

Supplementary Table S1 Comparison of CECT, FDG-PET-CT, MRI, and PSMA PET-CT in prostate cancer

Parameter	CECT	FDG-PET-CT	MRI	PSMA PET-CT	References
Localization of primary	Poor detection	Low detection rate due to confounding factors resulting from urinary excretion and uptake in benign prostatic hyperplasia and prostatitis [1]	Multiparametric MRI has established role in evaluation of prostate cancer	Sensitivity and specificity similar to MRI for detection of clinically significant prostate cancer	54
Staging	Inferior to FDG-PET-CT and PSMA PET-CT	Less sensitive than PSMA PET-CT	Restricted to local staging	Superior to CT and FDG-PET-CT	55
Bone metastasis	Inferior to FDG-PET-CT and PSMA PET-CT	Inferior to PSMA PET-CT	3T MRI approaches superiority to PSMA PET-CT Superiority index 4.43	Superior to conventional imaging modalities. Superiority index 4.56	54, 55
Lymph nodal metastasis	Inferior to FDG-PET-CT and PSMA PET-CT	Established modality for detecting lymph nodal metastasis	Inferior to FDG-PET-CT and PSMA PET-CT	Superior to CT and MRI	56
Detection of relapse	Inferior to PSMA PET-CT	Inferior to PSMA PET-CT	PSMA PET can detect when MRI fails	PSMA PET can change the treatment plan following biochemical relapse after radical prostatectomy and external beam radiotherapy (EBRT)	57
Radiation exposure	Radiation dose is 16 mSv for CECT abdomen	Radiation dose is 12.2 mSv	No radiation risk	Radiation dose is 8.4mSv, lower than CECT and FDG-PET-CT	58, 59, 60

Abbreviations: CECT, contrast-enhanced computed tomography; FDG-PET, fluorodeoxyglucose-positron emission tomography; MRI, magnetic resonance imaging; PSMA, prostate-specific membrane antigen, mSv, millisievert.

Supplementary Table S2 Comparison of CECT, FDG-PET-CT, MRI, and ⁶⁸Ga-DOTATOC PET-CT in NET

Parameter	CECT	FDG-PET-CT	MRI	⁶⁸ Ga-DOTATOC PET-CT	References
Primary lesion detection	High anatomic resolution for primary lesion detection No functional component.	Inferior to ⁶⁸ Ga-DOTATOC PET-CT for well-differentiated NET Detects only high-grade NET	Good for pancreatic lesions. Poor detection of GI and mesenteric lesions	Provides good anatomic resolution and has functional component as well	61
Metastasis detection	Overall inferior to MRI and ⁶⁸ Ga-DOTATOC PET-CT. Useful in non-functioning NET	Useful for staging in nonfunctioning NET	Overall diagnostic accuracy of whole-body MRI is 89% Detection rate better for liver and bone metastasis	Overall diagnostic accuracy of 99% Detection rate better for lymph node and lung metastasis	62, 63
Response evaluation	Not a functional modality	Predicts aggressiveness of NET	Good for hepatic and pancreatic lesions. Time consuming	Predicts response	61, 64
Radiation exposure	Radiation dose is 16 mSv for CECT abdomen	Radiation dose is 12.2 mSv	No radiation risk	Radiation dose approx. 10 mSv, lower than CECT and FDG-PET-CT	58, 59, 65

Abbreviations: CECT, contrast-enhanced computed tomography; FDG-PET, fluorodeoxyglucose-positron emission tomography; MRI, magnetic resonance imaging; mSv, millisievert; NET, neuroendocrine tumor.