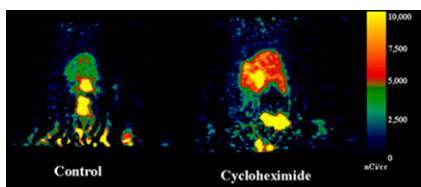


Apoptosis imaging: Niu and Chen look beyond annexin V at alternative techniques for visualization of cell death, including approaches that build on phosphatidylserine externalization, activity of caspases, and mitochondrial membrane potential **Page 1659**



Response to hormonal stimulation: Linden and Mankoff comment on the question of whether glycolysis may be a valid early marker of response to hormonal stimulation therapy in breast cancer and preview a paper on this topic in this issue of *JNM* **Page 1663**

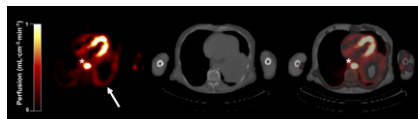
Effects of health economics: Hicks and Borland provide commentary and perspective on the sometimes contentious relationships among the clinical community, health care funding bodies, and formalized health technology assessments **Page 1665**

Cost and PET/CT in NSCLC: Schreyögg and colleagues report on the cost-effectiveness of staging non-small cell lung cancer with CT alone and with integrated PET/CT in German clinical practice **Page 1668**

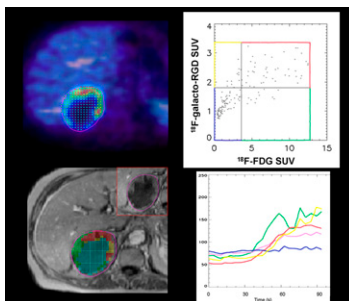
PET/CT and MRI in prostate cancer: Jambor and colleagues use qualitative and quantitative approaches to assess the ability of ¹¹C-acetate PET/CT, MRI, and proton MR spectroscopy to visualize localized prostate cancer and its aggressiveness. **Page 1676**

Tumor perfusion with ¹⁵O-water PET/CT: van der Veldt and colleagues investigate the reproducibility of dynamic H₂¹⁵O PET/CT scans for measuring tumor perfusion and

validate the quantitative accuracy of parametric perfusion images **Page 1684**

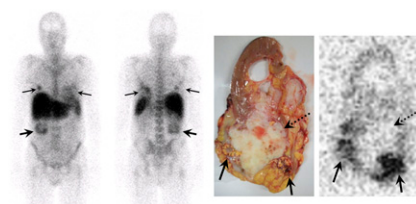


Multimodality imaging of tumor biology: Metz and colleagues analyze the relationship of $\alpha_v\beta_3$ expression, glucose metabolism, and perfusion by PET and dynamic contrast-enhanced MRI, focusing on tumor heterogeneity in patients with primary or metastasized cancer **Page 1691**

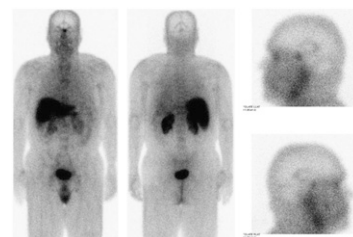


¹⁸F-fluorocholine vs. ¹⁸F-FDG in HCC: Talbot and colleagues compare the diagnostic performances of ¹⁸F-fluorocholine and ¹⁸F-FDG for PET/CT detection and staging of hepatocellular carcinoma in patients with chronic liver disease and suspected liver nodules **Page 1699**

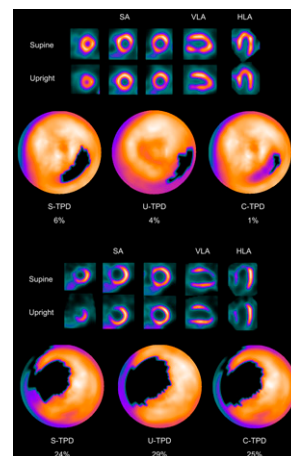
¹¹¹In-bevacizumab imaging in RCC: Desar and colleagues explore the ability of ¹¹¹In-bevacizumab scintigraphy to depict clear cell renal cell cancer and to evaluate response to neoadjuvant treatment with sorafenib, a vascular endothelial growth factor-receptor inhibitor. **Page 1707**



In vivo assay of folate receptors: Galt and colleagues describe in vivo assay of folate receptors in nonfunctional pituitary adenomas using preoperative ^{99m}Tc-folate SPECT/CT. **Page 1716**

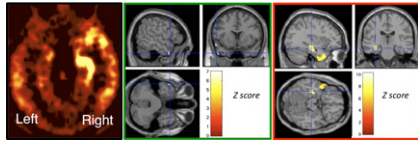


High-speed SPECT vs. coronary angiography: Nakazato and colleagues compare the diagnostic accuracy of automatic quantification of combined upright and supine myocardial high-speed SPECT with that of conventional invasive coronary angiography for detection of coronary artery disease. **Page 1724**



