

SNMMI NEWSLINE

- 9N** NIH AD Summit 2018 Yields Research Recommendations
- 10N** ORNL Advances ⁹⁹Mo Production Technologies
- 11N** Annual Report: Cancer Mortality Continues Decline
- 11N** New Approvals for ¹³¹I-Labeled Tx in Pediatric Cancer
- 12N** SNMMI Leadership Update: Trailblazing and Expanding Frontiers
Satoshi Minoshima
- 13N** Newsbriefs
- 16N** From the Literature

THE STATE OF THE ART

- 1007** A Perspective on the Evolving Story of PSMA Biology, PSMA-Based Imaging, and Endoradiotherapeutic Strategies
Denise S. O'Keefe, Dean J. Bacich, Steve S. Huang, and Warren D.W. Heston

ISSUES AND CONTROVERSIES

- 1014** ■ **INVITED PERSPECTIVE.** Radiation Dose Does Matter: Mechanistic Insights into DNA Damage and Repair Support the Linear No-Threshold Model of Low-Dose Radiation Health Risks
James R. Duncan, Michael R. Lieber, Noritaka Adachi, and Richard L. Wahl
- 1017** The BEIR VII Estimates of Low-Dose Radiation Health Risks Are Based on Faulty Assumptions and Data Analyses: A Call for Reassessment
Jeffrey A. Siegel, Bennett S. Greenspan, Alan H. Maurer, Andrew T. Taylor, William T. Phillips, Douglas Van Nostrand, Bill Sacks, and Edward B. Silberstein

CONTINUING EDUCATION

- 1020** α-Emitters for Radiotherapy: From Basic Radiochemistry to Clinical Studies—Part 2
Sophie Poty, Lynn C. Francesconi, Michael R. McDevitt, Michael J. Morris, and Jason S. Lewis

FOCUS ON MOLECULAR IMAGING

- 1028** Additional Clinical Value for PET/MRI in Oncology: Moving Beyond Simple Diagnosis
Kenneth A. Miles, Stefan A. Voo, and Ashley M. Groves

EDITORIAL

- 1033** Predictive Factors of Response and Overall Survival in Patients with Castration-Resistant Metastatic Prostate Cancer Undergoing ¹⁷⁷Lu-PSMA Therapy
Hojjat Ahmadzadehfard and Markus Essler

ONCOLOGY

Clinical

- 1035** Breast Cancer Blood Flow and Metabolism on Dual-Acquisition ¹⁸F-FDG PET: Correlation with Tumor Phenotype and Neoadjuvant Chemotherapy Response
Olivier Humbert, Maud Lasserre, Aurélie Bertaut, Pierre Fumoleau, Charles Coutant, François Brunotte, and Alexandre Cochet
- 1042** ⁹⁰Y Radioembolization for Locally Advanced Hepatocellular Carcinoma with Portal Vein Thrombosis: Long-Term Outcomes in a 185-Patient Cohort
Nadine Abouchaleh, Ahmed Gabr, Rehan Ali, Ali Al Asadi, Ronald A. Mora, Joseph Ralph Kallini, Samdeep Mouli, Ahsun Riaz, Robert J Lewandowski, and Riad Salem
- 1049** Does PET Reconstruction Method Affect Deauville Score in Lymphoma Patients?
Blandine Enilorac, Charline Lasnon, Cathy Nganoa, Christophe Fruchart, Anne-Claire Gac, Gandhi Damaj, and Nicolas Aide

Basic

- 1056** Preclinical Evaluation of Mesothelin-Specific Ligands for SPECT Imaging of Triple-Negative Breast Cancer
Christopher Montemagno, Sandrine Bacot, Mitra Ahmadi, Brigitte Kerfelec, Daniel Baty, Marlene Debiossat, Audrey Soubies, Pascale Perret, Laurent Riou, Daniel Fagret, et al.
- 1063** Thymidine Metabolism as a Confounding Factor for 3'-Deoxy-3'-¹⁸F-Fluorothymidine Uptake After Therapy in a Colorectal Cancer Model
Sonja Schelhaas, Lydia Wachsmuth, Sven Hermann, Natascha Rieder, Astrid Heller, Kathrin Heinzmann, Davina J. Honess, Donna-Michelle Smith, Inga B. Fricke, Nathalie Just, et al.

THERANOSTICS

Clinical

- 1070** EBONI: A Tool for Automated Quantification of Bone Metastasis Load in PSMA PET/CT
Jochen Hammes, Philipp Täger, and Alexander Drzezga
- 1076** Intraindividual Comparison of ¹⁸F-PSMA-1007 and ¹⁸F-DCFPyL PET/CT in the Prospective Evaluation of Patients with Newly Diagnosed Prostate Carcinoma: A Pilot Study
Frederik L. Giesel, Leon Will, Ismaheel Lawal, Thabo Lengana, Clemens Kratochwil, Mariza Vorster, Oliver Neels, Florette Reyneke, Uwe Haberkon, Klaus Kopka, et al.
- 1081** ■ **BRIEF COMMUNICATION.** Effects of Fasting on ¹⁸F-DCFPyL Uptake in Prostate Cancer Lesions and Tissues with Known High Physiologic Uptake
Maurits Wondergem, Friso M. van der Zant, Peter W. Vlotter, and Remco J.J. Knol
- 1085** ■ **SPECIAL CONTRIBUTION.** SSTR-RADS Version 1.0 as a Reporting System for SSTR PET Imaging and Selection of Potential PRRT Candidates: A Proposed Standardization Framework
Rudolf A. Werner, Lilja B. Solnes, Mehrbod S. Javadi, Alexander Weich, Michael A. Gorin, Kenneth J. Pienta, Takahiro Higuchi, Andreas K. Buck, Martin G. Pomper, Steven P. Rowe, et al.

