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

Interim PET in Hodgkin lymphoma: Biggi and colleagues report on an international study undertaken to validate the prognostic utility of interim PET using the Deauville 5-point score to evaluate images in Hodgkin lymphoma and to assess reviewer concordance rates. Page 683

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 99mTc-ethylcysteinate dimer SPECT in localization of epileptogenic foci in a pediatric population. Page 732

Localization of hyperparathyroidism: Schalin-Jintti and colleagues compare the performance of planar scintigraphy with 123I/99mTc-sestamibi, 99mTc-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: Niederkohr 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 radiotherapy with a novel 177Lu-labeled gastrin-releasing peptide receptor antagonist (alone and in combination) in both in vitro and animal studies. Page 762

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 cathepsin 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 99mTc-MAG3 and 99mTc-DTPA in experimental animals. Page 801

MMR imaging in experimental arthritis: Put and colleagues investigate whether SPECT/micro-CT imaging with 99mTc-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