

**Supplemental Table 1:** Patients' characteristics.

	<b>All PSMA-PET- patients (N=105)</b>
<b>Age (years)</b>	
Median (range)	68.2 (48-84)
<b>Prostate-specific antigen (ng/mL)</b>	
Median (range)	2.6 (0.1–1764)
<b>Gleason score</b>	
< 8	43 (41)
≥ 8	56 (53)
N/A	6 (6)
<b>Prior therapy</b>	
Prior prostate cancer–related surgery	79 (75)
Prior prostate cancer–related radiotherapy	47 (45)
ADT	16 (15)
<b>Conventionally assessed tumor burden</b>	
LVD	85 (81)
HVD	20 (19)
<b>N/M status by CT</b>	
N1	5 (5)
M1a	1 (1)
M1b	91 (87)
M1c	8 (8)

Data are number of patients (%) unless otherwise indicated.

**Supplemental Table 2:** mHSPC TNM by computed tomography (CT) versus PSMA-PET.

		PSMA-PET				
CT	Stage, n (%)	no disease	Tr/N1 only	Any M1a	Any M1b	Any M1c
	no disease	0	0	0	0	0
	Tr /N1 only	0	3 (3)	0	1 (1)*	1 (1)*
	Any M1a	0	0	1 (1)	0	0
	Any M1b	0	0	0	90 (86)	1 (1)*
	Any M1c	0	0	0	0	8 (8)

\*PET upstaging for 3 of 105 (3%) patients.

**Supplemental Table 3:** Comparison of disease extent as stratified by CT-based CHAARTED vs. PET-based miTNM Volume criteria

		PSMA-PET				
CT		PET LVD			PET HVD	
		uni	oligo	diss <~40 ml	oligo/ diss ≥~40 ml	M1c
	CHAARTED LVD	25 (29)	31 (36)	17 (20)	10 (12)*	2 (2)*
	CHAARTED HVD	0	0	1 (5)*	11 (55)	8 (40)

\*Mismatch between CT (CHAARTED) and PET (miTNM VOL) classification