826P Use of bone health agents (BHAs) in patients (pts) with metastatic castration-resistant prostate cancer (mCRPC) treated with radium-223 (Ra-223) after abiraterone (Abi): An interim review of REASSURE

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Background: When the Ra-223 phase 3 clinical trial (ALSYMPCA) was conducted, Abi was not available; REASSURE is a prospective, observational clinical study of Ra-223 in pts with mCRPC with a 7-year follow-up (NCT02141438). Pts could have had antihormonal agents, such as Abi, prior to receiving Ra-223. The objective of this interim review was to evaluate the fractures and skeletal-related events (SREs) based on prior Abi and the use of BHAs, denosumab and bisphosphonates.

Methods: Descriptive statistics were generated for baseline characteristics, fractures, SREs and overall survival (OS) by BHA use in pts who had completed Abi treatment prior to receiving Ra-223 (prior Abi) or who had no prior Abi (Abi-naïve). An SRE was defined as any skeletal-related adverse event or any radiotherapy to bone.

Results: As of Nov 2017, 1439 pts were enrolled, with a median follow-up time of 9.1 months. 708 (49%) pts had received BHAs at baseline, and BHAs were given concomitantly with Ra-223 in 553 (38%) pts. 430 (30%) pts received prior Abi, and Ra-223 was given as second line in 37% (157/430) of those pts; 705 (49%) pts were considered Abi-naïve. For the prior Abi group, median time of exposure to Abi was 11 months. In the prior Abi group SREs occurred in 17% and 22% of pts, with and without BHAs, respectively. In the Abi-naïve group, 16% of pts had SREs regardless of BHA use. Fractures were reported in 7/430 pts (1.6%) in the prior Abi group. In the Abi-naïve group fractures were reported in 2/311 (1%) and 8/394 (2%) pts with and without BHAs, respectively (Table).

Conclusions: BHAs were under-utilised in this study despite several guidelines and recommendations. The rate of fracture was the same in those who were Abi-naïve compared with those who received Abi prior to Ra-223. Pts with prior Abi had a shorter OS; these pts received Ra-223 at a later time during their disease course, as reflected by a longer time from CRPC to Ra-223 initiation.

Clinical trial identification: NCT02141438.

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Table: 826P

	Abi-naïve pts (n = 705)		Prior Abi pts (n = 430)		Overall cohort (n = 1439)	
	With BHAs (n = 311)	Without BHAs (n = 394)	With BHAs (n = 216)	Without BHAs (n = 214)	With BHAs (n = 708)	Without BHAs (n = 731)
Time from CRPC to Ra-223 initiation, median months (range)	6 (0–134) 8	10 (0–109)	23 (0–80) 23	23 (0–117)	12 (0–147) 13	13 (0–117)
PSA, median ng/mL (Q1, Q3)	49 (11, 160)	46 (15, 161)	114 (31, 331)	121 (30, 311)	60 (14, 212)	59 (19, 201)
Prior docetaxel,n (%)	95 (31)	106 (27)	122 (57)	120 (56)	273 (39)	269 (37)
Patient outcomes						
≥1 SRE, n (%)	49 (16)	62 (16)	36 (17)	46 (22)	116 (16)	129 (18)
≥1 fracture, n (%)	2 (1)	8 (2)	2 (1)	5 (2)	7 (1)	17 (2)
5–6 Ra-223 injections, n (%)	199 (64)	252 (64)	128 (59)	128 (60)	480 (68)	465 (64)
OS from initiation of Ra-223, median months (95% CI)	15.5 (13.1, 16.6)		11.1 (10.2, 11.8)		14.8 (13.5, 16.0)	