: IUC26668-93 Clinicopathological Features, Treatment Patterns, and Outcomes in Small Cell Carcinoma of the Prostate and Urinary Bladder: A Retrospective Study from an Indian Tertiary Care Centre



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INTRODUCTION

Background:

- Small cell carcinoma of the prostate (SCCP) is a rare (<1%) and highly aggressive neuroendocrine variant associated with poor prognosis and limited responsiveness to androgen deprivation therapy.
- Platinum-based chemotherapy remains the standard systemic treatment, although responses are often short-lived.
- Owing to its rarity, evidence is limited to small retrospective studies, and comparative data with conventional prostatic adenocarcinoma are scarce.

Objective:

- To describe the clinicopathological characteristics, treatment patterns, and survival outcomes of patients with small cell carcinoma of the prostate and urinary bladder treated.

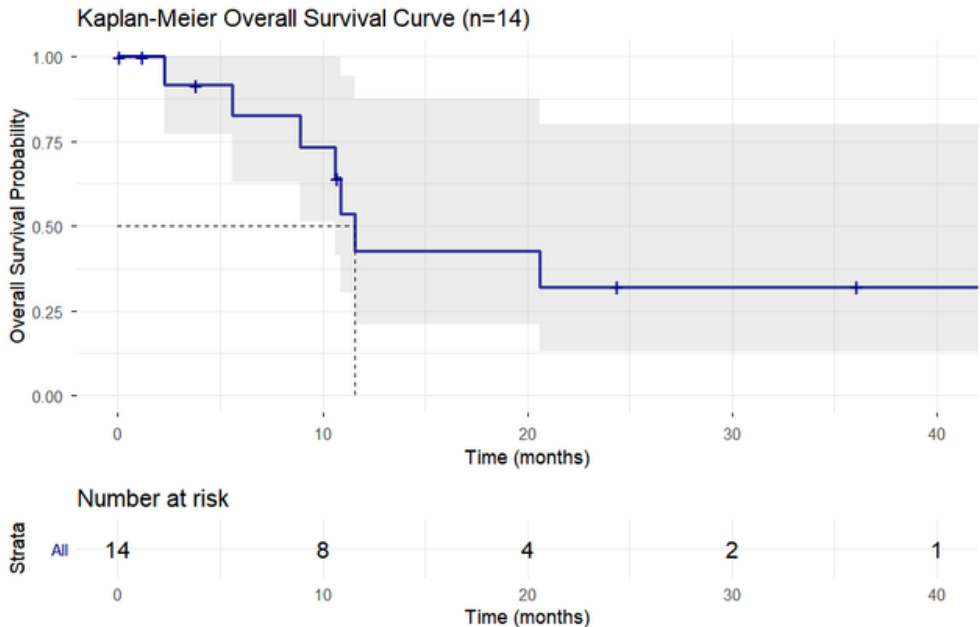
METHODS

- **Study design:** Retrospective observational study of patients diagnosed with small cell carcinoma of the prostate and urinary bladder.
- **Clinical & pathological assessment:** Demographic characteristics, primary tumour site, metastatic sites, and clinicopathological features were systematically recorded.
- **Treatment assessment:** First-line and subsequent treatment regimens, including platinum-based chemotherapy, androgen deprivation therapy (ADT), second-line and third-line treatments, were evaluated.

- Safety assessment: Treatment-related toxicities and treatment discontinuations were reviewed and documented according to available clinical records.
- Survival analysis: Overall survival (OS) was calculated from the time of diagnosis to death or last follow-up and estimated using the Kaplan–Meier method.

RESULTS

- **Study cohort:** 14 patients with small cell carcinoma of the prostate or urinary bladder.
- **Age:** Median 69.5 years (range, 35–81 years).
- **Duration of illness:** Mean 7.8 months (range, 1–48 months).
- **Primary tumor site:** Prostate: 11 patients (78.6%), Urinary bladder: 3 patients (21.4%)
- **Metastatic sites at presentation:** Lymph nodes: 12 patients (85.7%), Bone: 8 patients (57.1%), Visceral organs: 7 patients (50.0%)
- **Treatment:** All patients received first-line chemotherapy, predominantly platinum-based regimens. Nine patients (64.3%) also received androgen deprivation therapy (ADT). Four patients received second-line treatment. One patient received third-line therapy.
- **Safety:** No grade ≥ 3 treatment-related toxicities or treatment discontinuations were documented.
- **Survival:** Median overall survival: 11.6 months.
- **Status:** Seven patients (50.0%) died during follow-up, with most deaths occurring within the first year after diagnosis, reflecting the aggressive clinical course of the disease.



DISCUSSION AND CONCLUSION

- Patients exhibited aggressive clinicopathological features, a high burden of metastatic disease, and limited survival, with most deaths occurring within the first year of diagnosis.
- Although constrained by the rarity of the disease and small sample size, this study adds to the limited Indian literature and supports the need for prospective multicentre studies to optimize therapeutic strategies and improve outcomes.

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