

## SNMMI NEWSLINE

- 9N** Appropriate Use Criteria for Hepatobiliary Scintigraphy in Abdominal Pain: Summary and Excerpts
- 12N** Online Social Media Practices in Nuclear Medicine and Molecular Imaging: A Concept to Incentivize Creation of Digital and Web-Based Content  
Chadwick L. Wright, Ryan D. Niederkoher, Melanie U. Knopp, and Michael V. Knopp
- 15N** Outstanding *JNM* Articles for 2016
- 16N** Outstanding *JNMT* Articles for 2016
- 17N** From the ABNM: Making MOC Simpler  
George Segall
- 18N** In Memoriam: Hussein M. Abdel-Dayem, MD 1934–2017  
Habib Zaidi and Abass Alavi
- 18N** MURR Files for NRC Isotope Production Approval
- 19N** SNMMI Leadership Update: An Exciting Time for Nuclear Medicine and Molecular Imaging  
Sally W. Schwarz
- 20N** Newsbriefs

## ISSUES AND CONTROVERSIES

- 865** Dose Optimization to Minimize Radiation Risk for Children Undergoing CT and Nuclear Medicine Imaging Is Misguided and Detrimental  
Jeffrey A. Siegel, Bill Sacks, Charles W. Pennington, and James S. Welsh

## HOT TOPICS

- 869** Wet or Dry? Do Liquid Biopsy Techniques Compete with or Complement PET for Disease Monitoring in Oncology?  
Stephen Q. Wong, Richard W. Tothill, Sarah-Jane Dawson, and Rodney J. Hicks

## FOCUS ON MOLECULAR IMAGING

- 871** Metabolic and Molecular Imaging of Atherosclerosis and Venous Thromboembolism  
Eric A. Osborn, Chase W. Kessinger, Ahmed Tawakol, and Farouc A. Jaffer

## EDITORIAL

- 878** PET Imaging for Endocrine Malignancies: From Woe to Go  
David Taieb, Rodney J. Hicks, and Karel Pacak

## ONCOLOGY

### Basic

**881** Rapid Imaging of Tumor Cell Death In Vivo Using the C2A Domain of Synaptotagmin-I

André A. Neves, Bangwen Xie, Sarah Fawcett, Israt S. Alam, Timothy H. Witney, Maaikje M. de Backer, Julia Summers, William Hughes, Sarah McGuire, Dmitry Soloviev, et al.

**888** ■ **BRIEF COMMUNICATION.** Cumulated Activity Comparison of  $^{64}\text{Cu}$ -/ $^{177}\text{Lu}$ -Labeled Anti-Epidermal Growth Factor Receptor Antibody in Esophageal Squamous Cell Carcinoma Model

Eric Laffon, Matthieu Thumerel, Jacques Jougon, and Roger Marthan

### Translational

**891** ■ **FEATURED ARTICLE OF THE MONTH.** Intraoperative Assessment of Tumor Resection Margins in Breast-Conserving Surgery Using  $^{18}\text{F}$ -FDG Cerenkov Luminescence Imaging: A First-in-Human Feasibility Study

Maarten R. Grootendorst, Massimiliano Cariati, Sarah E. Pinder, Ashutosh Kothari, Michael Douek, Tibor Kovacs, Hisham Hamed, Amit Pawa, Fiona Nimmo, Julie Owen, et al.

### Clinical

**899** Prospective Evaluation of Changes in Tumor Size and Tumor Metabolism in Patients with Advanced Gastric Cancer Undergoing Chemotherapy: Association and Clinical Implication

Seongyeol Park, Seunggyun Ha, Hyun Woo Kwon, Woo Hyoung Kim, Tae-Yong Kim, Do-Youn Oh, Gi Jeong Cheon, and Yung-Jue Bang

**905**  $^{89}\text{Zr}$ -Bevacizumab PET: Potential Early Indicator of Everolimus Efficacy in Patients with Metastatic Renal Cell Carcinoma

Suzanne C. van Es, Adrienne H. Brouwers, Shekar V.K. Mahesh, Annemarie M. Leliveld-Kors, Igle J. de Jong, Marjolijn N. Lub-de Hooge, Elizabeth G.E. de Vries, Jourik A. Gietema, and Sjoukje F. Oosting

**911** Pharmacokinetic Analysis of Dynamic  $^{18}\text{F}$ -Fluoromisonidazole PET Data in Non-Small Cell Lung Cancer

Jazmin Schwartz, Milan Grkovski, Andreas Rimner, Heiko Schöder, Pat B. Zanzonico, Sean D. Carlin, Kevin D. Staton, John L. Humm, and Sadek A. Nehme

**920** Parametric Method Performance for Dynamic  $3'$ -Deoxy- $3'$ - $^{18}\text{F}$ -Fluorothymidine PET/CT in Epidermal Growth Factor Receptor–Mutated Non-Small Cell Lung Carcinoma Patients Before and During Therapy

Gerbrand Maria Kramer, Virginie Frings, Dennis Heijtel, E.F. Smit, Otto S. Hoekstra, and Ronald Boellaard

## THERANOSTICS

### Basic

**926**  $\alpha$ - Versus  $\beta$ -Emitting Radionuclides for Pretargeted Radioimmunotherapy of Carcinoembryonic Antigen–Expressing Human Colon Cancer Xenografts

Sandra Heskamp, Reinier Hernandez, Janneke D.M. Molkenboer-Kuening, Markus Essler, Frank Bruchertseifer, Alfred Morgenstern, Erik J. Steenbergen, Weibo Cai, Christof Seidl, William J. McBride, et al.

