

Is tau upside-down ^{18}F -FDG? van Eimeren and colleagues highlight areas in which tau imaging may offer additional clinical value to that of ^{18}F -FDG PET in elucidating mechanisms of neurodegeneration. **Page 1357**

Pediatric PET/CT: Fahey and colleagues offer an educational overview of factors that affect CT radiation dose, ways that CT is used in the context of PET/CT, and approaches to integrating PET/CT and diagnostic CT in children. **Page 1360**

Optical imaging of human organoids: Walsh and colleagues describe primary tumor organoids as a model for use in cancer research and as a platform for drug screening with optical metabolic imaging, which can probe organoid cells for drug-resistant subpopulations. **Page 1367**

^{64}Cu -DOTA-alendronate breast imaging: Ahrens and colleagues evaluate this tracer as a microcalcification-targeting PET imaging agent in a rat model, with a long-term goal of differentiating malignant from benign lesions. **Page 1373**

Brachytherapy with ^{90}Y -polyoxazoline: Sano and colleagues report on brachytherapy using biocompatible, injectable thermoresponsive polymers that can self-aggregate above a specific transition temperature, resulting in long-term intratumoral retention of radioactivity. **Page 1380**

^{89}Zr -DFO-AMG102 for HGF: Price and colleagues detail synthesis, radiolabeling, and in vitro and in vivo validation of this new immuno-PET imaging agent, which accumulates selectively in tumors with high local levels of hepatocyte growth factor protein. **Page 1386**

Cerenkov radiation-induced PIT: Nakamura and colleagues demonstrate the feasibility of using Cerenkov radiation generated by ^{18}F -FDG accumulated in tumors to induce photoimmunotherapy. **Page 1395**

GRPR expression in breast cancer: Morgat and colleagues screen a large number of invasive breast cancers with immunohistochemistry for the presence and intensity of gastrin-releasing peptide receptor expression, a potentially valuable treatment target. **Page 1401**

$^{99\text{m}}\text{Tc}$ -trofolostat SPECT/CT in PCa: Goffin and colleagues assess the SPECT performance of this small-molecule inhibitor of prostate-specific membrane antigen in patients with intermediate- and high-grade prostate cancer before radical prostatectomy and pelvic lymph node dissection. **Page 1408**

PET after anal cancer treatment: Houard and colleagues report on the relevance of ^{18}F -FDG PET/CT as a strategy for response evaluation, including predictive value, after chemoradiation for anal cancer. **Page 1414**

PET/CT and immune checkpoint blockade: Cho and colleagues describe the utility of ^{18}F -FDG PET/CT imaging as an early predictor of response to immune checkpoint inhibitors in patients with advanced melanoma. **Page 1421**

Variability of response measurement: O and colleagues look at interobserver variability in quantitative ^{18}F -FDG PET/CT parameters used in assessments of oncologic treatment response across multiple sites and readers. **Page 1429**

SSTR antagonists: Nicolas and colleagues investigate the biodistribution, pharmacokinetics, SPECT/CT characteristics, and dosimetry of a somatostatin receptor 2 antagonist labeled with ^{177}Lu , ^{90}Y , and ^{111}In and compare these with ^{177}Lu -DOTATATE. **Page 1435**

PSMA therapeutics: Kelly and colleagues report on new dual-target small molecules with high-affinity targeting to prostate cancer cells through interaction with prostate-specific membrane antigen and moderate affinities for albumin, with potential for use in targeted α -therapy. **Page 1442**

Perspective on ^{68}Ga -DOTATOC imaging: Mailman provides retrospective highlights and a patient's viewpoint on development of PET/CT imaging in neuroendocrine tumor therapy and introduces an article on this topic in this issue of *JNM*. **Page 1450**

^{68}Ga -DOTATOC imaging: Graham and colleagues report on the results of a systematic review and meta-analysis of the efficacy of this somatostatin receptor-targeted ligand for several distinct indications, with data in support of U.S. FDA approval. **Page 1452**

Predictive CZT SPECT: Engbers and colleagues determine the prognostic value of myocardial perfusion imaging with a cadmium-zinc-telluride SPECT camera in a large cohort of patients with suspected coronary artery disease. **Page 1459**

Initial evaluation of ^{11}C -preladenant: Sakata and colleagues describe first-in-human studies of safety, radiation dosimetry, and imaging with this selective antagonist for mapping of cerebral adenosine $\text{A}_{2\text{A}}$ receptors with PET. **Page 1464**

Impaired CSF clearance in AD: de Leon and colleagues use dynamic PET with ^{18}F -THK5117, a tracer for tau pathology, to estimate ventricular cerebrospinal fluid time-activity as a biomarker for CSF clearance in Alzheimer disease. **Page 1471**

TSPO PET in MS: Datta and colleagues use PET with translocator protein radioligands to assess microglial activation in lesions and in normal-appearing white matter in patients with multiple sclerosis. **Page 1477**

AV45 kinetic modeling vs. static imaging: Ottoy and colleagues compare the SUV ratio method for ^{18}F -AV45 uptake quantitation on PET with the gold standard volume of distribution to assess differences in plaque load in elderly patients. **Page 1483**

PET and anticonvulsant-induced cognitive impairment: Zhu and colleagues explore correlations between monoamine receptor PET imaging and additional imaging and clinical assessments in patients after anticonvulsant therapies, emphasizing the role of monoamine receptor dysfunction in anticonvulsant-induced cognitive impairment. **Page 1490**

^{18}F -THK-5351 radiation dosimetry: Hsiao and colleagues estimate in humans the radiation dose of this novel radiotracer with high binding selectivity for tau and compare clinical radiation dosimetry results with previous pre-clinical data. **Page 1498**

PET/CT in *S. aureus* bacteremia: Berrevoets and colleagues investigate the utility of ^{18}F -FDG PET/CT in patients with *Staphylococcus aureus* bacteremia, with a focus on detection of metastatic infection and consequences for treatment and outcome. **Page 1504**

Next-generation PET/CT system: Hsu and colleagues detail system performance studies for the Discovery MI PET/CT system, a new time-of-flight system based on silicon photomultipliers. **Page 1511**

PET/MR for oncologic brain imaging: Rausch and colleagues compare standard MR-based attenuation correction for PET/MR imaging with a model-based approach for the Siemens mMR PET/MR system. **Page 1519**