THIS MONTH IN JNM

ORBITA endpoints: Dilsizian and Erario offer a critical review of primary and secondary endpoints in the Percutaneous Coronary Intervention in Stable Angina clinical trial. . . . . ***Page 1***

Maximizing total-body PET: Cherry and colleagues discuss their efforts to develop and apply a first-generation total-body PET/CT scanner, the benefits of increasing body coverage, and likely clinical results of improvements in time-of-flight PET. . . . . ***Page 3***

Challenging nuclear cardiology research: Dilsizian comments on ways to increase the relevance of research in all areas of nuclear cardiology, with a special focus on factors currently limiting progression to routine clinical use. . . . . ***Page 13***

Immune patterns of response in HL: Dercle and colleagues investigate 3-month ^{18}F-FDG PET/CT for identification of patients with Hodgkin lymphoma responding to immune-checkpoint blockade by anti–programmed death 1 antibodies and describe new immune response and progression patterns. . . . ***Page 15***

^{18}F-FDG PET/CT in pediatric osteosarcoma: Davis and colleagues explore the relationship of ^{18}F-FDG uptake in primary tumor at diagnosis, during therapy, and after therapy with histologic response and event-free survival in pediatric and young adult patients with osteosarcoma. . . . . ***Page 25***

^{18}F-FDG PET and gene networks: Na and Choi identify and investigate gene networks associated with tumor metabolism and their biologic function, using RNA sequencing and ^{18}F-FDG PET data. . . . . ***Page 31***

^{64}Cu-trastuzumab uptake in breast cancer: Mortimer and colleagues characterize the relationship between tumor uptake of ^{64}Cu-DOTA-trastuzumab on PET/CT and standard immunohistochemistry-based classification of human epidermal growth factor receptor 2 status in women with metastatic breast cancer. . . . . ***Page 38***

FMT/CT and PET/MR imaging: Hage and colleagues compare in squamous cell carcinoma xenografts the performances of advanced fluorescence-mediated tomography/CT and PET/MR imaging in quantitative assessment of biodistributions of different antibody formats and their dependence on specific labels. . . . . ***Page 44***

^{89}Zr-transferrin vs. ^{18}F-FDG PET in TNBC: Henry and colleagues compare ^{89}Zr-transferrin and ^{18}F-FDG PET imaging in vitro and in preclinical models of triple-negative breast cancer, with a focus on the ability of ^{89}Zr-transferrin to identify expression of the MYC oncogene. . . . . ***Page 51***

Cerenkov-activated tagging: Das and colleagues describe research on a strategy to enable targeted Cerenkov luminescence–activated drug delivery to cancer cells and report on a tagging method for associated fluorescence imaging. . . . . ***Page 58***

AUC for SSTR PET: Representatives from 9 nuclear medicine, imaging, and oncology organizations provide consensus appropriate use criteria intended for referring medical practitioners on the use of somatostatin receptor PET in patients with neuroendocrine tumors. . . . . ***Page 66***

Single-sample dosimetry after ^{177}Lu-DOTA: Hänscheid and colleagues describe a method for dosimetry simplification in ^{177}Lu-DOTATATE/DOTATOC therapy, allowing calculation of absorbed doses from a single SPECT/CT assessment of abdominal activity distribution 4 days after treatment. . . . . ***Page 75***

^{68}Ga-PSMA PET/CT and PC management: Roach and colleagues report on the results of an Australian multicenter study assessing whether ^{68}Ga-prostate-specific membrane antigen PET/CT imaging affects management intent in patients with primary and/or recurrent prostate cancer. . . . . ***Page 82***

Management after ^{68}Ga-PSMA PET/CT: Afaq and a team of international researchers detail the impact of ^{68}Ga-prostate-specific membrane antigen PET/CT on management of prostate cancer in patients with biochemical recurrence. . . . . ***Page 89***

Radionuclide targeting with ADAPT: Lindbo and colleagues determine whether the use of a nonresidualizing label or different label placement improves the targeting properties of albumin-binding domain–derived affinity scaffold protein-6, a tracer for human epidermal growth factor receptor 2 expression. . . . . ***Page 93***

Hypercapnia and MBF: Pelletier-Galarneau and colleagues document the pharmacodynamics of CO_2 for myocardial blood flow using prospective end-tidal targeting to precisely control arterial P_{CO_2} and PET to assess myocardial blood flow. . . . . ***Page 100***

Pseudoreference regions for ^{11}C-PBR28 PET: Albrecht and colleagues evaluate various ratio approaches for translocator protein PET imaging and compare these with standard kinetic modeling techniques in patients with chronic low back pain or amyotrophic lateral sclerosis and healthy controls. . . . . ***Page 107***

Off-target labeling of AV-1451: Barrio provides perspective on the rapid adoption of this agent for tau imaging with PET, reviews reports that it is less than ideal for clinical applications, and previews a related article in this issue of *JNM*. . . . ***Page 115***

^{18}F-AV-1451 and iron: Choi and colleagues investigate the relationship between ^{18}F-AV-1451 off-target binding in the basal ganglia of elderly patients on PET and iron accumulation using iron-sensitive R_2* MR imaging. . . . . ***Page 117***

Thyroid stunning by contrast agents: Vassaux and colleagues ask whether it is the free iodide in iodinated imaging contrast media or the media themselves that reduce thyroid uptake on diagnostic thyroid scintigraphy and complicate radioiodine treatment of thyroid malignancies. . . . . ***Page 121***

PET/CT in chronic Q fever: Kouijzer and colleagues from multiple Dutch research sites explore the diagnostic, management, and prognostic value of ^{18}F-FDG PET/CT in chronic Q fever at diagnosis and during follow-up. . . . . ***Page 127***

Imaging bacterial infection with ^{18}F-FDS: Li and colleagues validate 2-^{18}F-fluorodeoxysorbitol as a potential radiopharmaceutical for longitudinal imaging bacterial infection and differentiating *K. pneumoniae* lung infection from inflammation. . . . . ***Page 134***

First KOR PET ^{18}F tracer: Li and colleagues synthesize and evaluate ^{18}F-LY2459989, a κ-opioid receptor–antagonist radiotracer, in nonhuman primates and compare it with ^{11}C-LY2459989. . . . . ***Page 140***

^{18}F-MFBG imaging of neuroendocrine cancer: Pandit-Taskar and colleagues report on a first-in-human study of ^{18}F-meta-fluorobenzylguanidine PET imaging to evaluate its safety, feasibility, pharmacokinetics, and dosimetry in patients with neuroendocrine tumors. . . . . ***Page 147***

OLINDA/EXM 2.0 compendium: Stabin and Siegel present a compendium of about 100 radiopharmaceuticals, based on the OLINDA/EXM version 2.0 software and using a new generation of voxel-based, realistic human computational phantoms to develop dose estimates. . . . . ***Page 154***

^{89}Zr-trastuzumab in esophagogastric cancer: O'Donoghue and colleagues evaluate the safety, pharmacokinetics, biodistribution, and dosimetry of ^{89}Zr-trastuzumab in human epidermal growth factor receptor 2–positive esophagogastric adenocarcinoma. . . . . ***Page 161***

PET stability during aggressive MR: Deller and colleagues test the PET stability of a whole-body PET/MR system during simultaneous scanning of intensive MR pulse sequences, with resulting promise for demanding applications such as kinetic modeling. . . . . ***Page 167***