

Supplemental Table 1. Testing of the CNN performance

	DSC			HD (mm)			ASSD (mm)			Computation time (sec)		
	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max
Internal testing 68Ga-PSMA-11	0.84	0.32	0.95	4.03	1.42	10.0	0.61	0.28	1.97	6.28	5.47	7.66
Internal testin 18F-PSMA-1007	0.81	0.28	0.93	5.0	1.41	8.49	0.5	0.26	1.82	6.00	3.53	9.2
External testing 68Ga-PSMA-11												
No resampling	0.78	0.11	0.89	12.57	1.43	32.9	0.62	0.27	4.03	1.93	0.27	2.02
B-spline interpolation	0.82	0.39	0.92	5.83	2.45	22.36	0.55	0.32	2.1	27.79	10.54	30.91
Tri-linear interpolation	0.83	0.32	0.93	4.12	2.01	22.36	0.46	0.28	1.61	23.32	10.55	26.37
Gaussian interpolation	0.81	0.04	0.94	7.35	2.24	20.05	0.55	0.19	3.72	25.13	10.49	28.3

Abbreviations: Dice-Sørensen coefficient (DSC), Hausdorff distance (HD) and average symmetric surface distance (ASSD).

Supplemental table 2. Impact of different clinical parameters on DSC (cut-off: median value of pooled cohorts).

Parameter	HR	95% CI		p value
		lower	upper	
initial PSA (20 ng/ml vs. >20 ng/ml)	1.286	0.343	4.816	0.709
Gleason score (6 + 7a vs. ≥7b)	3.733	0.78	17.88	0.099
cT stage (2 vs. 3)	2.489	0.616	10.056	0.201
Localization (lower half vs. upper half vs. both halves)	1.429	0.622	3.284	0.401

Testing cohorts 1 and 3 were pooled. The best performing resampling step (tri-linear interpolation) in terms of DSC in cohort 3 was used for analyses. The median DSC was used as cut-off point.