

## NUCLEAR MEDICINE

<b>Topic</b>	
<b>Observational Descriptive</b>	
1.	Clinical experience with Ga-68 FAPI (Fibroblast-activation-protein inhibitors) Positron emission tomography/Computed tomography in tuberculosis.
2.	Role of Ga-68 DOTA SSTR (somatostatin receptor) Positron emission tomography in evaluation of low-grade primary brain tumors.
3.	Role of 18-Fluoro-deoxyglucose Positron emission tomography in the staging of ovarian cancers.
4.	To study the role of 68-Gallium FAPI (Fibroblast-activation-protein inhibitors) for treatment algorithms for pulmonary fibrosis.
5.	Scope and role of 18-Fluoro-deoxyglucose Positron emission tomography in drug resistant (Extensively drug-resistant/Multidrug-resistant) tuberculosis.
6.	Diagnostic value of 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography imaging surveillance after primary treatment in breast cancer.
7.	Role of Ga-68 CXCR4 (C-X-C motif chemokine receptor4) Positron emission tomography/Computed tomography in smoldering myeloma.
8.	Standardization of gastric emptying time by radioisotope methods by using standardized meal, in patients who have undergone various gastric surgeries and stomach pull through in oncosurgical scenarios.
9.	To evaluate the role of 99 mTc (Technetium-99m) Sulphur colloid solid gastric emptying study in the diagnosis and follow-up of diabetic gastroparesis.
10.	To evaluate the role of 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography in the diagnosis of fever of unknown origin in adults.
11.	Prognosis of paediatric Lymphomas with whole body 18-Fluoro-deoxyglucose Positron emission tomography scan.
12.	Prognostication of Aortoarteritis with 18-Fluoro-deoxyglucose Positron emission tomography.
13.	Role of F-18 FES ( $16\alpha$ - $^{18}\text{F}$ -fluoro- $17\beta$ -estradiol) in staging and prognostication of lobular breast carcinoma.
14.	Poorly differentiated thyroid carcinoma - clinical outcomes and factors prognosticating refractoriness to radio-iodine ablation.
15.	Sentinel node imaging with Radioisotope Colloids in Breast, uterine, cervix, melanoma, Prostate and oral malignancies.

<b>Observational Analytical</b>	
16.	Clinical utility of dual tracer Positron emission tomography/Computed tomography imaging using Ga68-DOTATOC (Gallium 68 DOTA <sup>0</sup> -D-Phe <sup>1</sup> -Tyr <sup>3</sup> -octreotide) and 18-Fluoro-deoxyglucose in preoperative evaluation of aggressiveness in Neuroendocrine tumors.
17.	Comparing diagnostic performance of attenuated and non-attenuated images in Myocardial perfusion scintigraphy in patients with coronary artery disease.
18.	Interval of radioiodine treatment and its association with response to treatment and adverse effects in patients with lung metastases from differentiated thyroid cancer.
19.	Assessment and comparison of quantitative parameters of left ventricular function by gated blood pool SPECT (Single-photon emission computed tomography) vs speckle tracking echocardiography.
20.	Evaluation of diagnostic performance of Ga-68 FAPI (Fibroblast-activation-protein inhibitors) Positron emission tomography/Computed tomography compared to 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography in assessment of cardiac sarcoidosis.
21.	Early response prediction to immunotherapy using Fluoro-deoxyglucose Positron emission tomography/Computed tomography.
22.	Compare Computed tomography based fractional flow reserve/quantitative flow ratio with Positron emission tomography derived myocardial flow reserve in the evaluation of functional significance of intermediate coronary stenosis.
23.	Comparison of 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography's conventional Computed tomography imaging to localize the site of infection and better rationalize antimicrobial treatment in patients with neutropenic fever.
24.	Can Fluoro-deoxyglucose Positron emission tomography/Computed tomography radiomics predict treatment response to anti-epidermal growth factor receptor therapy in patients with epidermal growth factor receptor mutation-positive non-small cell lung cancer?
25.	Does dual point 18-Fluoro-deoxyglucose Positron emission tomography /Computed tomography have better specificity (as compared to single point) in detecting recurrence in patients with metastatic head and neck squamous Cell Cancer Post-Chemoradiation Therapy?
26.	Is 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography better in the Initial Staging or Surveillance of Endometrial Cancer Patients compared to conventional imaging?

27.	Will 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography be helpful in assessing the time to stop Anti-tuberculosis therapy in patients with extra-pulmonary tuberculosis?
28.	Is PSMA (Prostate-specific membrane antigen) Positron emission tomography/Computed tomography better than mpMRI (Multiparametric Magnetic Resonance Imaging) in Local Disease Assessment Among Patients with a High Suspicion of Prostate Cancer?
29.	To evaluate the role of 3 phase Tc99m MDP (Technetium 99m methylene diphosphonate) bone scintigraphy with SPECT-CT vs Magnetic Resonance Imaging in the detection of primary pain generator in the foot and ankle.
30.	To evaluate and compare the role of 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography vs conventional methods (histopathology/Magnetic Resonance Imaging) in the detection of unknown primary tumor in the head and neck region in patients with metastatic cervical lymph nodes.
31.	Comparison of visual vs quantitative assessment in Cognitive decline and neurodegenerative diseases.
32.	Progression free survival and Overall survival in patients treated with Lu177 PSMA ( <sup>177</sup> Lutetium-Prostate-specific membrane antigen) therapy: A retrospective study.
33.	Comparison of role of Ga-68 DOTANOC Positron emission tomography/Computed tomography with 18-fluorodeoxyglucose positron emission tomography in diagnosis of Cardiac Sarcoidosis.
34.	Role of 99mTc-Pyrophosphate imaging in detection of Transthyretin cardiac amyloidosis in patients with unexplained heart failure.
35.	Prospective comparison between 18-Fluoro-deoxyglucose Positron emission tomography/Computed tomography and conventional modalities for staging of Ewing sarcoma family of tumors.
36.	Comparison of glomerular filtration rate using radioisotope technique vs eGFR (estimated glomerular filtration rate) in kidney donors.
37.	Assessment of Brain Perfusion and metabolism in various stages of Tuberculous meningitis and its ability to predict outcome.
38.	Comparison of <sup>99m</sup> Tc-MDP (Technetium 99m methylene diphosphonate) retention study with biochemical parameters to estimate Bone mineral turnover.