

Peptide receptor therapy: Delbeke and Graham offer a brief introduction to recently published practical guidance on peptide receptor radionuclide therapy in neuroendocrine tumors, now available at some European sites and in U.S. clinical trials. . . . *Page 663*

Molecular imaging-guided surgery: Garcia-Allende and colleagues present an overview of recent key developments in optical interventional imaging and outline the potential for a paradigm shift in surgical and endoscopic visualization. . . . *Page 664*

Stem cell therapy in stroke: Cross and Minoshima look at the potential of molecular imaging for personalizing and monitoring stem cell therapy and preview a relevant article on ¹⁸F-FDG PET imaging in this issue of *JNM*. . . . *Page 668*

PET and esophageal cancer: Tamaki and colleagues reevaluate the diagnostic accuracy of ¹⁸F-FDG PET/CT for presurgical staging of esophageal squamous cell carcinoma and correlate findings with tracer avidity in primary lesions. . . . *Page 670*

Documenting inpatient variability: Bektor and colleagues derive reference ranges for normal inpatient ¹⁸F-FDG PET scan-to-scan variation in blood-pool and liver standardized uptake values and identify influencing factors. . . . *Page 677*

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¹⁸F-alfatide and antiangiogenesis imaging: Wan and colleagues detail the development of a simple lyophilized kit for ¹⁸F labeling of the PRGD2 peptide and describe initial PET studies in patients with lung cancer and tuberculosis. . . . *Page 691*

PET and prostate cancer prognosis: Haseebuddin and colleagues investigate whether ¹¹C-acetate PET/CT predicts lymph node metastasis and treatment failure in men for whom radical prostatectomy is planned. . . . *Page 699*

H/M ratio in MIBG imaging: Inoue and colleagues research optimal acquisition protocols and correction methods for routine clinical estimation of heart-to-mediastinum ratio in cardiac ¹²³I-MIBG imaging. . . . *Page 707*

¹²³I-FP-CIT semiquantitative analysis: Söderlund and colleagues determine whether a more objective approach to analysis of ¹²³I-FP-CIT binding in SPECT studies results in more reproducible clinical reporting and explore the ideal form in which such analyses should be provided. . . . *Page 714*

¹⁸F-florbetaben PET quantification: Becker and colleagues evaluate kinetic model-based approaches to quantification of β -amyloid binding in the brain from dynamic PET data from healthy individuals and from patients with Alzheimer disease. . . . *Page 723*

Automatic injector for pediatric ictal SPECT: Kim and colleagues demonstrate the improved success rate of ictal injection with an automatic injector for ^{99m}Tc-ethylcysteinate dimer SPECT in localization of epileptogenic foci in a pediatric population. . . . *Page 732*

Localization of hyperparathyroidism: Schalin-Jäntti and colleagues compare the performance of planar scintigraphy with ¹²³I/^{99m}Tc-sestamibi, ^{99m}Tc-sestamibi SPECT/CT, ¹¹C-methionine PET/CT, and selective venous sampling in patients with persistent primary hyperparathyroidism. . . . *Page 739*

PET/CT and colitis assessment: Bettenworth and colleagues explore the translational potential of noninvasive ¹⁸F-FDG PET/CT for evaluation of mucosal damage in murine dextran sodium sulfate colitis and human inflammatory bowel disease. . . . *Page 748*

Oncologic PET/CT reporting guidance: Niederkoher and members of an international taskforce provide an educational overview of the essential elements of a concise and complete ¹⁸F-FDG PET/CT report, with examples drawn from clinical oncology practice. . . . *Page 756*

Targeted radiotherapy in prostate cancer: Dumont and colleagues determine the effect of treatment with rapamycin and radio-

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PET and photoimmunotherapy: Sano and colleagues describe studies with ¹⁸F-FDG PET for monitoring acute cytotoxic effects in mice undergoing this novel, highly specific cancer therapy. . . . *Page 770*

⁶⁸Ga-labeled nanobodies for immuno-PET: Xavier and colleagues outline synthesis of a new anti-human epidermal growth factor receptor type 2 PET tracer, ⁶⁸Ga-NOTA-2Rs15d, and detail preclinical validation studies in preparation for first in-human trials. . . . *Page 776*

PET and stem cells in brain injury: Wang and colleagues use ¹⁸F-FDG PET to investigate the functionality of transplanted induced pluripotent stem cells and embryonic stem cells in a rat model of cerebral ischemia. . . . *Page 785*

SPECT and allergic lung inflammation: Chen and colleagues assess the feasibility of in vivo SPECT imaging of heparan sulfate side chain expression in a mouse model of asthma using the recombinant eosinophil cationic protein. . . . *Page 793*

Renography and NSAIDs: Mustafa and Elgazzar compare the effects of the nonsteroidal antiinflammatory drug diclofenac on the kinetic behavior of administered renal imaging agents ^{99m}Tc-MAG3 and ^{99m}Tc-DTPA in experimental animals. . . . *Page 801*

MMR imaging in experimental arthritis: Put and colleagues investigate whether SPECT/micro-CT imaging with ^{99m}Tc-labeled nanobodies directed against the macrophage mannose receptor is a useful tool for monitoring and quantifying joint inflammation in a mouse model for rheumatoid arthritis. . . . *Page 807*

Integrated PET/MR imaging: Catana and colleagues discuss the technical advances that allowed development of human PET/MR scanners, current methodologic challenges and opportunities, and potential oncologic, cardiac, and neuropsychiatric applications. . . . *Page 815*