

**The ^{68}Ga / ^{177}Lu -Theragnostic Concept in PSMA-Targeting
of Metastatic Castration Resistant Prostate Cancer: Impact of Post-therapeutic Whole Body Scintigraphy in the Follow-Up**

Maffey-Steffan J.^{1*}, Scarpa L^{1*}, Svirydenka A^{1*}, Nilica B¹, Mair C¹, Buxbaum S¹, Bektic J², von Guggenberg E¹, Uprimny C¹, Horninger W², Virgolini I¹

Departments of ¹Nuclear Medicine and ²Urology, Medical University of Innsbruck, 6020 Innsbruck, Austria.

*the three authors contributed equally to the manuscript

Corresponding Author: Irene J. Virgolini, M.D., Director, Department of Nuclear Medicine, Medical University Innsbruck, Anichstraße 35, A-6020 Innsbruck, Tel: +43 (0)50 504 22650 or ext. 80935, FAX: +43 (0)50 504 22659, E-Mail: irene.virgolini@i-med.ac.at, http://nuklearmedizin-innsbruck.com

Supplement 1: Demographic Data of Metastatic Resistant Prostate Cancer Patients

Patient	Age	Operations	Radiotherapy	Chemotherapy	Hormonal Therapy	Supportive Therapy
1	75	prostatectomy, vesiculectomy	EBRT	/	bicalutamide, degralix	zoledronic acid◆
2	76	prostatectomy	/	/	leuprorelin	/
3	82	prostatectomy	proton therapy	/	leuprorelin, enzalutamide	denosumab◆
4	61	/	EBRT	docetaxel	bicalutamide, degralix, dutasteride, enzalutamide	24.4 ^{223}Ra (MBq)
5	68	/	/	/	bicalutamide, leuprorelin	/
6	63	prostatectomy	EBRT	/	abiraterone, leuprorelin	18.1 ^{223}Ra (MBq), denosumab◆
7	74	prostatectomy, decompression L4/L5	/	/	gosereline, enzalutamide	zoledronic acid◆
8	59	prostatectomy	/	docetaxel	bicalutamide, tamoxifen, abiraterone, enzalutamide	zoledronic acid, denosumab◆
9	56	/	/	docetaxel	degarelix, pamoreline, leuprorelin	26.3 ^{223}Ra (MBq), denosumab
10	67	prostatectomy, vesiculectomy	/	docetaxel	triptoreline, leuprorelin	denosumab
11	89	prostatectomy, vesiculectomy	EBRT	docetaxel	enzalutamide, abiraterone	denosumab
12	68	/	/	docetaxel	enzalutamide, abiraterone, leuprorelin, bicalutamide	denosumab
13	59	/	/	docetaxel	bicalutamide, leuprorelin, triptorelin	denosumab
14	91	/	EBRT	docetaxel	enzalutamide, abiraterone, bicalutamide, gosereline, degarelix	denosumab◆
15	81	prostatectomy	EBRT	docetaxel	enzalutamide, abiraterone, bicalutamide, gosereline, degarelix	denosumab
16	60	prostatectomy, vesiculectomy	/	docetaxel	abiraterone	/
17	80	/	EBRT	/	enzalutamide, abiraterone	/
18	73	prostatectomy, vesiculectomy	/	docetaxel	abiraterone, degarelix, triptoreline	24.76 ^{223}Ra (MBq)
19	75	/	/	docetaxel	enzalutamide, degarelix, leuprorelin	denosumab
20	60	prostatectomy, vesiculectomy	EBRT	/	abiraterone, bicalutamide, gosereline	alendronic acid, denosumab◆
21	82	/	EBRT	docetaxel	enzalutamide, bicalutamide, leuprorelin, degarelix	/
22	75	/	EBRT	/	/	/
23	71	prostatectomy, vesiculectomy	EBRT	docetaxel	enzalutamide, bicalutamide, leuprorelin	cannabis, denosumab
24	69	/	/	docetaxel	enzalutamide, leuprorelin	denosumab
25	73	palliative transurethral resection	EBRT, proton therapy	regional chemotherapy	/	/
26	84	prostatectomy, vesiculectomy	salvage radiation	docetaxel	enzalutamide	22.91 ^{223}Ra (MBq)
27	61	prostatectomy	EBRT	docetaxel	bicalutamide, enzalutamide, abiraterone, cyproteronacetate	/
28	83	prostatectomy, penectomy	EBRT	docetaxel	bicalutamide, leuprorelin, abiraterone acetate	/
29	73	/	/	cabazitaxel, docetaxel	degarelix, trenantone, bicalutamide, tamoxifen	/
30	50	/	/	cisplatin/etoposide	bicalutamide, leuprorelin, leuprorelin acetate	denosumab
31	67	prostatectomy	/	docetaxel, cabazitaxel	bicalutamide, leuprorelin, enzalutamide, abiraterone	/
32	79	prostatectomy	/	/	bicalutamide, enzalutamide, leuprorelin	denosumab◆

EBRT: External beam radiation therapy

◆ Therapy ongoing