

DISCUSSIONS WITH LEADERS

- 163 From Scientist to Analyst to Strategist**
Aharon (Ronny) Gal, Ken Herrmann, and Johannes Czernin

THE STATE OF THE ART

- 166 Dosimetry Software for Theranostic Applications: Current Capabilities and Future Prospects**
Adam L. Kesner, Julia Brosch-Lenz, Jonathan Gear, and Michael Lassmann

CONTINUING EDUCATION

- 173 Large Language Models and Large Multimodal Models in Medical Imaging: A Primer for Physicians**
Tyler J. Bradshaw, Xin Tie, Joshua Warner, Junjie Hu, Quanzheng Li, and Xiang Li

IS IT REALLY HAPPENING?

- 183 Is the Clinical Implementation of In-House Artificial Intelligence–Developed Algorithms Happening?**
David Gergely Kovacs, Claes Nøhr Ladefoged, Jacob Bak Rosenkjær, Fatima Mawassi, Line Akiti Hingelberg, Anna Olga Aaskilde Laursen, Barbara Malene Fischer, and Flemming Littrup Andersen

EDITORIAL

- 186 Diagnostic Radiopharmaceuticals: A Sustainable Path to the Improvement of Patient Care**
Andrei Gafita, Andrew R. Menard, and Lilja B. Solnes

ONCOLOGY

Clinical

- 187 Borderline Findings in O-(2-[¹⁸F]-Fluoroethyl)-L-Tyrosine PET of Patients with Suspected Glioma Relapse: Role in Clinical Practice**
Karl-Josef Langen, Gabriele Stoffels, Christian P. Filss, Martin Kocher, Christoph Lerche, Michael Sabel, Marion Rapp, Hosai Noltemeier, Jan-Michael Werner, Garry Ceccon, et al.
- 194 Inpatient 16 α -[¹⁸F]Fluoro-17 β -Estradiol PET Heterogeneity as a Prognostic Factor for Endocrine Therapy Response and Survival in Patients with Estrogen Receptor–Positive Metastatic Breast Cancer**
Jasper J.L. van Geel, Jasmine Moustaquim, Jorianne Boers, Sjoerd G. Elias, Esther M.M. Smeets, Jelijin J. Knip, Andor W.J.M. Glaudemans, Erik F.J. de Vries, Geke A.P. Hospers, Michel van Kruchten, et al.
- 201 Head-to-Head Comparison of [⁶⁸Ga]Ga-NOTA-RM26 and [¹⁸F]FDG PET/CT in Patients with Gastrointestinal Stromal Tumors: A Prospective Study**
Rongxi Wang, Weiming Kang, Zhen Liu, Yumin Zheng, Huimin Sui, Linlin Li, Jiarou Wang, Jialin Xiang, Xingtong Peng, Xiaoyuan Chen, et al.

- 207 ■ INVITED PERSPECTIVE. Gastrin-Releasing Peptide Receptor Imaging and Therapy in the Era of Personalized Medicine**
Clément Morgat, Andrei Iagaru, and Elif Hindié

- 209 ■ BRIEF COMMUNICATION. PET-Based Risk Stratification in Primary Mediastinal B-Cell Lymphoma: A Comparative Analysis of Different Segmentation Methods in the IELSG37 Trial Patient Cohort**
Luca Ceriani, Lisa Milan, Maria Cristina Piroso, Maurizio Martelli, Teresa Ruberto, Luciano Cascione, Peter W.M. Johnson, Andrew J. Davies, Giovannino Ciccone, and Emanuele Zucca

Basic

- 215 ■ FEATURED BASIC SCIENCE ARTICLE. RadioFlow Cytometry Reveals That [¹⁸F]FDG Uptake in K-RAS Lung Cancer Is Driven by Immune Cells: An Analysis on a Single-Cell Level**
Chrysoula Vraka, Monika Homolya, Öykü Özer, Andreas Spittler, Michael Machtlinger, Herwig P. Moll, Emilio Casanova, Claudia Kuntner, Stefan Grünert, Marcus Hacker, et al.

