

**Amyloid imaging in dementia:** Frey provides perspectives on key questions about the utility of amyloid imaging in dementia diagnosis and previews an article in this issue of *JNM* on  $^{18}\text{F}$ -florbetapir PET in this setting. . . . . **Page 331**

**$^{99\text{m}}\text{Tc}$ -MAA uptake before radioembolization:** Ilhan and colleagues evaluate variations in  $^{99\text{m}}\text{Tc}$ -macroaggregated albumin uptake in primary and secondary liver tumors before  $^{90}\text{Y}$  radioembolization in a large and diverse cohort of oncology patients. . . . . **Page 333**

**Personalized radioembolization in PVT:** Garin and colleagues investigate the effects of a personalized dosimetry and intensification concept on response and survival rates in patients with hepatocellular carcinoma portal vein thrombosis treated with  $^{90}\text{Y}$ -loaded glass microspheres. . . . . **Page 339**

**DOTATATE PET in meningiomas:** Rachinger and colleagues report on a study correlating  $^{68}\text{Ga}$ -DOTATATE uptake on PET, somatostatin receptor 2 expression, and histology (including tumor-free scar tissue) in patients with primary or recurrent meningiomas. . . . . **Page 347**

**PET and CRPC response:** Yu and colleagues describe the results of a trial exploring the ability of  $^{18}\text{F}$ -fluoride PET to delineate treatment response to dasatinib in castrate-resistant prostate cancer bone metastases and to predict progression-free survival. . . . . **Page 354**

**Integrin PET imaging of renal masses:** Withofs and colleagues identify correlations between uptake of  $^{18}\text{F}$ -FPRGD2, an RGD peptide, and both integrin  $\alpha_v\beta_3$  expression and angiogenesis in renal tumors. . . . . **Page 361**

**Quantification of  $^{18}\text{F}$ -fluorocholine uptake:** Verwer and colleagues use pharmacokinetic modeling to validate the application of simplified methods for quantification of  $^{18}\text{F}$ -fluoromethylcholine uptake in routine clinical PET imaging. . . . . **Page 365**

**$^{18}\text{F}$ -bombesin PET/CT in prostate cancer:** Sah and colleagues detail a study of the feasibility, safety, tolerability, and dosimetric and imaging properties of the bombesin analog BAY 864367 for PET/CT in a small patient group with primary and recurrent prostate cancer. . . . . **Page 372**

**PET/CT acquisition timing in neurofibromatosis:** Chirindel and colleagues compare the effectiveness

of early and delayed  $^{18}\text{F}$ -FDG PET/CT imaging in differentiating malignant peripheral nerve sheath tumors from benign neurofibromas in patients with neurofibromatosis type 1. . . . . **Page 379**

**$^{18}\text{F}$ -florbetapir PET in FTD and AD:** Kobylecki and colleagues describe a PET study using  $^{18}\text{F}$ -florbetapir PET to assess amyloid  $\beta$  in healthy controls and patients with frontotemporal dementia and Alzheimer disease. . . . . **Page 386**

**Mapping brain  $\alpha_2$  adrenoceptors:** Nahimi and colleagues determine blood-brain clearances, volumes of distribution, and receptor availability in PET with  $^{11}\text{C}$ -yohimbine, a selective  $\alpha_2$ -adrenoceptor antagonist, in healthy men. . . . . **Page 392**

**Prefrontal hypometabolism in AD:** Klupp and colleagues use  $^{11}\text{C}$ -PiB and  $^{18}\text{F}$ -FDG PET and MR imaging to explore locoregional and remote relationships between prefrontal metabolism and longitudinal amyloid increase, illuminating linking mechanisms between pathology and dysfunction in Alzheimer disease. . . . . **Page 399**

**$^{68}\text{Ga}$ -EDTA PET-assessed GFR:** Hofman and colleagues compare agreement between glomerular filtration rates derived from  $^{51}\text{Cr}$ -EDTA plasma clearance and from  $^{68}\text{Ga}$ -EDTA PET/CT camera-based renal imaging and quantitation of clearance of activity from blood and its appearance in the urine. . . . . **Page 405**

**$^{68}\text{Ga}$ -pentixafor dosimetry:** Herrmann and colleagues detail whole-body distribution and radiational dosimetry of this promising PET tracer for imaging expression of the human chemokine receptor 4 in a small group of patients with multiple myeloma. . . . . **Page 410**

**Clinical evaluation of single-echo ZTE:** Delso and colleagues assess a novel, recently published method for zero-echo-time-based MR bone depiction and segmentation in the skull that could be used to provide high-resolution maps of bone tissue with anatomic accuracy. . . . . **Page 417**

**PET/MR-based attenuation correction:** Cabello and colleagues present a fully automatic method to estimate attenuation correction maps for quantitative PET reconstruction, including bone tissue, using only MR information. . . . . **Page 423**

**$^{18}\text{F}$ -fluoride PET/MR in foot pain:** Rauscher and colleagues compare the quality and diagnostic performance of  $^{18}\text{F}$ -fluoride PET/MR imaging with that of  $^{18}\text{F}$ -fluoride PET/CT in patients with foot pain of unclear cause. . . . . **Page 430**

**PET and MR in gynecologic cancer:** Lee and colleagues provide an educational overview of the complementary roles of pelvic MR imaging and  $^{18}\text{F}$ -FDG PET/CT in the care of gynecologic cancer patients and the potential of PET/MR imaging this setting. . . . . **Page 436**

**Cerenkov imaging for therapy monitoring:** Timmermand and colleagues investigate Cerenkov luminescence imaging as a tool for deriving key dosimetric parameters in radionuclide therapy in ex and in vivo animal studies. . . . . **Page 444**

**Imaging tumor-associated monocytes:** Becker and colleagues assess alarmin S100A9, implicated in induction of tumor-associated macrophages and myeloid-derived suppressor cells, as a molecular imaging marker for activity of tumor-associated immune cells in a murine breast cancer model. . . . . **Page 450**

**PET and MR in post-MI assessment:** Lautamaki and colleagues use multiple tomographic imaging techniques to explore cardiac sympathetic neuronal pathology after myocardial infarction in a porcine model. . . . . **Page 457**

**Dynamic myocardial innervation analysis:** Giorgetti and colleagues describe a 3D approach with a cadmium-zinc-telluride camera to clarify the normal myocardial kinetics of  $^{123}\text{I}$ -MIBG over time in an animal model. . . . . **Page 464**

**Ultra-high-sensitivity mouse SPECT:** Ivashchenko and colleagues detail the development and potential applications of a dedicated ultra-high-sensitivity pinhole SPECT apparatus with very fast time resolution and the capability to image submegabecquerel tracer amounts. . . . . **Page 470**

**Parallel-cone collimator for SPECT:** Beijst and colleagues present a parallel-hole collimator with cone-shaped holes, designed to limit collimator penetration while preserving resolution and sensitivity in SPECT imaging using high-energy photon-emitting isotopes. . . . . **Page 476**

**In vivo pH detection by Cerenkov imaging:** Czupryna and colleagues report on the design, testing, and in vivo application of pH-sensitive contrast agents designed specifically for Cerenkov imaging. . . . . **Page 483**

**$^{18}\text{F}$ -FPEB via an iodonium ylide:** Stephenson and colleagues describe a 1-step, regioselective, metal-free  $^{18}\text{F}$ -labeling method that uses a hypervalent iodonium(III) ylide precursor to prepare  $^{18}\text{F}$ -FPEB for PET imaging. . . . . **Page 489**