

**Discussions with leaders:** Johannes Czernin, editor in chief of *JNM*, and Jérémie Calais talk with Dominique Le Guludec, president of the Haute Autorité de Santé, about health care and nuclear medicine in France. . . . . **Page 327**

**History of PSMA theranostics:** Miyahira and Soule review the history of research in and clinical applications with prostate-specific membrane antigen, including the role of the Prostate Cancer Foundation in providing critical and sustaining support. . . . . **Page 331**

**Oligometastatic prostate cancer therapy:** Suter and colleagues provide an overview of the current state of oligometastatic prostate cancer treatment, including the promise of complementary roles of stereotactic ablative radiotherapy and advanced molecular imaging in effecting cures. . . . . **Page 339**

**Methodology of kinetic analysis:** Pantel and colleagues offer an educational summary of the principles of PET tracer kinetic analysis in oncology, methodologic approaches for such analysis, and application of kinetic modeling in cancer-specific diagnosis. . . . . **Page 342**

**Multimodality imaging of aortic stenosis:** Tzolos and colleagues examine the latest advances in imaging of aortic stenosis and bioprosthetic valve degeneration, with a focus on  $^{18}\text{F}$ -NaF PET/CT, and explore potential benefits in patient management and accelerated novel therapeutic development. . . . . **Page 353**

**Understanding immune checkpoint inhibitor PET:** Westdorp and colleagues present perspectives on the potential of whole-body PD-1 or PD-L1 expression obtained from PET imaging to facilitate a more dynamic assessment of immunooncology treatment. . . . . **Page 359**

**$^{89}\text{Zr}$ -pembrolizumab in NSCLC:** Niemeijer and colleagues assess  $^{89}\text{Zr}$ -pembrolizumab safety and biodistribution on PET/CT in patients with non-small cell cancer and determine uptake correlations with immunohistochemistry and response to pembrolizumab treatment. . . . . **Page 362**

**$^{68}\text{Ga}$ -pentixafor for adrenal lesions:** Ding and colleagues investigate the diagnostic and prognostic value of this chemokine receptor type 4-specific tracer for PET/CT imaging in nononcologic patients with suspected adrenal masses. . . . . **Page 368**

**$^{68}\text{Ga}$ -satoreotide trizoxetan dose:** Virgolini and colleagues determine the optimal dosing

regimen for this novel somatostatin receptor antagonist for PET/CT imaging in patients with metastatic gastroenteropancreatic neuroendocrine tumors. . . . . **Page 376**

**$^{68}\text{Ga}$ -DOTATOC vs.  $^{18}\text{F}$ -DOPA for insulinoma:** Imperiale and colleagues describe the relative values of these tracers for PET/CT functional imaging of insulinomas in hypoglycemic patients. . . . . **Page 384**

**Segmentation methods and radiomics:** Eertink and colleagues assess the influence of segmentation method on the discriminative power of radiomics features in diffuse large B-cell lymphoma at the patient level and for the largest lesion. . . . . **Page 389**

**Immunotherapy and PRRT in MCC:** Ferdinandus and colleagues report on response to combined peptide receptor radionuclide therapy and checkpoint immunotherapy with ipilimumab plus nivolumab in a patient with metastatic Merkel cell carcinoma. . . . . **Page 396**

**Dosimetry across  $^{177}\text{Lu}$ -DOTATATE cycles:** Roth and colleagues review  $^{177}\text{Lu}$ -DOTATATE dosimetry in patients with neuroendocrine tumors to elucidate the range and variation of tumor-absorbed doses, how dosimetric quantities evolve over treatment cycles, and whether these changes differ with tumor grade. . . . . **Page 399**

**Intraarterial PRRT in meningioma:** Vonken and colleagues investigate the added value of intraarterial administration of  $^{177}\text{Lu}$ -high-affinity-DOTATATE in treatment of surgery- and radiotherapy-refractory meningiomas. . . . . **Page 406**

**Post- $^{223}\text{Ra}$   $^{177}\text{Lu}$ -PSMA in mCRPC:** Sartor and colleagues analyze real-world clinical outcomes of sequential  $\alpha$ - and  $\beta$ -emitter therapy in patients with metastatic castrate-resistant prostate cancer. . . . . **Page 410**

**$^{177}\text{Lu}$ -FAP-2286 PRRT for adenocarcinoma:** Baum and colleagues present first-in-humans results using  $^{177}\text{Lu}$ -fibroblast activation protein-2286 for peptide-targeted radionuclide therapy in diverse advanced adeno-carcinomas. . . . . **Page 415**

**Radiotracers for GRPR imaging:** Bratanovic and colleagues synthesize ProBOMB2, a novel bombesin derivative radiolabeled with  $^{68}\text{Ga}$  and  $^{177}\text{Lu}$ , and assess its ability to target gastrin-releasing peptide receptors in a preclinical model of human prostate cancer. . . . . **Page 424**

**Sex differences, caffeine, and adenosine stress MBF:** Lassen and colleagues evaluate whether sex-specific differences characterize hemodynamic response after caffeine consumption and whether such differences affect myocardial blood flow and myocardial flow reserve assessments. . . . . **Page 431**

**Acetylcholine-dopamine imbalance in PD:** Sanchez-Catasus and colleagues use cholinergic and dopaminergic PET to investigate acetylcholine-dopamine interaction at 2 levels of dopaminergic loss in individuals with Parkinson disease. . . . . **Page 438**

**CSF-1R inhibition in stroke:** Barca and colleagues use PET/MR imaging in mice to research the effects of chronic colony-stimulating factor 1 receptor inhibitor-mediated microglia depletion on translocator protein-dependent neuroinflammation and cerebrovascular parameters. . . . . **Page 446**

**PET/CT studies after COVID-19 vaccination:** Orevi and colleagues report on experience with distinctive PET/CT features in patients imaged after vaccination, with a focus on axillary radiotracer-avid lymphadenopathy and injection site uptake. . . . . **Page 453**

**PET imaging of polystyrene:** Im and colleagues administer  $^{64}\text{Cu}$ -DOTA-labeled polystyrene orally in mice for real-time PET monitoring of transit and tissue absorption, with resulting implications for future studies of microplastics' toxicity. . . . . **Page 461**

**Deep learning-based attenuation correction:** Sari and colleagues describe development of deep learning-based methods to automatically segment air pockets and generate pseudo-CT images from CAIPIRINHA-accelerated MR Dixon images. . . . . **Page 468**

**Biograph Quadra performance assessment:** Prenosil and colleagues detail the performance of the Biograph Vision Quadra PET/CT system according to the National Electrical Manufacturers Association NU 2-2018 standard, with additional assessments. . . . . **Page 476**

**Standard methods for dose calculations:** Stabin and colleagues present the second part of a report on standardized methods for performing dose calculations for radiopharmaceuticals, with a focus on data analysis and dosimetry. . . . . **Page 485**