

MR/PET in neurology: Heiss looks at the development of simultaneous PET and MR clinical data acquisition and at current activities and future potential for synergetic real-time recording of functional, metabolic, physiologic, and morphologic data. *Page 993*

Immuno-PET of EGFRs: Kramer-Marek and Oyen describe the status of human epidermal growth factor receptor-specific imaging agents and efforts to move these molecular probes from early preclinical studies to clinical trials. *Page 996*

¹⁷⁷Lu-PSMA in prostate cancer: Kwekkeboom offers perspective on the use of ¹⁷⁷Lu-labeled prostate-specific membrane antigen ligands in therapy targeting castration-resistant prostate cancer cells and previews a related article in this issue of *JNM*. *Page 1002*

Chemokine receptor imaging: Bengel provides insight into research targeting visualization and quantification of the chemokine-chemokine receptor axis, with a focus on potential roles in exploring inflammatory processes. *Page 1004*

¹⁷⁷Lu-PSMA assessment: Baum and colleagues report on the safety and efficacy of a ¹⁷⁷Lu-labeled DOTAGA-based prostate-specific membrane antigen ligand in patients with metastatic castration-resistant prostate cancer. *Page 1006*

Dose-response in ⁹⁰Y radioembolization: van den Hoven and colleagues characterize the relationship between tumor-absorbed dose and response after ⁹⁰Y-microsphere radioembolization in patients with colorectal liver metastases. *Page 1014*

Sphere numbers in radioembolization: Pasciak and colleagues investigate microscopic absorbed-dose heterogeneity in ⁹⁰Y radioembolization as a function of microsphere numbers per unit volume in tumors and discuss potential related effects on tumor control and treatment planning. *Page 1020*

Dose-response in DTC with ¹²⁴I: Wierts and colleagues use a fixed-activity approach in ¹²⁴I PET/CT quantification of the dose-response relationship in ¹²⁴I-sodium iodide treatment of differentiated thyroid cancer. *Page 1027*

NSCLC tumor heterogeneity: Tixier and colleagues quantify differences between volumetry, uptake, and heterogeneity features extracted from static and parametric PET images of non-small cell lung carcinoma and describe the potential added value of parametric images. *Page 1033*

¹⁸F-FDG uptake and HER2 expression: Chen and colleagues investigate an association between human epidermal growth factor receptor 2 expression and tracer uptake and the potential for ¹⁸F-FDG PET/CT prediction of HER2 status in gastric cancer. *Page 1040*

Posttransplantation volumetric PET in HCC: Kim and colleagues compare recently introduced metabolic and volumetric ¹⁸F-FDG PET/CT indices with current clinicopathologic data as predictors of hepatocellular carcinoma recurrence after liver transplantation. *Page 1045*

PET/CT and liver metastasis ablation: Cornelis and colleagues determine whether ¹⁸F-FDG PET/CT and contrast-enhanced CT performed immediately after percutaneous ablation of liver metastases are predictors of local treatment failure at 1 year. *Page 1052*

¹⁸F-choline PET/CT in CRPC: Lee and colleagues explore the serial application of metabolically active tumor volume measurements from ¹⁸F-fluorocholine PET/CT as systemic treatment response markers and predictors of disease progression in patients with castration-resistant prostate cancer. *Page 1058*

¹⁸F-choline PET/MR for prostate biopsy: Piert and colleagues compare the value of fusion ¹⁸F-fluoromethylcholine PET/MR imaging for targeted prostate biopsies with that of standard systematic 12-core biopsies to detect significant prostate cancer. *Page 1065*

¹¹C-DED and ¹¹C-PIB in brain perfusion: Rodriguez-Vieitez and colleagues compare early-phase ¹¹C-DED and ¹¹C-Pittsburgh compound B PET imaging as surrogate markers of brain perfusion in cognitive decline and determine the extent to which brain perfusion influences ¹¹C-DED binding. *Page 1071*

Variable-depth 3D-SSP for amyloid PET: Lilja and colleagues report on a method for 3-dimensional stereotactic surface projection quantification and visualization of ¹⁸F-flutemetamol images that avoids extraction of white matter signal. *Page 1078*

Motion correction for dynamic PET: Yu and colleagues apply an event-by-event respiratory motion-correction method, correlating internal organ motion and external respiratory signals, to human dynamic PET studies and investigate the impact on kinetic parameter estimation. *Page 1084*

ASiR and bone SPECT/CT: Sibille and colleagues compare a routine bone SPECT/CT protocol using CT reconstructed with filtered backprojection with an optimized protocol using low-dose CT images reconstructed with adaptive statistical iterative reconstruction. *Page 1091*

MR-AC reproducibility and LBM extraction: Rausch and colleagues assess the reproducibility of standard Dixon-based attenuation correction in PET/MR imaging and use resulting data to estimate patient-specific lean body mass. *Page 1096*

Lesion number, PERCIST, and breast cancer: Pinker and colleagues explore the question of whether and how the number of analyzed lesions

affects standardized response assessment in metastatic breast cancer. *Page 1102*

Immuno-PET and RIT in ESCC: Song and colleagues study the abilities of ⁶⁴Cu-cetuximab immuno-PET to image epidermal growth factor receptor expression levels in esophageal squamous cell carcinoma tumors and of ¹⁷⁷Lu-cetuximab radioimmunotherapy to inhibit tumor growth in mouse models. *Page 1105*

Tissue factor imaging in pancreatic cancer: Nielsen and colleagues investigate the possibility of using active site-inhibited factor VII labeled with ⁶⁴Cu for PET imaging of tissue factor expression in mice with pancreatic adenocarcinomas. *Page 1112*

Biodistribution of NTR1 antagonists: Schulz and colleagues evaluate the biodistribution profiles of a series of newly developed diarylpyrazole-based neurotensin receptor-1 antagonists for suitability as diagnostic and radiotherapeutic agents. *Page 1120*

Nanoparticle imaging of atherosclerosis: Luehmann and colleagues describe a targeted nanoparticle for sensitive and specific detection of chemokine receptors regulating trafficking of inflammatory cells in a mouse vascular injury model and in a mouse atherosclerosis model. *Page 1124*

High-resolution mouse brain PET scanner: Yang and colleagues detail the development of a prototype small-animal PET scanner based on depth-encoding detectors using dual-ended readout of small scintillator elements to produce high and uniform spatial resolution. *Page 1130*

Single-cell ¹⁸F-FLT characterization: Sengupta and Pratz use a novel in vitro radioluminescence microscopy technique to measure the differential distribution of ¹⁸F-FLT radiotracer with single-cell precision. *Page 1136*

PET mapping for brain-computer interface: Zhu and colleagues investigate the use of PET mapping for brain-computer interface stimulation in a rat model with electrodes implanted in the ventroposterior medial thalamus. *Page 1141*

Nuclear medicine physics training: Harkness and Fahey summarize the findings of an American Association of Physicists in Medicine/SNMMI joint task force reviewing nuclear medicine physics training and identifying ways to improve future training opportunities. *Page 1146*

Administered activities in pediatrics: Fahey and colleagues present part 2 of the final report of the Nuclear Medicine Global Initiative, surveying standards and practice for administered activities in children and offering recommendations toward global standardization of radiopharmaceutical administration. *Page 1148*