

⁶⁸Ga vs. ¹⁸F in prostate cancer: Kesch and colleagues look at the clinical and logistic advantages of prostate-specific membrane antigen agents labeled with these 2 common tracers in patients with prostate cancer. **Page 687**

PET, preclinical imaging, and optimal care: Clark and colleagues provide an overview of the underlying biochemical and biologic bases for a variety of PET tracers and discuss their potential in research to advance personalized cancer therapy. **Page 689**

Prescribed activity of ¹³¹I: Van Nostrand offers commentary and perspective on the need for critical scrutiny of published evidence on selection of activity for ¹³¹I therapy in patients with well-differentiated thyroid cancer. **Page 697**

Bevacizumab and ¹⁸F-FET uptake: Stegmayr and colleagues investigate the effects of bevacizumab on blood-brain barrier permeability and ¹⁸F-FET uptake on PET in a human xenograft model as a possible solution to confounding posttreatment pseudoresponses on MR imaging. **Page 700**

Targeted imaging of micrometastases: Hekman and colleagues assess whether dual-modality imaging using a humanized anticarcinoembryonic antigen monoclonal antibody labeled with ¹¹¹In-DTPA and a near-infrared fluorescent dye can detect pulmonary micrometastases in a mouse model. **Page 706**

⁸⁹Zr-bevacizumab PET in DIPGs: Jansen and colleagues determine the ability of bevacizumab to reach tumors in children with diffuse intrinsic pontine gliomas by measuring ⁸⁹Zr-labeled bevacizumab uptake on PET, with additional data on safety and optimal imaging timing. **Page 711**

RAI and metastatic thyroid cancer: Deandreis and colleagues compare empiric and whole-body/blood clearance dosimetry-based approaches to radioactive iodine treatment in patients with metastases from differentiated thyroid cancer. **Page 717**

Response prediction in esophageal cancer: Beukinga and colleagues report on a model designed to predict complete tumor response to neoadjuvant chemoradiotherapy in esophageal cancer based on pretreatment clinical parameters and ¹⁸F-FDG PET/CT-derived textural features. **Page 723**

Predictive PET in HCC: Na and colleagues describe the prognostic value of ¹⁸F-FDG uptake on PET/CT at time of presentation in patients with Barcelona Clinic Liver Cancer stage C hepatocellular cancer. **Page 730**

Follow-up PET/CT in oncology: Taghipour and colleagues explore retrospective data on common

clinical indications for performing 4 or more follow-up ¹⁸F-FDG PET/CT scans and on resulting effects in patient management. **Page 737**

Validation of K_i images: Ilan and colleagues evaluate parametric methods for computation of net influx rate in somatostatin analog imaging by comparison with volume-of-interest-based methods and assess image contrast in terms of tumor-to-liver ratio. **Page 744**

Late PET/CT with ⁶⁸Ga-PSMA-11: Afshar-Oromieh and colleagues assess effects on tumor detection and clinical impact of PET/CT imaging acquired 3 hours after injection of this small-molecule inhibitor of prostate-specific membrane antigen in patients with prostate cancer. **Page 750**

SSTR PET/CT management: Barrio and colleagues detail the results of a systematic review and meta-analysis to evaluate the impact of somatostatin receptor PET/CT on management of patients with neuroendocrine tumors. **Page 756**

Mapping $A_{2A}R$ with ¹¹C-preladanant: Zhou and colleagues explore the suitability of ¹¹C-preladanant PET imaging for quantification of striatal adenosine A_{2A} receptors and assessment of receptor occupancy in conscious rhesus monkeys. **Page 762**

Quantification of diaschisis: Segtnan and colleagues use ¹⁸F-FDG PET/CT to investigate the prognostic implications of total hemispheric glucose metabolism ratio in cerebrotocerebellar diaschisis in patients with supratentorial gliomas. **Page 768**

PET/CT and vulnerable plaques: Wan and colleagues quantify ⁶⁸Ga-DOTATATE uptake in carotid plaque in patients with recent carotid events, assess inter- and intraobserver variability, and describe associated immunohistochemical markers. **Page 774**

Sympathetic imaging in HFpEF: Boutagy and Sinusas offer perspective on the potential of radionuclide-based imaging of the cardiac sympathetic nervous system in patients with heart failure with preserved ejection fraction and preview a related article in this issue of *JNM*. **Page 781**

¹¹C-hydroxyephedrine PET in HFpEF: Aikawa and colleagues detail the relationship between myocardial sympathetic innervation quantified by ¹¹C-hydroxyephedrine PET and diastolic dysfunction in patients with heart failure with preserved ejection fraction. **Page 784**

Assessing cyclotron-produced ^{99m}Tc: Selivanova and colleagues report on a prospective clinical study with cyclotron-produced ^{99m}Tc-sodium perchlorate in patients with indications for thyroid

scanning to demonstrate safety and efficacy and to compare with conventional generator-eluted ^{99m}Tc-NaTcO₄. **Page 791**

Sympathetic innervation of BAT and WAT: Muzik and colleagues use ¹¹C-HED, ¹⁵O-water, and ¹⁸F-FDG PET to explore the relationship between sympathetic innervation and cold-induced activation of brown and white adipose tissue in lean young adults. **Page 799**

Optoacoustic tomography precision: Joseph and colleagues use phantoms and mice to assess the repeatability and reproducibility of a commercial small-animal optoacoustic tomography system and discuss the implications for reliable longitudinal imaging. **Page 807**

^{2-¹⁸F-FEtOH} as a perfusion reporter: Wadsworth and colleagues describe investigation of ^{2-¹⁸F-fluoroethanol} PET in differentiation between tumors of varying perfusion levels, with potential applications in screening drugs that modify tumor perfusion. **Page 815**

HER2-targeting peptide probe: Li and colleagues detail the development and preclinical evaluation of ^{99m}Tc-HYNIC-H6F, a human epidermal growth factor receptor 2-targeted peptide probe for SPECT imaging in breast cancer. **Page 821**

¹¹C-methoxybenzamide PET in melanoma: Garg and colleagues report on synthesis and preclinical assessment of this ¹¹C-labeled probe for selectively targeting melanoma using PET. **Page 827**

4D MR and attenuation map generation: Fayad and colleagues investigate the generation of 4D MR images and associated attenuation maps from a single static MR image combined with motion fields obtained from simultaneously acquired 4D non-attenuation-corrected PET images. **Page 833**

PET/MR implant AC: Fuin and colleagues present a novel technique for accurate whole-body attenuation correction in the presence of metallic endoprostheses on integrated non-time-of-flight PET/MR scanners. **Page 840**

Motion correction for cardiac PET/MR: Kolbitsch and colleagues investigate a new cardiac PET/MR approach providing respiratory and cardiac motion-compensated MR and PET images in less than 5 minutes. **Page 846**

In vivo hypoxia imaging in RA: Fuchs and colleagues measure hypoxia noninvasively in arthritic ankles with ¹⁸F-FMISO and ¹⁸F-FAZA PET/MR and quantify temporal and other dynamics of hypoxia and reactive oxygen species stress with a chemiluminescent optical imaging probe. **Page 853**