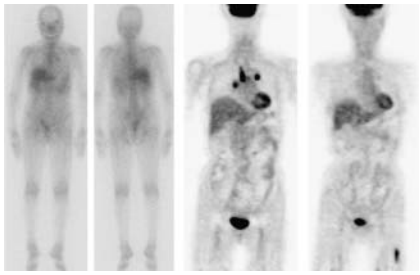
Late effects of radioablation: Reiners and colleagues review recent literature on the risk of secondary cancers after radiation treatment and preview an article in this issue of *JNM* on potential sequelae to radioiodine ablation in children near Chernobyl. . . . . ***Page 1563***

Optimal patient selection for CRT: Ypenburg and colleagues assess whether the extent of myocardial viability on ^{18}F-FDG SPECT at intervention can accurately forecast the success of cardiac resynchronization therapy in patients with heart failure. . . . . ***Page 1565***

Enhanced imaging of granulomas: Nishiyama and colleagues compare tracer uptake on ^{18}F-FDG PET and ^{67}Ga whole-body planar and thoracic imaging in the evaluation of pulmonary and extrapulmonary involvement in patients with sarcoidosis. . . . . ***Page 1571***



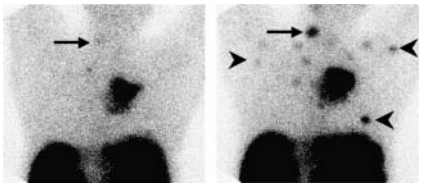
Strategic approach to heel pain: Frater and colleagues devise a set of scintigraphic criteria based on blood-pool abnormalities to predict the success of steroid injection therapies in patients with plantar fasciitis. . . . ***Page 1577***

Noninvasive misery perfusion evaluation: Kobayashi and colleagues describe a novel technique for measuring asymmetric increases in oxygen extraction fraction in $H_2{}^{15}O$ PET studies in cerebrovascular disease and point to advantages in technical simplicity and decreased patient discomfort. . . . . ***Page 1581***

Reevaluating ^{131}I doses in the elderly: Tuttle and colleagues look at age-associated differences in maximum tolerated activity in fixed-dose ^{131}I therapy for metastatic thyroid cancer. . . . ***Page 1587***

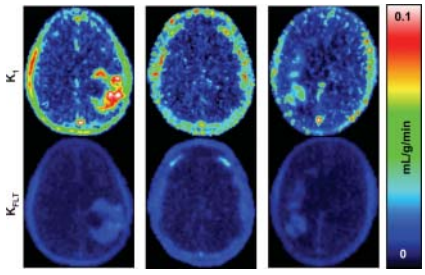
PET and bone marrow cellularity: Agool and colleagues investigate the feasibility of using ^{18}F-FLT PET to visualize and quantify proliferative activity in the bone marrow compartment to differentiate among various hematologic disorders. . . . . ***Page 1592***

Identifying somatostatin receptor subtypes: van Essen and colleagues describe the effects of ^{177}Lu-octreotate therapy in patients with metastasized or inoperable paragangliomas, meningiomas, small cell lung carcinomas, and melanomas. . . . . ***Page 1599***

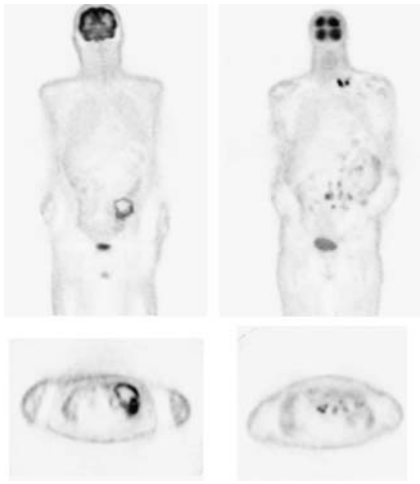


Brain PET and operable NSCLC: Posther and colleagues ask whether ^{18}F-FDG PET provides useful information in patients whose suspected or proven non–small cell lung cancer is considered resectable on the basis of conventional imaging approaches. . . . . ***Page 1607***

Kinetics of ^{18}F-FLT brain imaging: Muzi and colleagues investigate compartmental modeling of tracer transport and retention in ^{18}F-FLT studies to assess cellular proliferation in patients with gliomas. . . . ***Page 1612***



PET and celiac disease progression: Hadithi and colleagues compare ^{18}F-FDG PET and CT in the detection of enteropathy-associated T-cell lymphoma in patients with refractory celiac disease. . . . . ***Page 1622***

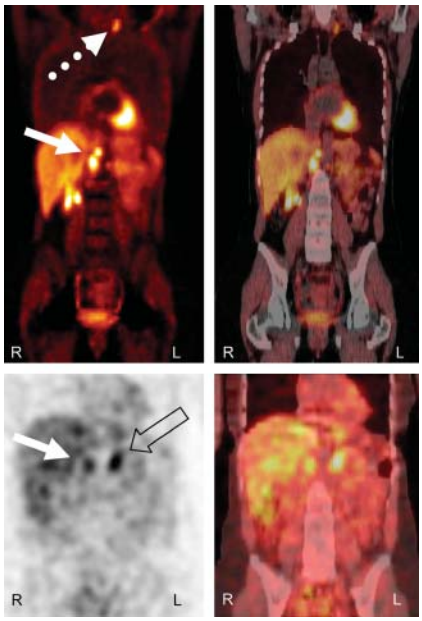


PET/CT vs. CT in thymic tumors: Sung and colleagues assess the utility of ^{18}F-FDG PET/CT in distinguishing subgroups of thymic epithelial tumors and for staging extent of disease. . . . . ***Page 1628***

