

SNMMI NEWSLINE

- 9N** 2016 SNMMI Highlights Lecture: General Nuclear Medicine
Patrick M. Colletti
- 13N** SNMMI Begins Release of AUC for High-Value Nuclear Medicine Procedures
- 14N** Appropriate Use Criteria for Bone Scintigraphy in Prostate and Breast Cancer: Summary and Excerpts
- 18N** SNMMI Leadership Update: The SNMMI Annual Meeting: Reaching New Heights in the Mile-High City
Virginia Pappas
- 19N** Newsbriefs

CONTINUING EDUCATION

- 523** Repeatability of SUV in Oncologic ^{18}F -FDG PET
Martin A. Lodge

FOCUS ON MOLECULAR IMAGING

- 533** Metabolic Imaging of Glutamine in Cancer
Lin Zhu, Karl Ploessl, Rong Zhou, David Mankoff, and Hank F. Kung

ONCOLOGY

Basic

- 538** Practical Immuno-PET Radiotracer Design Considerations for Human Immune Checkpoint Imaging
Aaron T. Mayer, Arutselvan Natarajan, Sydney R. Gordon, Roy L. Maute, Melissa N. McCracken, Aaron M. Ring, Irving L. Weissman, and Sanjiv S. Gambhir
- 547** Fluorescence-Based Molecular Imaging of Porcine Urinary Bladder Sentinel Lymph Nodes
Hak J. Lee, Christopher V. Barback, Carl K. Hoh, Zhengtao Qin, Kareem Kader, David J. Hall, David R. Vera, and Christopher J. Kane

Translational

- 554** ■ **FEATURED TRANSLATIONAL SCIENCE ARTICLE.** Synthesis and Evaluation of the Estrogen Receptor β -Selective Radioligand 2- ^{18}F -Fluoro-6-(6-Hydroxynaphthalen-2-yl)Pyridin-3-ol: Comparison with 16α - ^{18}F -Fluoro-17 β -Estradiol
Inês F. Antunes, Aren van Waarde, Rudi A.J.O Dierckx, Elisabeth G.E. de Vries, Geke A.P. Hospers, and Erik F.J. de Vries

Clinical

- 560** ■ **INVITED PERSPECTIVE.** Functional Estrogen Receptor Imaging Before Neoadjuvant Therapy for Primary Breast Cancer
Amy M. Fowler and Hannah M. Linden

- 563** A Randomized Feasibility Study of ^{18}F -Fluoroestradiol PET to Predict Pathologic Response to Neoadjuvant Therapy in Estrogen Receptor-Rich Postmenopausal Breast Cancer

Sun Young Chae, Sung-Bae Kim, Sei Hyun Ahn, Hye Ok Kim, Dok Hyun Yoon, Jin-Hee Ahn, Kyung Hae Jung, Sangwon Han, Seung Jun Oh, Sang Ju Lee, Hee Jeong Kim, Byung Ho Son, Gyungyub Gong, Hyo Sang Lee, and Dae Hyuk Moon

- 569** ■ **FEATURED ARTICLE OF THE MONTH.** Associations Between Somatic Mutations and Metabolic Imaging Phenotypes in Non-Small Cell Lung Cancer

Stephen S.F. Yip, John Kim, Thibaud P. Coroller, Chintan Parmar, Emmanuel Rios Velazquez, Elizabeth Huynh, Raymond H. Mak, and Hugo J.W.L. Aerts

- 577** Posttreatment PET/CT Rather Than Interim PET/CT Using Deauville Criteria Predicts Outcome in Pediatric Hodgkin Lymphoma: A Prospective Study Comparing PET/CT with Conventional Imaging

Sameer Bakhshi, Sainath Bhethanabhotla, Rakesh Kumar, Krishankant Agarwal, Punit Sharma, Sanjay Thulkar, Arun Malhotra, Deepa Dhawan, and Sreenivas Vishnubhatla

- 584** ^{18}F -FET PET Uptake Characteristics in Patients with Newly Diagnosed and Untreated Brain Metastasis

Marcus Unterrainer, Norbert Galldiks, Bogdana Suchorska, Lara-Caroline Kowalew, Vera Wenter, Christine Schmid-Tannwald, Maximilian Niyazi, Peter Bartenstein, Karl-Josef Langen, and Nathalie L. Albert

THERANOSTICS

Basic

- 590** Novel "Add-On" Molecule Based on Evans Blue Confers Superior Pharmacokinetics and Transforms Drugs to Theranostic Agents
Haojun Chen, Orit Jacobson, Gang Niu, Ido D. Weiss, Dale O. Kiesewetter, Yi Liu, Ying Ma, Hua Wu, and Xiaoyuan Chen
- 598** Cure of Human Ovarian Carcinoma Solid Xenografts by Fractionated α -Radioimmunotherapy with ^{211}At -MX35-F(ab')₂: Influence of Absorbed Tumor Dose and Effect on Long-Term Survival
Tom Bäck, Nicolas Chouin, Sture Lindegren, Helena Kahu, Holger Jensen, Per Albertsson, and Stig Palm

