

# EFFECTIVENESS AND SAFETY OF RADIUM-223 CHLORIDE IN BONE-METASTATIC CASTRATIONRESISTANT PROSTATE CANCER

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## BACKGROUND

- Radium-223 (<sup>223</sup>Ra) chloride has been shown to improve overall survival (OS) and progression-free survival (PFS) in patients with castration-resistant prostate cancer (CRPC) and bone metastases.

## OBJETIVES

- To evaluate the effectiveness and safety of <sup>223</sup>Ra in real-life clinical practice in patients with CRPC and bone metastases.

## MATERIAL AND METHODS

- Retrospective observational multicenter study evaluating all males with CRPC treated with <sup>223</sup>Ra from July 2015 - September 2018.
- Demographical, diagnostic, therapeutic and clinical variables were collected.
- The response was assessed through the PFS and OS.
- To assess safety, all treatment-related adverse events were recorded.

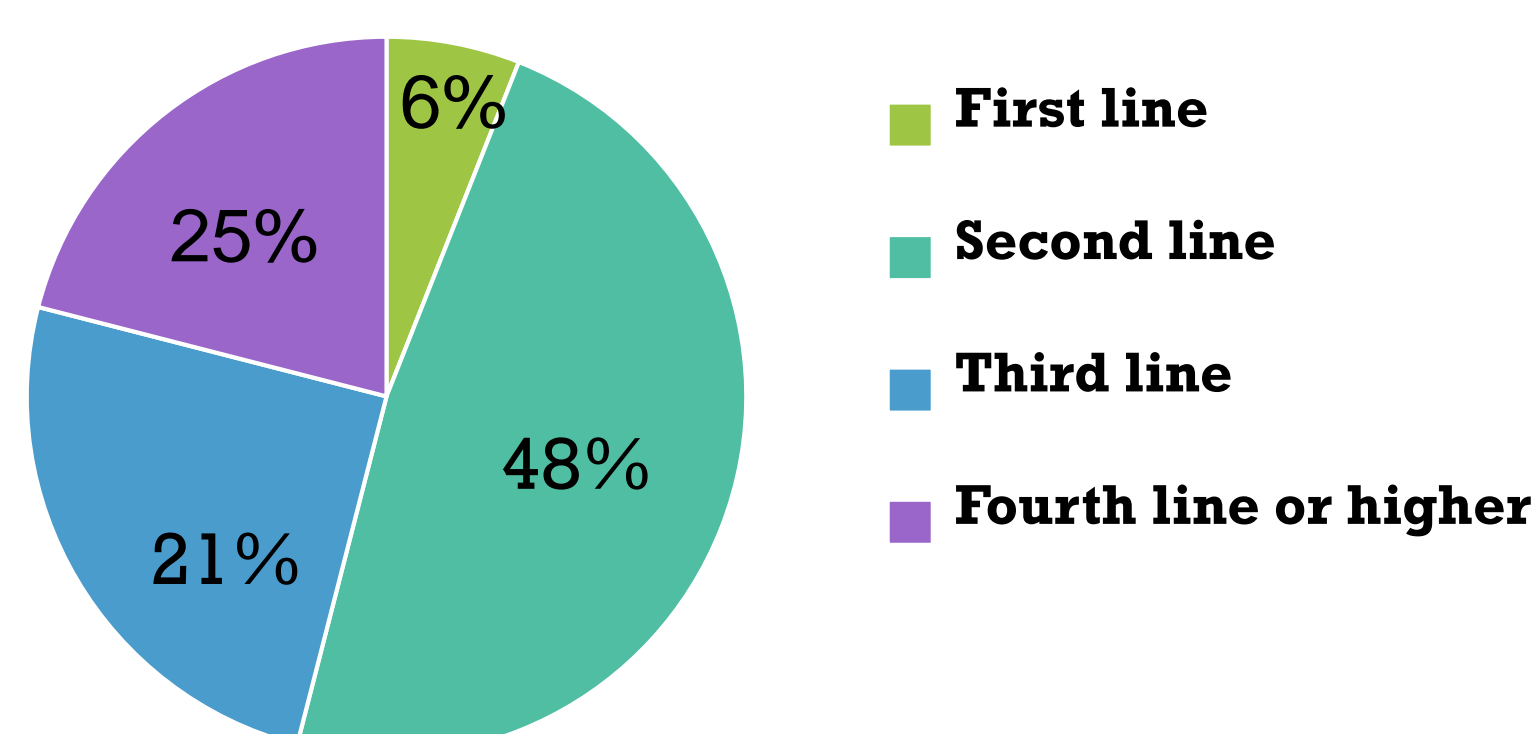
## RESULTS

**N = 63 patients with metastatic CRPC treated with <sup>223</sup>Ra**

- Mean age 71.9 years (SD=10.3)
- 64% of patients ECOG 0–1
- 36% ECOG 2–3