**934** ■ **INVITED PERSPECTIVE.** NTR Is the New SSTR? Perspective for Neurotensin Receptor 1 (NTR)–Directed Theranostics

Wolfgang P. Fendler and Richard P. Baum

**936 Proof of Therapeutic Efficacy of a <sup>177</sup>Lu-Labeled Neurotensin Receptor 1 Antagonist in a Colon Carcinoma Xenograft Model**

Jörg Schulz, Martin Rohracker, Marvin Stiebler, Jürgen Goldschmidt, Franziska Stöber, Mercedes Noriega, Anette Pethe, Mathias Lukas, Frank Osterkamp, Ulrich Reineke, et al.

**Clinical**

**942 ■ FEATURED CLINICAL INVESTIGATION ARTICLE. Semiquantitative Parameters in PSMA-Targeted PET Imaging with <sup>18</sup>F-DCFPyL: Variability in Normal-Organ Uptake**

Xin Li, Steven P. Rowe, Jeffrey P. Leal, Michael A. Gorin, Mohamad E. Allaf, Ashley E. Ross, Kenneth J. Pienta, Martin A. Lodge, and Martin G. Pomper

**947 PSA-Stratified Performance of <sup>18</sup>F- and <sup>68</sup>Ga-PSMA PET in Patients with Biochemical Recurrence of Prostate Cancer**

Felix Dietlein, Carsten Kobe, Stephan Neubauer, Matthias Schmidt, Simone Stockter, Thomas Fischer, Klaus Schomäcker, Axel Heidenreich, Boris D. Zlatopolskiy, Bernd Neumaier, et al.

**CARDIOLOGY**

**Basic**

**953 ■ FEATURED BASIC SCIENCE ARTICLE. Arterial CO<sub>2</sub> as a Potent Coronary Vasodilator: A Preclinical PET/MR Validation Study with Implications for Cardiac Stress Testing**

Hsin-Jung Yang, Damini Dey, Jane Sykes, Michael Klein, John Butler, Michael S. Kovacs, Olivia Sobczyk, Behzad Sharif, Xiaoming Bi, Avinash Kali, et al.

**Clinical**

**961 Automatic Valve Plane Localization in Myocardial Perfusion SPECT/CT by Machine Learning: Anatomic and Clinical Validation**

Julian Betancur, Mathieu Rubeaux, Tobias A. Fuchs, Yuka Otaki, Yoav Arnsion, Leandro Slipczuk, Dominik C. Benz, Guido Germano, Damini Dey, Chih-Jen Lin, et al.

**968 Association Between Osteogenesis and Inflammation During the Progression of Calcified Plaque Evaluated by <sup>18</sup>F-Fluoride and <sup>18</sup>F-FDG**

Xiang Li, Daniel Heber, Jacobo Cal Gonzalez, Georgios Karanikas, Marius E. Mayerhoefer, Sazan Rasul, Dietrich Beitzke, Xiaoli Zhang, Hermine Agis, Markus Mitterhauser, et al.

**NEUROLOGY**

**Basic**

**975 Preclinical Evaluation of <sup>18</sup>F-JNJ64349311, a Novel PET Tracer for Tau Imaging**

Lieven Declercq, Frederik Rombouts, Michel Koole, Katleen Fierens, Jonas Mariën, Xavier Langlois, José Ignacio Andrés, Mark Schmidt, Gregor Macdonald, Diederik Moechars, et al.

**Translational**

**982 PET Imaging Evaluation of Four  $\sigma_1$  Radiotracers in Nonhuman Primates**

Evan Baum, Zhengxin Cai, Frederic Bois, Daniel Holden, Shu-fei Lin, Teresa Lara-Jaime, Michael Kapinos, Yuanyuan Chen, Winnie Deuther-Conrad, Steffen Fischer, et al.

**Clinical**

**989 The Variability of Translocator Protein Signal in Brain and Blood of Genotyped Healthy Humans Using In Vivo <sup>123</sup>I-CLINDE SPECT Imaging: A Test-Retest Study**

Ling Feng, Per Jensen, Gerda Thomsen, Agnete Dyssegaard, Claus Svarer, Lars V. Knudsen, Kirsten Møller, Carsten Thomsen, Jens D. Mikkelsen, Denis Guilloteau, et al.

**996 In Vivo Comparison of Tau Radioligands <sup>18</sup>F-THK-5351 and <sup>18</sup>F-THK-5317**

Tobey J. Betthausen, Patrick J. Lao, Dhanabalan Murali, Todd E. Barnhart, Shozo Furumoto, Nobuyuki Okamura, Charles K. Stone, Sterling C. Johnson, and Bradley T. Christian

**IMMUNOLOGY**

**1003 Noninvasive Imaging of Human Immune Responses in a Human Xenograft Model of Graft-Versus-Host Disease**

Catharina H.M.J. Van Elssen, Mohammad Rashidian, Vladimir Vrbancac, Kai W. Wucherpfennig, Zeina el Habre, Jana Sticht, Christian Freund, Johanne T. Jacobsen, Juanjo Cragolini, Jessica Ingram, et al.

**NOVEL MOLECULAR IMAGING APPROACHES**

**1009 ■ BRIEF COMMUNICATION. Noninvasive Imaging of Colitis Using Multispectral Optoacoustic Tomography**

Neal Bhutiani, William E. Grizzle, Susan Galandiuk, Denis Otali, Gerald W. Dryden, Nejat K. Egilmez, and Lacey R. McNally

**DEPARTMENTS**

**8A** This Month in JNM

**22A** Information for Authors

**1013** Book Reviews

**1014** Letters to the Editor