CARDIOLOGY

Basic

- 605** ^{13}N -Ammonia PET/CT Detection of Myocardial Perfusion Abnormalities in Beagle Dogs After Local Heart Irradiation
Jianbo Song, Rui Yan, Zhifang Wu, Jianguo Li, Min Yan, Xinzhong Hao, Jianzhong Liu, and Sijin Li

NEUROLOGY

Basic

- 611** Performing Repeated Quantitative Small-Animal PET with an Arterial Input Function Is Routinely Feasible in Rats
Chi-Cheng Huang, Chun-Hu Wu, Ya-Yao Huang, Kai-Yuan Tzen, Szu-Fu Chen, Miao-Ling Tsai, and Hsiao-Ming Wu

- 617** ■ **FEATURED BASIC SCIENCE ARTICLE.** Longitudinal Small-Animal PET Imaging of the zQ175 Mouse Model of Huntington Disease Shows In Vivo Changes of Molecular Targets in the Striatum and Cerebral Cortex
Jenny Häggkvist, Miklós Tóth, Lenke Tari, Katarina Varnäs, Marie Svedberg, Anton Forsberg, Sangram Nag, Celia Dominguez, Ignacio Munoz-Sanjuan, Jonathan Bard, John Wityak, Andrea Varrone, Christer Halldin, and Ladislav Mrzljak

Clinical

- 623** Modeling Strategies for Quantification of In Vivo ^{18}F -AV-1451 Binding in Patients with Tau Pathology
Andreas Hahn, Martin Schain, Maria Erlandsson, Petter Sjölin, Gregory M. James, Olof T. Strandberg, Douglas Hägerström, Rupert Lanzenberger, Jonas Jögi, Tomas G. Olsson, Ruben Smith, and Oskar Hansson
- 632** ^{18}F -FDG PET in Posterior Cortical Atrophy and Dementia with Lewy Bodies
Jennifer L. Whitwell, Jonathan Graff-Radford, Tarun D. Singh, Daniel A. Drubach, Matthew L. Senjem, Anthony J. Spychalla, Nirubol Tosakulwong, Val J. Lowe, and Keith A. Josephs
- 639** Predicting Regional Pattern of Longitudinal β -Amyloid Accumulation by Baseline PET
Tengfei Guo, Matthias Brendel, Timo Grimmer, Axel Rominger, and Igor Yakushev, for the Alzheimer's Disease Neuroimaging Initiative

PHYSICS/INSTRUMENTATION

- 646** Hybrid Surgical Guidance: Does Hardware Integration of γ - and Fluorescence Imaging Modalities Make Sense?
Gijs H. Kleinjan, Daan Hellingman, Nynke S. van den Berg, Matthias N. van Oosterom, Kees Hendricksen, Simon Horenblas, Renato A. Valdes Olmos, and Fijfs WB van Leeuwen
- 651** Spectral Clustering Predicts Tumor Tissue Heterogeneity Using Dynamic ^{18}F -FDG PET: A Complement to the Standard Compartmental Modeling Approach
Prateek Katiyar, Mathew R. Divine, Ursula Kohlhofer, Leticia Quintanilla-Martinez, Bernhard Schölkopf, Bernd J. Pichler, and Jonathan A. Disselhorst

- 658** Optimization of Image Reconstruction for ^{90}Y Selective Internal Radiotherapy on a Lutetium Yttrium Orthosilicate PET/CT System Using a Bayesian Penalized Likelihood Reconstruction Algorithm
Lisa M. Rowley, Kevin M. Bradley, Philip Boardman, Aida Hallam, and Daniel R. McGowan

RADIOPHARMACEUTICALS

- 665** $^{99\text{m}}\text{Tc}$ -Duramycin SPECT Imaging of Early Tumor Response to Targeted Therapy: A Comparison with ^{18}F -FDG PET
Filipe Elvas, Jan Boddaert, Christel Vangestel, Koon Pak, Brian Gray, Samir Kumar-Singh, Steven Staelens, Sigrid Stroobants, and Leonie Wyffels
- 671** In Vivo PET Imaging of the Cancer Integrin $\alpha\text{v}\beta6$ Using ^{68}Ga -Labeled Cyclic RGD Nonapeptides
Johannes Notni, Dominik Reich, Oleg V. Maltsev, Tobias G. Kapp, Katja Steiger, Frauke Hoffmann, Irene Esposito, Wilko Weichert, Horst Kessler, and Hans-Jürgen Wester

BRIEF COMMUNICATIONS

- 678** Assessment of P-Glycoprotein Transport Activity at the Human Blood–Retina Barrier with (*R*)- ^{11}C -Verapamil PET
Martin Bauer, Rudolf Karch, Nicolas Tournier, Salvatore Cisternino, Wolfgang Wadsak, Marcus Hacker, Peter Marhofer, Markus Zeitlinger, and Oliver Langer

DEPARTMENTS

- 8A** This Month in JNM
- 682** Book Reviews
- 683** Letters to the Editor