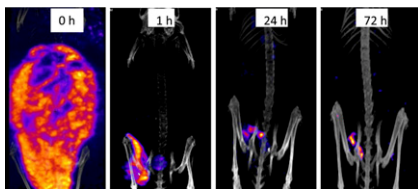
¹⁸F-MPPF asymmetry index analysis in TLE: Didelot and colleagues describe a

voxel-based method for computing inter-hemispheric asymmetry indices and validate the clinical relevance of this method for ^{18}F -MPPF PET imaging in patients with drug-resistant temporal lobe epilepsy **Page 1732**



Glucose metabolism and therapy response: Ko and colleagues explore the effect of estrogen on ^{18}F -FDG uptake in responsive breast cancer cells and investigate the mediating molecular mechanisms **Page 1740**

Brief intraperitoneal RIT: Boudousq and colleagues assess the efficiency and toxicity of brief intraperitoneal radioimmunotherapy using high activities of ^{125}I -labeled monoclonal antibody in the treatment of small-volume peritoneal carcinomatosis **Page 1748**

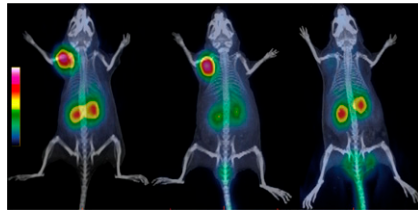


Imaging with 2'- ^{18}F -fluorofolic acid: Ross and colleagues detail the potential of this folic acid derivative for routine clinical PET imaging of folate receptor-positive tumors. **Page 1756**

5-HT_{2A} receptor agonist for PET: Ettrup and colleague radiolabel a high-affinity

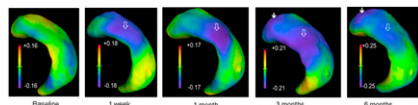
serotonin 2A receptor agonist, investigate its promise as a PET tracer, and describe potential benefits in assessing membrane-bound receptors **Page 1763**

Bicyclic somatostatin-based radiotracers: Fani and colleagues develop and evaluate early examples of this new class of radiotracers for imaging or therapy of neuroendocrine tumors **Page 1771**

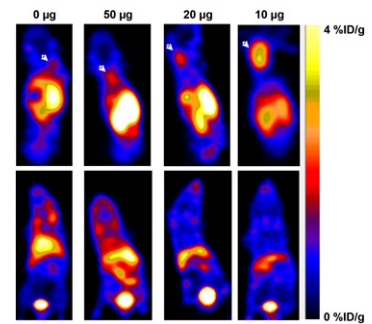


Pretargeted RIT of CEA tumors: Schoffelen and colleagues describe optimization, therapeutic efficacy, and toxicity of pretargeted radiimmunotherapy of colon cancer with a ^{177}Lu -labeled peptide in mice with carcinoembryonic antigen-expressing human tumors **Page 1780**

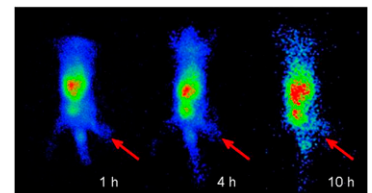
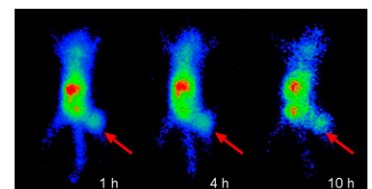
Progressive cerebral changes after TBI: Liu and colleagues assess metabolic and structural alterations in rat brain after traumatic brain injury using serial ^{18}F -FDG PET and 3-dimensional MRI . . . **Page 1788**



PET and CXCR4 expression: Jacobson and colleagues report on the development of a stable, ^{18}F -labeled peptide that enables in vivo quantification of the chemokine receptor CXCR4 in cancer. . . **Page 1796**



MDM2 imaging with radiolabeled ASON: Fu et al. evaluate whether liposome-coated $^{99\text{m}}\text{Tc}$ -radiolabeled antisense oligonucleotides targeting mouse double-minute 2 oncogene messenger RNA can be used for imaging of the oncogene's expression in vivo. **Page 1805**



Sodium ^{18}F -fluoride PET/CT bone scans: Segall and other molecular imaging experts provide revised and updated SNM practice guidelines, including definitions, clinical and research indications, documentation and reporting recommendations, and quality control considerations **Page 1813**

ON THE COVER

^{18}F -fluorocholine appears to be a useful PET/CT tracer for the detection and surveillance of HCC. Here, liver lesions are seen on maximum-intensity-projection PET/CT images obtained with ^{18}F -fluorocholine but not with ^{18}F -FDG PET/CT. ^{18}F -FDG appears somewhat more sensitive at detecting other liver malignancies, and performing PET/CT with both radiopharmaceuticals seems to be the best option.

See pages 1703–1704.