Basic

1092 ■ FEATURED ARTICLE OF THE MONTH.

Radionuclide Therapy of HER2-Expressing Human Xenografts Using Affibody-Based Peptide Nucleic Acid-Mediated Pretargeting: In Vivo Proof of Principle

Kristina Westerlund, Mohamed Altai, Bogdan Mitran, Mark Konijnenberg, Maryam Oroujeni, Christina Atterby, Marion de Jong, Anna Orlova, Johanna Mattsson, Patrick Micke, et al.

CARDIOLOGY

Basic

1099 Impact of Novel Antidepressants on Cardiac ¹²³I-Metaiodobenzylguanidine Uptake: Experimental Studies on SK-N-SH Cells and Healthy Rabbits

Rudolf A. Werner, Ryohei Kobayashi, Mehrbod Som Javadi, Zoe Köck, Hiroshi Wakabayashi, Stefan Unterecker, Kenichi Nakajima, Constantin Lapa, Andreas Menke, and Takahiro Higuchi

NEUROLOGY

Clinical

1104 Validation of Noninvasive Tracer Kinetic Analysis of ¹⁸F-Florbetaben PET Using a Dual-Time-Window Acquisition Protocol

Santiago Bullich, Henryk Barthel, Norman Koglin, Georg A. Becker, Susan De Santi, Aleksandar Jovalekic, Andrew W. Stephens, and Osama Sabri

1111 Generation of Structural MR Images from Amyloid PET: Application to MR-Less Quantification

Hongyoon Choi and Dong Soo Lee, for the Alzheimer's Disease Neuroimaging Initiative

1118 Modeling the Effects of Age and Sex on Normal Pediatric Brain Metabolism Using ¹⁸F-FDG PET/CT

Sophie Turpin, Patrick Martineau, Marc-André Levesseur, and Raymond Lambert

MUSCULOSKELETAL

Clinical

1125 ■ FEATURED CLINICAL INVESTIGATION ARTICLE.

Translocator Protein as an Imaging Marker of Macrophage and Stromal Activation in Rheumatoid Arthritis Pannus

Nehal Narayan, David R. Owen, Harpreet Mandhair, Erica Smyth, Francesco Carlucci, Azeem Saleem, Roger N. Gunn, Eugenii A. Rabiner, Lisa Wells, Stephanie G. Dakin, et al.

RADIOBIOLOGY/DOSIMETRY

Clinical

1133 Whole-Body Voxel-Based Personalized Dosimetry: The Multiple Voxel S-Value Approach for Heterogeneous Media with Nonuniform Activity Distributions

Min Sun Lee, Joong Hyun Kim, Jin Chul Paeng, Keon Wook Kang, Jae Min Jeong, Dong Soo Lee, and Jae Sung Lee

RADIOCHEMISTRY

Basic

1140 Noninvasive Whole-Body Imaging of Phosphatidylethanolamine as a Cell Death Marker Using ^{99m}Tc-Duramycin During TNF-Induced SIRS

Tinneke Delvaeye, Leonie wyffels, Steven Deleye, Kelly Lemeire, Amanda Gonçalves, Elke Decrock, Steven Staelens, Luc Leybaert, Peter Vandenabeele, and Dmitri V. Krysko

1146 In Vivo Characterization of Platinum(II)-Based Linker Technology for the Development of Antibody-Drug Conjugates: Taking Advantage of Dual Labeling with ^{195m}Pt and ⁸⁹Zr

Joey A. Muns, Veronica Montserrat, Hendrik-Jan Houthoff, Karlijn Codée-van der Schilden, Oene Zwaagstra, Niels J. Sijbrandi, Eugen Merkul, and Guus A.M.S. van Dongen

PHYSICS AND INSTRUMENTATION

1152 Evaluation of Penalized-Likelihood Estimation Reconstruction on a Digital Time-of-Flight PET/CT Scanner for ¹⁸F-FDG Whole-Body Examinations

Elin Lindström, Anders Sundin, Carlos Trampal, Lars Lindsjö, Ezgi Ilan, Torsten Danfors, Gunnar Antoni, Jens Sörensen, and Mark Lubberink

1159 Impact of the Arterial Input Function Recording Method on Kinetic Parameters in Small-Animal PET

Hanna Napieczynska, Armin Kolb, Prateek Katiyar, Matteo Tonietto, Minhaz Ud-Dean, Ramona Stumm, Kristina Herfert, Carsten Calaminus, and Bernd J. Pichler

DEPARTMENTS

2A Recruitment

8A This Month in JNM

1164 Erratum

1165 Letters to the Editor