

**Amino acids for oncologic imaging:** Huang and McConathy provide an overview of this class of molecular imaging agents, including radiolabeling considerations and key clinical applications. . . . . **Page 1007**

**Amyloid PET AUC update:** Johnson and members of the SNMMI and Alzheimer's Association Amyloid Imaging Task Force provide clarification and additional detail on previously published appropriate use criteria for amyloid PET imaging in Alzheimer disease. . . . . **Page 1011**

**VEGF-A imaging in primary breast cancer:** Gaykema and colleagues determine whether vascular endothelial growth factor-A in primary breast cancer can be visualized with <sup>89</sup>Zr-bevacizumab PET. . . . . **Page 1014**

**VPAC1 receptors and breast cancer imaging:** Thakur and colleagues describe a feasibility study with a novel <sup>64</sup>Cu-labeled PET agent with the potential for distinguishing malignant from benign breast lesions. . . . . **Page 1019**

**EORTC and PERCIST response evaluation:** Skougaard and colleagues compare these 2 widely used criteria in response evaluation of patients with metastatic colorectal cancer treated with a combination of the chemotherapeutic drug irinotecan and the monoclonal antibody cetuximab. . . . . **Page 1026**

**PET prognosis in salivary gland carcinomas:** Ryu and colleagues look at the predictive value of metabolic tumor and total lesion glycolysis assessed by pretreatment <sup>18</sup>F-FDG PET/CT in patients with intermediate- or high-grade salivary gland carcinomas. . . . . **Page 1032**

**PET/CT and nasal-type NK/T-cell lymphoma:** Moon and colleagues explore the potential of <sup>18</sup>F-FDG PET/CT in cancer staging by comparing results with those from conventional staging methods in patients with this aggressive lymphoid neoplasm. . . . . **Page 1039**

**<sup>177</sup>Lu-DOTA-rituximab therapy:** Forrer and colleagues determine the maximum tolerated dose of and clinical response to <sup>177</sup>Lu-DOTA-rituximab in treatment of patients with relapsed follicular, mantle cell, and other indolent lymphomas. . . . . **Page 1045**

**PET and DWI in osteosarcoma:** Byun and colleagues evaluate the ability of serial <sup>18</sup>F-FDG PET/CT and diffusion-weighted MR imaging to monitor histologic response in patients with

extremity osteosarcoma receiving neoadjuvant chemotherapy. . . . . **Page 1053**

**PET and HIF-1 $\alpha$  in OSCC:** Sato and colleagues elucidate correlations between <sup>18</sup>F-FMISO PET findings and hypoxia-inducible factor-1 $\alpha$  expression in patients with oral squamous cell carcinoma. . . . . **Page 1060**

**Frontotemporal degeneration and *Granulin* mutations:** Premi and colleagues detail <sup>99m</sup>Tc-ECD SPECT imaging results in healthy controls and frontotemporal lobar degeneration patients with and without *Granulin* gene mutations to look at specific patterns of brain connectivity. . . . . **Page 1066**

**Striatal DAT in DLB:** Ziebell and colleagues use <sup>123</sup>I-PE2I SPECT to correlate striatal dopamine transporter availability with core characteristic features and symptoms of dementia with Lewy bodies in newly diagnosed patients. . . . . **Page 1072**

**V/Q SPECT PE interpretation criteria:** Roux and colleagues compare the performance of ventilation-perfusion SPECT using various interpretation criteria with that of a validated independent diagnostic strategy in confirming or excluding acute pulmonary embolism. . . . . **Page 1077**

**Interim PET in Hodgkin lymphoma:** Kostakoglou and Gallamini offer an educational review of the integral role of interim <sup>18</sup>F-FDG PET imaging in Hodgkin lymphoma, as well as challenges to integration and routine use, critical issues to improve accuracy, and current supporting study and trial data. . . . . **Page 1082**

**PET imaging of EphB4:** Liu and colleagues outline development and initial studies with a series of <sup>64</sup>Cu-labeled antibodies for PET imaging of tumor ephrin type B receptor 4 expression, with implications for evaluating early-stage treatment using anti-EphB4 strategies in colorectal, breast, and other cancers. . . . . **Page 1094**

**<sup>18</sup>F peptides for integrin  $\alpha_v\beta_6$  imaging:** Hackel and colleagues evaluate 2 cystine knot peptides for <sup>18</sup>F labeling and PET imaging of BxPC3 pancreatic adenocarcinoma xenografts in mice, with promise for molecular imaging of integrin  $\alpha_v\beta_6$  overexpression in pancreatic and other cancers. . . . . **Page 1101**

**PET and tumor hypoxia:** Valtorta and colleagues describe the kinetics of <sup>64</sup>Cu-ATSM distribution in different cancer models, using

<sup>18</sup>F-FAZA as a gold standard, with a focus on the implications of cell-dependent distribution and retention. . . . . **Page 1106**

**Hyperpolarized [1-<sup>13</sup>C]MRSI and <sup>18</sup>F-FDG PET:** Menzel and colleague compare <sup>13</sup>C MR spectroscopic imaging with <sup>18</sup>F-FDG PET imaging in tumor metabolism visualization in rats with subcutaneous hepatocellular carcinoma. . . . . **Page 1113**

**Novel PET brain tumor agent:** Solingapuram Sai and colleagues compare the effectiveness of <sup>18</sup>F-AFETP, a structural analog of histidine, with that of <sup>18</sup>F-FET in PET imaging of brain tumors in a murine model of glioblastoma. . . . . **Page 1120**

**<sup>18</sup>F-florbetaben PET in mice:** Rominger and colleagues report on the longitudinal progression of  $\beta$ -amyloid deposition in brains of mice overexpressing Swedish mutant  $\beta$ -amyloid precursor protein, a model of Alzheimer disease, as assessed by <sup>18</sup>F-florbetaben PET. . . . . **Page 1127**

**PET and chemokine receptors:** Liu and colleagues detail the development of a positron emitter-radiolabeled probe to image the upregulation of chemokine receptor in a wire-injury-accelerated apolipoprotein E knockout mouse model of atherosclerosis. . . . . **Page 1135**

**PET and norepinephrine:** Higuchi and colleagues investigate the mechanisms of cardiac uptake of a novel PET imaging agent, <sup>18</sup>F-LMI1195, in healthy rats, with and without pretreatment with norepinephrine uptake-1 and -2 inhibitors. . . . . **Page 1142**

**T-cell PET for rejection diagnosis:** Grabner and colleagues investigate small-animal PET with <sup>18</sup>F-FDG-labeled T lymphocytes as a new method for image-based diagnosis of acute allogeneic renal transplant rejection established in a rat model. . . . . **Page 1147**

**Curie-level NCA <sup>18</sup>F-FDOPA production:** Libert and colleagues propose and outline a simplified, no-carrier-added approach to production of <sup>18</sup>F-FDOPA, resulting in automation of the synthesis in a commercially available module. . . . . **Page 1154**

**High-performance bench-top scanner:** Herrmann and colleagues look at the performance of the Genisys4, a small bench-top preclinical PET device, and compare the results with those from a well-established preclinical PET scanner. . . . . **Page 1162**