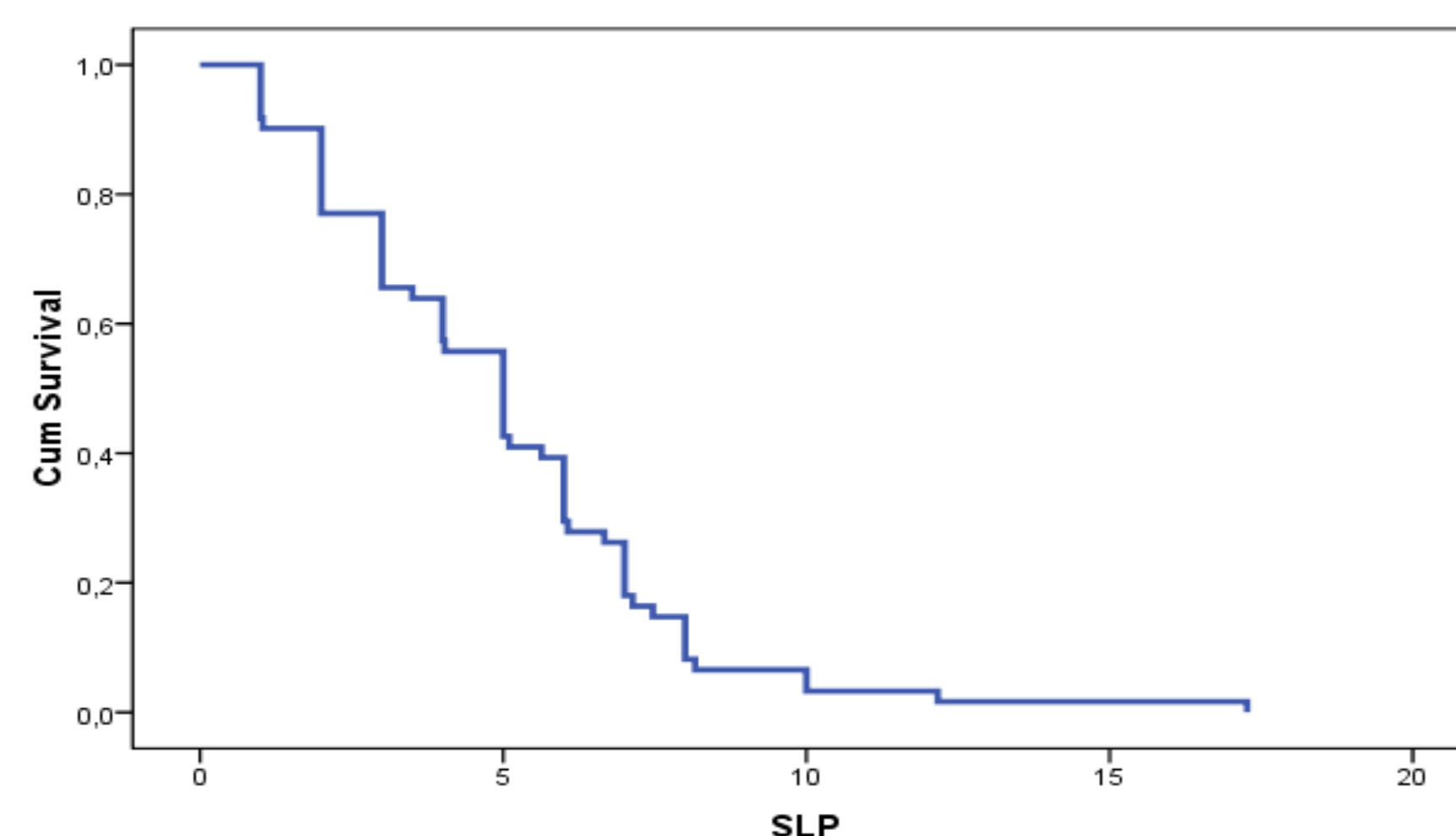
- 37 patients completed six treatment cycles
- 26 stopped treatment before completing six cycles because of side effects or worsening performance status

Treatment line with <sup>223</sup>Ra



According to Kaplan–Meier estimation

Survival Function



6 months OS rate: 76%  
12 months OS rate: 39%

**Median OS: 10.0 months (95% CI: 8.1 to 11.9)**

**Median PFS: 5.0 months (95% CI: 4.1 to 5.9)**

Adverse events	% of patients
Haematological (thrombocytopenia and neutropenia)	49% 3 patients grade 3 or 4
Gastrointestinal (diarrhoea, nausea and vomiting)	24% only grade 1 or 2
Bone pain	22%

Patients receiving all six cycles experienced the major benefit from the therapy



## CONCLUSIONS

- PFS and OS observed in this study are lower than those reported in the clinical trial.
- This could be explained by a worse performance status and that approximately half of the patients had been heavily pre-treated, <sup>223</sup>Ra receiving as a third line or higher.
- <sup>223</sup>Ra was well tolerated, the adverse effects being clinically manageable.