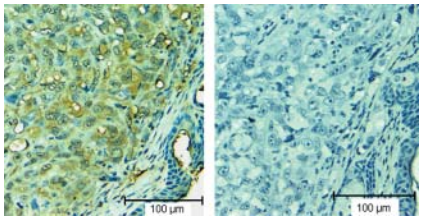
PET/CT in SNS imaging: Franzius and colleagues evaluate the feasibility of whole-body ^{11}C-HED PET/low-dose CT for examination of tumors of the sympathetic nervous system and compare the results with those from ^{123}I-MIBG scintigraphy and SPECT/CT. . . . . ***Page 1635***

Effective PET/CT dose reduction: Rodríguez-Vigil and colleagues compare contrast-enhanced full-dose PET/CT and unenhanced

low-dose ^{18}F-FDG PET/CT in lesion detection and initial staging of Hodgkin's disease and non-Hodgkin's lymphoma. . . . . ***Page 1643***



Novel tracer for prostate imaging: Peng and colleagues investigate the use of $^{64}CuCl_2$ as a probe in PET localization of human prostate cancer xenografts in mice and discuss the implications for clinical use in locally recurrent tumors. ***Page 1649***

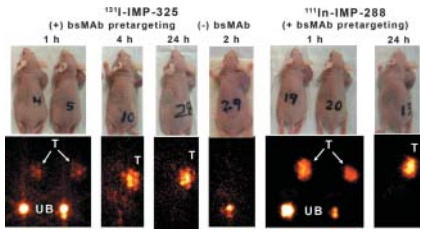


Radiologic threat preparedness: Barnett and colleagues provide an educational overview of radiologic and nuclear terrorism as public health threats and discuss appropriate preparedness and response perspectives for nuclear medicine professionals. . ***Page 1653***

Optimizing clinical SPECT: Xiao and colleagues compare the performances of Monte Carlo–based and window-based scatter correction in ^{99m}Tc SPECT cardiac imaging. . ***Page 1662***

Molecular targeting of mRNA: Watanabe and colleagues investigate the therapeutic effect of Auger electrons emitted by ^{111}In-labeled phosphorothioate antisense oligonucleotides on human neuroblastoma cells. . . . . ***Page 1670***

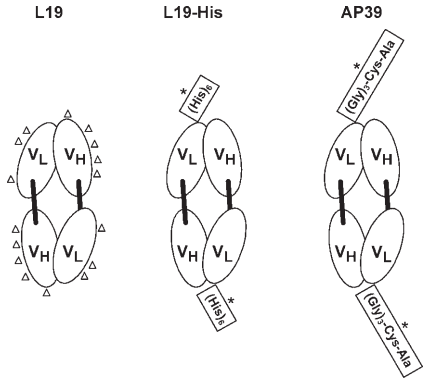
ImmunoPET investigations: McBride and colleagues continue their work with bispecific antibody pretargeting for tumor imaging, here reporting on a radioiodination procedure to assess PET imaging with ^{124}I. . . ***Page 1678***



Tracing dependence: Horti and colleagues evaluate an ^{11}C-labeled analog of a cerebral cannabinoid receptor antagonist as a potential radioligand for PET imaging of addiction and related neuropsychiatric disorders. . . . . ***Page 1689***

Novel serotonin agent: Saigal and colleagues report on the radiosynthesis and in vitro and in vivo binding characteristics of ^{18}F-mefway, a more stable serotonin 5-HT$_{1A}$ agent for use in PET imaging in disorders of the central nervous system. . . . . ***Page 1697***

^{99m}Tc-labeled fibronectin antibodies: Berndorff and colleagues detail the synthesis and ^{99m}Tc labeling of compounds to target the angiogenesis-associated extracellular matrix protein ED-B fibronectin for scintigraphic molecular imaging of solid tumors. . . . . ***Page 1707***



DNA synthesis imaging: Toyohara and colleagues describe the production of a novel thymidine analog for simplified ^{11}C-PET imaging of DNA synthesis in tumor cell proliferation. . . . . ***Page 1717***

Long-term follow-up recommended: Travis and Stabin review treatment data from children in the Chernobyl area who underwent radioiodine ablation and estimate the increased risk of cancers—including breast cancer—in this population. . . . . ***Page 1723***

ON THE COVER

Because serotonin 5-HT$_{1A}$ receptors have been implicated in disorders of the central nervous system, efforts are under way to develop fluorinated PET radiotracers that are stable to metabolism, easily synthesized, and highly selective for 5-HT$_{1A}$ receptors. ^{18}F-Mefway has shown value as such a radiotracer and is, in addition, sensitive to being displaced by serotonin, suggesting potential as a PET agent for measuring changes in serotonin concentration in the living brain.

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