

Automated WB tumor segmentation: Shiyam Sundar and Beyer examine the transition toward automation in whole-body tumor segmentation using PET/CT imaging, including innovations in artificial intelligence and the need for collaboration across academia, industry, and clinical users. *Page 995*

Molecular imaging in gynecology: Sebastiano and colleagues survey recent advances in PET, SPECT, MRI, and fluorescence imaging for diagnosis and management of benign gynecologic conditions, with emphasis on clinical reports, areas of need, and growth opportunities. *Page 998*

Aberrant PSMA expression in BLBC: Zhou and colleagues investigate the molecular basis of the application of PMSA-targeting radiopharmaceuticals in breast cancer subtypes, including basal-like breast cancer. *Page 1004*

PSMA PET/CT in RCC: Sadaghiani and colleagues provide a systematic review and metaanalysis of the utility and detection rate of PSMA PET/CT in staging and evaluation of primary renal cell carcinoma and restaging of metastatic or recurrent disease. *Page 1007*

[¹⁸F]F-choline PET/CT in PCa: Evangelista and colleagues compare the efficacy of [¹⁸F]F-choline PET/CT with that of conventional imaging for staging and managing intermediate- to high-risk prostate cancer. *Page 1013*

[¹⁸F]AIF-thretide PET/CT in PCa: Zang and colleagues assess the diagnostic accuracy and whole-body radiation dosimetry of [¹⁸F]AIF-thretide PET/CT in patients with newly diagnosed, treatment-naïve prostate cancer, using histopathology as a reference standard. *Page 1021*

⁶⁸Ga-FAPI-46, ¹⁸F-FDG PET/CT, and OS: Watanabe and colleagues look at comparative and complementary prognostic values (including for overall survival) of [⁶⁸Ga]Ga-fibroblast activation protein inhibitor-46 PET/CT and ¹⁸F-FDG PET/CT in a range of tumor entities. *Page 1027*

PET imaging of NK cells: Pham and colleagues use PET to trace natural killer cell migration to human epidermal growth factor receptor 2–positive HCC1954 breast tumors, focusing on trastuzumab antibody treatment effects on NK cell tumor accumulation. *Page 1035*

CEACAM5 imaging in AR⁻ PCa: Imberti and colleagues report on development of an immunopET agent targeting the carcinoembryonic antigen-related cell adhesion molecule 5 and evaluate its ability to delineate androgen receptor–negative prostate cancer in preclinical studies. *Page 1043*

[¹¹¹In]-DOTA-h11B6 in mCRPC: Pandit-Taskar and colleagues detail the results of a first-in-human phase 0 trial with ¹¹¹In-radiolabeled anti-human kallikrein 2 monoclonal antibody to assess hK2 as a target for treatment of metastatic castration-resistant prostate cancer. *Page 1051*

Ac-PSMA therapy vs Lu/Ac cocktail: Rathke and colleagues review clinical experience and published data on ²²⁵Ac-PSMA-617 treatment in advanced-stage prostate cancer, both as deescalated monotherapy and as part of a ¹⁷⁷Lu-PSMA-617/²²⁵Ac-PSMA-617 cocktail regimen. *Page 1057*

Lesion-based response to PSMA RPT: Yadav and colleagues ask whether baseline lesion-absorbed dose in ¹⁷⁷Lu-PSMA-617 radiopharmaceutical therapies can predict corresponding responses and identify connections between lesion-absorbed dose and prostate-specific antigen response. *Page 1064*

[¹⁷⁷Lu]Lu-DOTATATE response in NETs: Warfvinge and colleagues explore the relationship between tumor-absorbed dose and tumor response in a cohort of patients with neuroendocrine tumors treated with [¹⁷⁷Lu]Lu-DOTATATE, with implications for dosimetry-guided regimen design. *Page 1070*

PSMA PET/CT before RT: Nikitas and colleagues report on a multicenter randomized phase III trial evaluating the utility of PSMA PET/CT before definitive radiotherapy in men with unfavorable intermediate- or high-risk prostate cancer. *Page 1076*

¹⁸F-Flutolofastat vs standard imaging: Fleming and colleagues detail findings from the SPOTLIGHT study, assessing the performance of ¹⁸F-flutolofastat PET/CT for identifying PSMA-positive lesions in biochemical recurrence of prostate cancer but negative conventional baseline imaging. *Page 1080*

Targeted ^{99m}Tc and ¹⁸⁸Re theranostics: Pham and colleagues report on application of a diphosphine platform incorporating ^{99m}Tc into receptor-targeted peptides to label a prostate-PSMA–targeted peptide with ^{99m}Tc and ¹⁸⁸Re for imaging and radiotherapy of prostate cancer. *Page 1087*

Radiosynoviorthesis in synovitis: Desautniers and colleagues describe the results of a Health Canada–approved trial on the safety and efficacy of intraarticular radionuclide treatment in patients with synovitis refractory to standard treatments. *Page 1095*

TB pediatric PET/CT dose reduction: Minigels and colleagues define a lower limit of reduced injected activity in delayed [¹⁸F]FDG

total-body PET/CT in pediatric oncology patients. *Page 1101*

$\alpha_v\beta_3$ integrin dynamics after AMI: Dietz and colleagues monitor angiogenesis through myocardial integrin $\alpha_v\beta_3$ expression in patients with ST-segment elevation myocardial infarction and correlate integrin expression levels with subsequent changes in ⁸²Rb PET/CT parameters. *Page 1107*

Patient-specific cutoffs in [¹⁵O]H₂O PET: Hoek and colleagues assess the influences of prior coronary artery disease, sex, and age on optimal cutoffs of hyperemic myocardial blood flow and coronary flow reserve and whether cutoff optimization enhances diagnostic [¹⁵O]H₂O PET. *Page 1113*

Patterns of early A β deposition: Leczy and colleagues investigate amyloid- β signals in the perithreshold SUV ratio range using Pittsburgh compound B PET in a population-based study, with implications for diagnosis and understanding of Alzheimer disease phenotypes. *Page 1122*

PET/CT and immune-related CNS toxicity: Ma and colleagues analyze ¹⁸F-FDG PET/CT images to identify probable biomarkers specific to immune-related central nervous system toxicity in cancer patients treated with immune checkpoint inhibitors. *Page 1129*

Granzyme B PET for IBD: Heidari and colleagues use ⁶⁸Ga-NOTA-GZP PET to target granzyme B, released from cytotoxic T and natural killer cells, and detect early inflammatory bowel disease in murine models of colitis. *Page 1137*

Deep learning amyloidosis quantification: Miller and colleagues evaluate a deep learning approach for fully automated volumetric quantitation of ^{99m}Tc-pyrophosphate using segmentation of coregistered anatomic structures from CT attenuation maps. *Page 1144*

MCT4-based radiomics for [¹⁸F]FDG PET: Smeets and colleagues investigate correlations between radiomics features extracted from [¹⁸F]FDG PET images and histologic expression patterns of monocarboxylate transporter-4, a glycolytic marker in pancreatic cancer. *Page 1151*

AI-based prediction of brain tumor foci: Lohmann and colleagues present a case study in suspected glioma illustrating the potential of artificial intelligence–based decision support for diagnostic and treatment planning based on amino acid PET. *Page 1160*

[⁶⁸Ga]Ga-FAPI-46 uptake and infection: Cuzzani and colleagues describe a case of actinomycosis in which [⁶⁸Ga]Ga-FAPI-46 PET findings mimic lung cancer. *Page 1161*