EFFECTIVENESS OF ABIRATERONE ACETATE IN ELDERLY CHEMOTHERAPY-NAÏVE PATIENTS WITH METASTATIC CASTRATION-RESISTANT PROSTATE CANCER

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INTRODUCTION & OBJECTIVES

Therapeutic optimization remains challenging in elderly patients with metastatic castration-resistant prostate cancer (mCRPC) given their greater likelihood of having comorbidities and lower tolerance for toxicity.[1,2] Abiraterone acetate (AA) improved overall survival in chemotherapy-naïve patients.[3,4] The oral route of administration and the safety profile are other advantages of this therapy in this population.[1,2] We aim to evaluate the effectiveness of AA treatment in the elderly population (aged ≥75 years) with mCRPC before docetaxel-based chemotherapy.

MATERIAL & METHODS

A single-centered, retrospective study was conducted, including patients with mCRPC who initiated treatment with 1000mg AA and 10mg prednisolone daily between October 2014 and April 2019 without previous chemotherapy exposure. Outcomes of interest were prostate-specific antigen (PSA) response rate (RR), time to PSA progression (TTPP), radiographic progression-free survival (rPFS) and overall survival (OS), defined according to COU-AA-302 study[3,4]. Toxicities were reported according to the National Cancer Institute scale, Common Terminology Criteria for Adverse Events, version 4.0. Median time to event and hazard ratio (HR) were estimated using Kaplan-Meier method and Cox model, respectively.

RESULTS

Forty-five patients were included, with median age of **78 years [58-88]**, **68.9% (n=31)** of whom were **elderly (≥75 years)**.

Median time of **follow-up** was **10 (0-41) months** and median duration of AA **treatment** was **7 (0-27) months**.

Table 1: Demographic and clinical characteristics

	≥75 years n = 31	<75 years n = 14
Age (years)		
Median [range]	**81** [75-88]	**69** [58-74]
Disease extension at diagnosis		
Localized	**24 (77.4%)**	**11 (78.6%)**
Metastatic	7 (22.6%)	3 (21.4%)
Gleason at diagnosis		
<8	14 (45.2%)	**8 (57.1%)**
≥8	**15 (48.4%)**	5 (35.7%)
Unknown	2 (6.5%)	1 (7.1%)
PSA at diagnosis (ng/ml)		
Median (range)	**18.02** (3.44-1751.00)	**19.00** (3.34-769.80)
Previous therapies		
Radical prostatectomy	9 (29%)	4 (28.6%)
Radiotherapy	12 (38.7%)	10 (71.4%)
LHRHa/Orchidectomy	**31 (100%)**	**14 (100%)**
Enzalutamide	1 (3.2%)	0 (0%)
Baseline ECOG-PS		
0	9 (29%)	**7 (50%)**
1	**20 (64.5%)**	4 (28.6%)
2	2 (6.5%)	3 (21.4%)
Baseline concurrent medication (drugs no.)		
0	4 (12.9%)	0 (0%)
1-4	**17 (54.8%)**	**10 (71.4%)**
≥5	10 (32.3%)	4 (28.6%)
Baseline modified CCI		
Range	3-7	1-6
<5	**19 (61.3%)**	**9 (64.3%)**
≥5	12 (38.7%)	5 (35.7%)
Baseline metastization topography		
Bone	**26 (83.9%)**	**12 (85.7%)**
Lymph nodes	16 (51.6%)	6 (42.9%)
Liver	1 (3.2%)	0 (0%)
Lung	1 (3.2%)	1 (7.1%)
Other tissue	1 (3.2%)	0 (0%)

LHRHa: Luteinizing Hormone-Releasing Hormone agonist; CT: Chemotherapy; CS: Castration-Sensitive; CR: Castration-Resistent; ECOG-PS: Eastern Cooperative Oncology Group-Performance Status; CCI: Charlson Comorbidity Index

