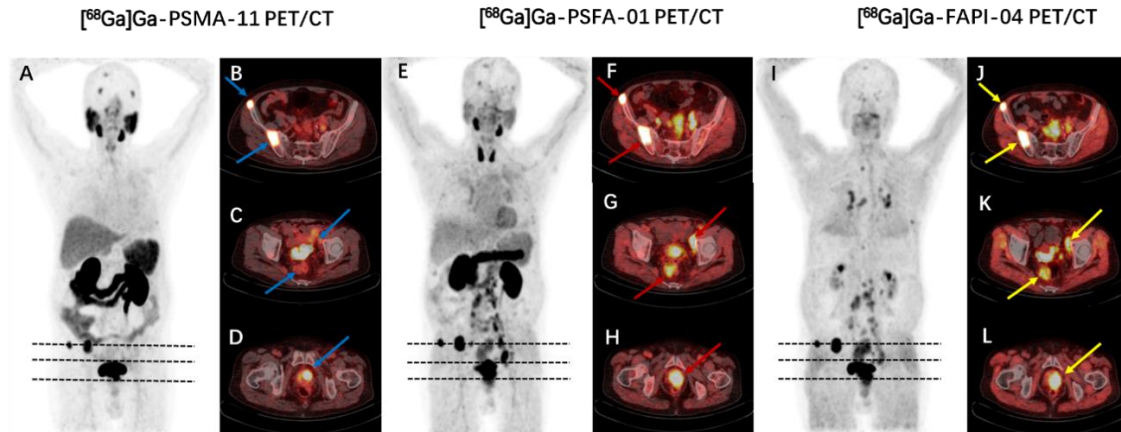


Supplementary table 1. SUVmax of [⁶⁸Ga]Ga-PSFA-01, [⁶⁸Ga]Ga-PSMA-11, and [⁶⁸Ga]Ga-FAPI-04 in Normal Tissue

	[⁶⁸ Ga]Ga-PSFA-01	[⁶⁸ Ga]Ga-PSMA-11	[⁶⁸ Ga]Ga-FAPI-04
Muscle	1.43 ± 0.29	0.63 ± 0.18	1.63 ± 0.36
Kidney	12.22 ± 3.38	39.12 ± 12.99	2.08 ± 0.35
Liver	3.83 ± 0.83	4.79 ± 1.31	1.03 ± 0.25
Mediastinal blood pool	3.78 ± 0.72	1.62 ± 0.36	1.58 ± 0.30
Spleen	4.83 ± 0.96	7.15 ± 1.95	1.05 ± 0.24
Pancreas	9.90 ± 2.53	2.15 ± 0.72	1.55 ± 0.35
Thyroid	11.39 ± 2.76	1.49 ± 0.49	1.49 ± 0.52
Parotid gland	5.60 ± 1.53	11.36 ± 4.01	1.26 ± 0.39
Submandibular gland	9.19 ± 2.38	13.86 ± 4.37	2.69 ± 1.09
Sublingual gland	4.85 ± 1.66	5.52 ± 3.06	2.11 ± 0.74



Supplementary figure 1. A 73-year-old man with a Gleason score of 4+5 and current serum tPSA level of 52.99 ng/ml underwent both dual-targeting and single-targeting imaging. (A, B, C) The three imaging techniques identified metastatic lesions in the right iliac bone and primary prostate cancer. Nevertheless, only $[^{68}\text{Ga}]\text{Ga-PSFA-01}$ and $[^{68}\text{Ga}]\text{Ga-FAPI-04}$ PET/CT revealed positive lymph nodes in the left obturator area and mesorectal metastases.