

**Cancer surveillance imaging:** Weber and Wahl offer perspective on the multiple factors and challenges affecting surveillance imaging in patients with cancer, with a focus on existing evidence supporting its utility and the framework needed for additional studies. . . . . **Page 1513**

**Reassessing PET/CT cancer surveillance:** Eary and Krohn provide a critical review of findings in an article in this issue of *JNM* on PET and PET/CT surveillance in patients with treated cancers. . . . . **Page 1516**

**Evidence for imaging surveillance:** Patel and colleagues report on the results of a systematic review of studies on the diagnostic accuracy and clinical impact of PET and PET/CT used for surveillance in several cancers. . . . . **Page 1518**

**PET and response in NSCLC:** Usmanij and colleagues evaluate the potential of  $^{18}\text{F}$ -FDG PET changes for prediction of response to concomitant chemoradiotherapy in patients with locally advanced non-small cell lung cancer. . . . . **Page 1528**

**Combined radioisotope therapy in NHL:** Hobbs and colleagues describe a combined methodology for myeloablative treatment of non-Hodgkin lymphoma using  $^{131}\text{I}$ -tositumomab and  $^{90}\text{Y}$ -ibritumomab tiuxetan. . . . . **Page 1535**

**FMISO and FLT in lung cancer:** Thureau and colleagues compare scoring of tracer uptake intensity, definition of hypoxic and proliferative volumes, and segmentation methods across 18 centers participating in a study of non-small cell lung cancer. . . . . **Page 1543**

**$^{18}\text{F}$ -ICMT-11 dosimetry in humans:** Challapalli and colleagues detail in healthy human volunteers the safety, biodistribution, and internal radiation dosimetry profiles of this caspase-3-specific PET tracer for apoptosis imaging. . . . . **Page 1551**

**Alternative to  $^{90}\text{Y}$  PET?:** Elschot and colleagues introduce and validate a new reconstruction method for quantitative  $^{90}\text{Y}$  bremsstrahlung SPECT to improve dosimetry after radioembolization of liver malignancies. . . . . **Page 1557**

**PET time correlation coefficient in AD:** Shokouhi and colleagues report on longitudinal changes in brain glucose metabolism and their relationship to cognitive status in Alzheimer disease to determine correlations in  $^{18}\text{F}$ -FDG spatial distribution over time. . . **Page 1564**

**Repeat  $^{11}\text{C}$ -PiB amyloid imaging:** van Berckel and colleagues identify optimal quantitative and analytic methods for measuring longitudinal changes in  $^{11}\text{C}$ -Pittsburgh compound-B binding in patients with progressive cognitive impairment. . . . . **Page 1570**

**PET and cervical myelopathy:** Floeth and colleagues use  $^{18}\text{F}$ -FDG PET to prospectively assess regional changes in glucose metabolism in the cervical spinal cord in patients with degenerative spinal stenosis and symptomatic cervical myelopathy after decompressive surgery. . . . . **Page 1577**

**MR and fMRI for BAT:** Chen and colleagues describe MR and functional MR applications to assess the volume and function of human brown adipose tissue and responses to mildly cold stimulation in cervical areas in human volunteers. . . . . **Page 1584**

**V/Q SPECT and SPECT/CT:** Roach and colleagues provide an educational overview of the advantages of planar ventilation-perfusion SPECT and its applications, with or without CT, in pulmonary conditions. . . . . **Page 1588**

**$\alpha$ -RIT for multiple myeloma:** Chérel and colleagues explore  $^{213}\text{Bi}$ -labeled anti-mCD138 radioimmunotherapy efficacy in multiple myeloma minimal residual disease treatment in mice with low tumor burden. . . **Page 1597**

**Hypoxia-enhanced bombesin conjugates:** Zhou and colleagues describe investigations of the in vivo properties of hypoxia-enhanced,  $^{111}\text{In}$ -labeled gastrin-releasing peptide receptor-targeted agents in a human prostate cancer xenograft mouse model. . . **Page 1605**

**Melanoma response to  $\sigma$  ligand:** Rybczynska and colleagues determine whether the  $\sigma$  ligand rimcazole inhibits growth of A375 M melanoma xenografts in nude mice and whether rimcazole treatment changes  $^{18}\text{F}$ -FDG uptake in vivo. . . . . **Page 1613**

**p53 in  $^{64}\text{Cu}$ -cetuximab RIT:** Guo and colleagues examine in mice the role of tumor suppressor protein p53 in response to  $^{64}\text{Cu}$ -DOTA-cetuximab treatment, with and without cisplatin, and describe the potential for personalized clinical strategies in colorectal cancer. . . . . **Page 1621**

**PET and therapy response in tumors:** Goggi and colleagues evaluate the utility of various PET imaging biomarkers for early determination of response to therapy with the antiangiogenic agent axitinib in tumors with diverse biologic characteristics. . . **Page 1630**

**rMGU quantification in mice:** Thorn and colleagues detail a noninvasive and repeatable method for assessing mouse myocardial glucose uptake with  $^{18}\text{F}$ -FDG PET and Patlak kinetic analysis using the vena cava image-derived blood input function. . . **Page 1637**

**Quantification of cardiac nerve density:** Raffel and colleagues determine whether analyses of  $^{11}\text{C}$ -GMO kinetics can provide robust and sensitive measures of regional cardiac sympathetic nerve densities. . . **Page 1645**

**PET for PBF:** Pouzot and colleagues report on the use of regional fraction of blood to assess pulmonary blood flow with  $^{18}\text{F}$ -FDG PET and compartmental modeling of  $^{15}\text{O}$ - $\text{H}_2\text{O}$  kinetics as a reference method in animals with acute lung injury. . . **Page 1653**

**Macrophage polarization and glucose uptake:** Tavakoli and colleagues describe detection of enhanced glucose uptake with  $^{18}\text{F}$ -FDG PET as a noninvasive approach to explore the effect of macrophage polarization on glucose metabolism and oxidative phosphorylation. . . . . **Page 1661**

**In vivo selectivity of  $\kappa$  antagonist:** Kim and colleagues investigate the in vivo selectivity of  $^{11}\text{C}$ -LY2795050, a novel  $\kappa$ -selective antagonist PET tracer, in monkeys. . . **Page 1668**

**MITA on PET research:** Hillman and colleagues provide the results of a 2012 Medical Imaging & Technology Alliance meeting addressing clinical research endpoints that may be appropriate as evidentiary standards in supporting Medicare coverage of new PET radiopharmaceuticals and procedures. . . **Page 1675**