



Supplemental FIGURE 1:

A-C: ^{18}F -PSMA-1007 PET/CT examination of a prostate cancer patient (Gleason score 7, T2, N0) with biochemical recurrence (PSA 0.33 ng/ml) after radical prostatectomy. Axial PET and fused ^{18}F -PSMA-1007 PET/CT show a focal PSMA-ligand uptake in the prostate bed (B, C red arrow) with no morphological correlate on CT images (A).

D-F: ^{68}Ga -PSMA-11 PET/CT examination of a local recurrent prostate cancer patient (Gleason score 7, T2, N0, PSA 1.0 ng/ml) after radical prostatectomy with focal PSMA-ligand uptake (E, F red arrow). On corresponding CT images a small soft tissue lesion can be observed (D, red arrow). Note, relatively high uptake of ^{68}Ga -PSMA-11 in the urinary bladder.

Supplemental Table 1: Comparison of SUV mean of lesions attributed to recurrent PC and benign origin in ¹⁸F-PSMA-1007 PET and ⁶⁸Ga-PSMA-11 PET according to their localization and origin.

	Median SUVmax (range)	
	⁶⁸ Ga-PSMA-11 PET	¹⁸ F-PSMA-1007 PET
Lesions attributed to benign origin		
Total	4.4 (2.8-7.5)	5.3 (3.0-42.7)*
Unspecific LN		
- inguinal	4.5 (3.6-6.7)	5.1 (3.0- 7.5)
- axillary/mediastinal/hilar	4.1 (3.9-4.2)	4.9 (3.8- 14.9)
Ganglia		
- cervical	3.9 (3.3-4.8)	5.3 (3.1-10.7)*
- coeliac	5.2 (4.2-7.0)	5.4 (3.1-26.6)
- sacral	none	4.2 (4.0-7.9)
Bone	4.5 (2.8-7.5)	5.4 (3.6-12.4)*
Others	n.e.	
Lesions attributed to recurrent PC		
Total	9.9 (3.3-112.5)	9.4 (2.7-234.4)
Local recurrence	7.5 (3.3-48.2)	6.0 (2.7-34.8)
Lymph node metastases		
- abdomino-pelvic	10.8 (3.6-112.5)	12.6 (3.4-234.4)
- supradiaphragmatic	13.8 (4.7-80.5)	7.5 (3.3-159.9)
Bone metastases	10.6 (3.6-35.4)	15.2 (3.4-110.6)
Other metastases	7.4 (5.7-8.5)	17.3 (5.6-31.4)

* indicates a significant difference p<0.05

n.e.: non evaluable due to small sample size