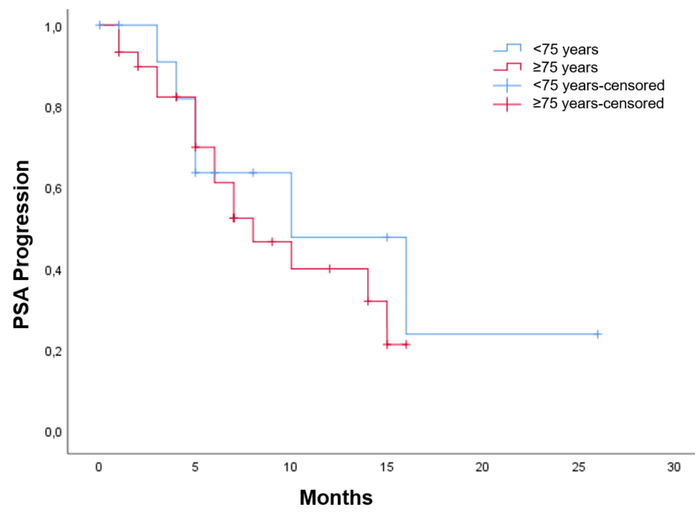

Figure 1: Kaplan-Meier estimates of TTPP

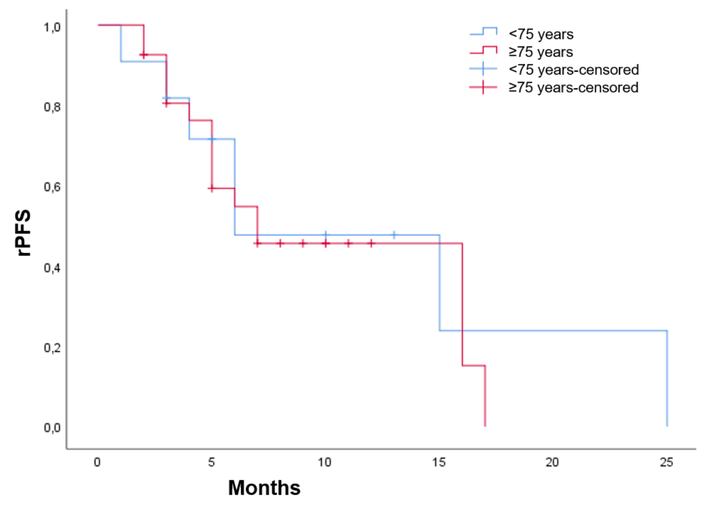

Figure 2: Kaplan-Meier estimates of rPFS

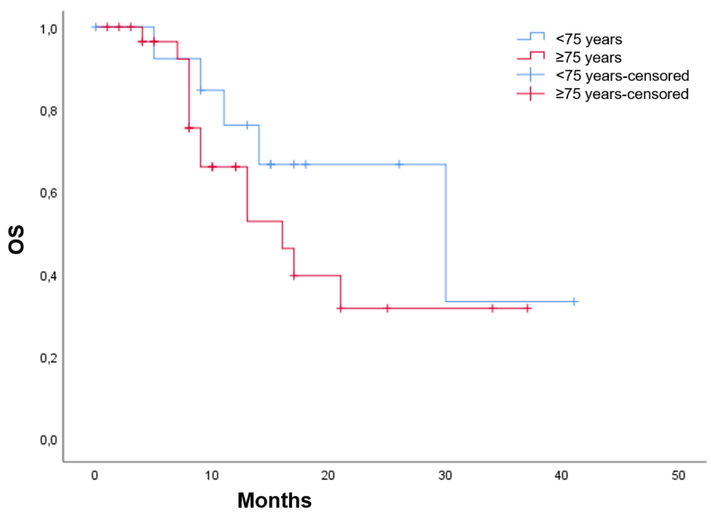

Figure 3: Kaplan-Meier estimates of OS

Table 2: Outcomes

	≥75 years (n = 31)	<75 years (n = 14)	Hazard Ratio (95% CI); p value
PSARR	71%	64%	
TTPP	8 months	10 months	1.36 (0.52-3.53); p=0.529
rPFS	7 months	6 months	1.15 (0.44-2.95); p=0.778
OS	16 months	30 months	1.78 (0.63-5.02); p=0.277

Table 3: Adverse events

	≥75 years (n = 31)	<75 years (n = 14)
Grade≥3	**5 (16.1%)**	**5 (35.7%)**
Cardiac and hypertension	0 (0%)	2 (14.3%)
Vomiting	0 (0%)	1 (7.1%)
Urinary infection	1 (3.2%)	0 (0%)
Sepsis	1 (3.2%)	0 (0%)
Other	1 (3.2%)	1 (7.1%)
Multiple	2 (6.5%)	1 (7.1%)
AA suspension due to toxicity		
Temporary	2 (6.5%)	1 (7.1%)
Definitive	**2 (6.5%)**	**2 (14.3%)**

CONCLUSION

Despite the non-negligible frequency of grade ≥3 adverse events, a minority of elderly patients discontinued AA due to toxicity and there were no statistically significant differences in the survival analysis when comparing these patients with the younger ones, suggesting that this is an important therapeutic option for elderly patients. However, longer follow-up and larger populations are needed to confirm the effectiveness of AA in this context.

REFERENCES

(1) Smith MR et al. Efficacy and Safety of Abiraterone Acetate in Elderly (≥75 Years) Chemotherapy-Naïve Patients with Metastatic Castration-Resistant Prostate Cancer. J Urol. 2015.

(2) Sirotova Z et al. Safety and efficacy of abiraterone acetate (AA) in patients aged 75 or more with metastatic castration-resistant prostate cancer (mCRPC) in both pre-chemotherapy or post-chemotherapy settings: Real-life experience from thirteen Italian centers. Journal of Clinical Oncology. 2018.

(3) Ryan CJ. Abiraterone acetate plus prednisone versus placebo plus prednisone in chemotherapy-naive men with metastatic castration-resistant prostate cancer (COU-AA-302): final overall survival analysis of a randomised, double-blind, placebo-controlled phase 3 study. Lancet Oncology. 2015.

(4) Ryan CJ et al. Randomized Phase 3 Trial of Abiraterone Acetate in Men with Metastatic Castration-Resistant Prostate Cancer and No Prior Chemotherapy. N Engl J Med. 2013.