

PSMA biology: O’Keefe and colleagues survey the evolution of knowledge on the biology of prostate-specific membrane antigen and its translation to therapy, including PSMA-based imaging and endoradiotherapeutic strategies. . . . *Page 1007*

Dose matters: Duncan and colleagues detail agreement with Biologic Effects of Ionizing Radiation VII, which upheld the linear no-threshold model of low-dose exposure to ionizing radiation, and contrast this viewpoint with that of an article in this month’s *JNM*. . . . *Page 1014*

BEIR VII and the LNT: Siegel and colleagues offer critical reevaluation of the Biologic Effects of Ionizing Radiation VII report and the data on which its conclusions were based, calling for reassessment of the linear no-threshold model and associated policies. . . . *Page 1017*

α -Emitters for radiotherapy: Poty and colleagues, in the second of 2 educational reviews, provide an overview of the most promising and current uses of α -emitters in preclinical and clinical studies, highlighting the importance of clinical trial design. . . . *Page 1020*

Potential value of PET/MR: Miles and colleagues describe the ways in which a multiparametric PET/MR imaging approach might add clinical value through precision medicine and as a cost-effective oncology imaging modality. . . . *Page 1028*

Response to ^{177}Lu -PSMA therapy: Ahmadzadehfar and Essler offer editorial comment on predictive factors associated with response and overall survival in castration-resistant metastatic prostate cancer after ^{177}Lu -prostate-specific membrane antigen therapy. . . . *Page 1033*

Dual-acquisition PET in breast cancer: Humbert and colleagues use a single ^{18}F -FDG dual-acquisition PET study to simultaneously assess tumor SUV_{max} and tumor blood flow to identify correlations with tumor phenotypic features and pathologic complete response. . . . *Page 1035*

^{90}Y radioembolization for HCC with PVT: Abouchaleh and colleagues report on survival outcomes in patients with advanced-stage hepatocellular carcinoma with portal vein thrombosis treated with ^{90}Y radioembolization. . . . *Page 1042*

PET reconstruction and Deauville score: Enilorac and colleagues investigate whether choice of reconstruction algorithm affects Deauville scores and whether discordance affects the ability of ^{18}F -FDG PET to accurately stratify patients with diffuse large B-cell lymphoma. . . . *Page 1049*

Mesothelin imaging agents: Montemagno and colleagues report on radiolabeling and preclinical evaluation of $^{99\text{m}}\text{Tc}$ -A1 and $^{99\text{m}}\text{Tc}$ -C6, antimethelin single-domain antibody-derived imaging agents, and describe potential uses in triple-negative breast cancer and other mesothelin-positive tumors. . . . *Page 1056*

FOLFOX combination therapy in CRC models: Schelhaas and colleagues perform sequential ^{18}F -FLT PET and diffusion-weighted MR imaging to evaluate changes, including thymidine metabolism and DNA damage response, induced by a FOLFOX-like combination chemotherapy in colorectal cancer xenografts. . . . *Page 1063*

PSMA PET bone metastasis quantification: Hammes and colleagues introduce and validate Evaluation of Bone Involvement, a software tool to automatically quantify bone metastasis load in prostate-specific membrane antigen PET/CT imaging. . . . *Page 1070*

^{18}F -PSMA-1007 and ^{18}F -DCFPyL: Giesel and colleagues present an intraindividual comparison to evaluate tracer-specific characteristics of ^{18}F -DCFPyL and ^{18}F -PSMA-1007, prostate-specific membrane antigen-targeted PET/CT tracers, in patients with prostate cancer. . . . *Page 1076*

Fasting and ^{18}F -DCFPyL uptake: Wondergem and colleagues report on a study to determine the impact of preimaging fasting on ^{18}F -DCFPyL uptake on PET/CT in suspected lesions in patients with prostate cancer. . . . *Page 1081*

SSTR-RADS 1.0 for SSTR PET: Werner and colleagues propose a structured reporting system on a 5-point scale for somatostatin receptor PET imaging that could serve as a standardized assessment for both diagnosis and treatment planning in neuroendocrine tumors. . . . *Page 1085*

Affibody-based pretargeting: Westerlund and colleagues test the hypothesis that Affibody-based peptide nucleic acid-mediated pretargeted therapy of human epidermal growth factor receptor 2-expressing cancer extends survival without renal toxicity. . . . *Page 1092*

Antidepressants and ^{123}I -MIBG uptake: Werner and colleagues evaluate in vitro and in rabbits whether the 4 classes of antidepressants most prescribed as first-line treatment for major depressive disorder have the potential to alter ^{123}I -MIBG imaging results. . . . *Page 1099*

Kinetic protocol for ^{18}F -florbetaben PET: Bullich and colleagues validate a noninvasive kinetic modeling approach for ^{18}F -florbetaben PET and

assess the impact of cerebral blood flow changes and radiotracer clearance on SUVs and noninvasive kinetic modeling data. . . . *Page 1104*

Structural MR generation: Choi and Lee describe development of a model to generate structural MR images from amyloid PET imaging using deep generative networks, with an example of quantification of cortical amyloid load without structural MR. . . . *Page 1111*

Pediatric brain metabolism models: Turpin and colleagues develop mathematic models of regional relative brain metabolism using pediatric ^{18}F -FDG PET with CT data from normal pediatric brains, accounting for sex and age and facilitating accurate prediction of regional pediatric brain metabolism. . . . *Page 1118*

TSPO in RA pannus: Narayan and colleagues use ^{11}C -PBR28 PET to investigate translocator protein expression in major cellular constituents of rheumatoid arthritis pannus to more accurately interpret TSPO PET signal from rheumatoid arthritis synovium. . . . *Page 1125*

Whole-body personalized dosimetry: Lee and colleagues propose a novel method, the multiple voxel-S-value approach, for whole-body voxel-based personalized radiopharmaceutical dosimetry in heterogeneous media with nonuniform activity distributions. . . . *Page 1133*

Whole-body imaging during TNF SIRS: Delvaeye and colleagues demonstrate that noninvasive $^{99\text{m}}\text{Tc}$ -duramycin SPECT imaging can characterize the temporal and spatial kinetics of injury and cell death in susceptible tissues during tumor necrosis factor-induced systemic inflammatory response syndrome. . . . *Page 1140*

Evaluation of Lx -ADCs using $^{195\text{m}}\text{Pt}/^{89}\text{Zr}$: Muns and colleagues characterize Lx (a promising metal-organic linker) antibody-drug conjugates for in vivo stability and tumor targeting using dual labeling with $^{195\text{m}}\text{Pt}$ and ^{89}Zr *Page 1146*

Penalized reconstruction evaluation: Lindström and colleagues compare block-sequential regularized expectation maximization with time-of-flight ordered-subsets expectation maximization in ^{18}F -FDG PET/CT, both quantitatively and in a qualitative visual evaluation. . . . *Page 1152*

MR-compatible blood sampler: Napieczynska and colleagues validate the use of an MR-compatible blood sampler with a detector system based on a lutetium oxyorthosilicate scintillator and avalanche photodiodes for small-animal PET. . . . *Page 1159*