BACKGROUND

- Radium-223 (223Ra) 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.

OBJECTIVES

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

MATERIAL AND METHODS

- Retrospective observational multicenter study evaluating all males with CRCP treated with 223Ra 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 223Ra
  - 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

Adverse events | % of patients
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Haematological (thrombocytopaenia and neutropaenia) | 49%
Gastrointestinal (diarrhoea, nausea and vomiting) | 24%
Bone pain | 22%

According to Kaplan–Meier estimation

- 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)

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, 223Ra receiving as a third line or higher.
- 223Ra was well tolerated, the adverse effects being clinically manageable.