THERANOSTICS

Clinical

- 223 Prospective Head-to-Head Comparison of ¹⁸F-PSMA PET/CT and ¹⁸F-NaF PET/CT for Assessing Bone Metastases in 160 Patients with Newly Diagnosed High-Risk Prostate Cancer**
Claus Madsen, Dan Fuglø, Maria Pedersen, Rikke Broholm, Peter B. Østergren, Rasmus Bisbjerg, Per Kongsted, Kayalvili Nielsen, Christian Haarmark, and Helle Zachø
- 230 Diuresis During ¹⁸F-Flotufolastat (rhPSMA-7.3) PET/CT Improves Recurrence Detection After Prostatectomy: A Prospective Phase II Trial**
Ismaheel O. Lawal, Aliza Mushtaq, Ashesh B. Jani, Manali Rupji, Vishal R. Dhere, Sagar A. Patel, Mehmet A. Bilen, Pretesh R. Patel, Nikhil T. Sebastian, Jeffrey M. Switchenko, et al.
- 238 ■ FEATURED ARTICLE OF THE MONTH. ¹⁷⁷Lu-DOTATATE Plus Capecitabine Versus ¹⁷⁷Lu-DOTATATE Alone in Patients with Advanced Grade 1/2 Gastroenteropancreatic Neuroendocrine Tumors (LuCAP): A Randomized, Phase 2 Trial**
Swayamjeet Satapathy, Piyush Aggarwal, Ashwani Sood, Kunal R. Chandekar, Chandan K. Das, Rajesh Gupta, Divya Khosla, Namrata Das, Rakesh Kapoor, Rajender Kumar, et al.
- 245 ■ BRIEF COMMUNICATION. Comprehensive Characterization via Molecular Imaging, Longitudinal Multisite Sampling, and Autoptic Work-up in Advanced Small Cell Lung Cancer Undergoing SSTR-Directed Radiopharmaceutical Therapy**
Johanna S. Enke, Nic G. Reitsam, Sebastian Dintner, Friederike Liesche-Starnecker, Tina Schaller, Josua A. Decker, Angela Langer, Eva Sipos, Ana Antic Nikolic, Thomas Kröncke, et al.

Basic

250 Preclinical Evaluation of $^{68}\text{Ga}/^{177}\text{Lu}$ -Labeled FAP-Targeted Peptide for Tumor Radiopharmaceutical Imaging and Therapy

Rang Wang, Mingxing Huang, Weichen Wang, Mufeng Li, Yingwei Wang, and Rong Tian

RADIOBIOLOGY/DOSIMETRY

Clinical

257 Safety, Biodistribution, and Radiation Dosimetry of the ^{68}Ga -Labeled Minigastrin Analog DOTA-MGS5 in Patients with Advanced Medullary Thyroid Cancer and Other Neuroendocrine Tumors

Elisabeth von Guggenberg, Gianpaolo di Santo, Christian Uprimny, Steffen Bayerschmidt, Boris Warwitz, Anton A. Hörmann, Taraneh S. Zavvar, Christine Rangger, Clemens Decristoforo, Anna Sviridenko, et al.

CARDIOVASCULAR

Clinical

264 PET/CT with Myocardial Blood Flow Assessment Is Prognostic of Cardiac Allograft Vasculopathy Progression and Clinical Outcomes

Nikil Prasad, Erin Harris, Ersilia M. DeFilippis, Gabriel Sayer, Margarita Chernovolenko, Paolo C. Colombo, Justin Fried, David Bae, Kyung Taek Oh, Jayant Raikhelkar, et al.

271 Cardiac Presynaptic Sympathetic Nervous Function Evaluated by Cardiac PET in Patients with Chronotropic Incompetence Without Heart Failure

Toshihiko Goto, Shohei Kikuchi, Yomei Sakurai, Yoshiro Tsuruta, Kento Mori, Tatsuya Mizoguchi, Yu Kawada, Yasuhiro Shintani, Masashi Yokoi, Sayuri Yamabe, et al.

NEUROLOGY

Clinical

277 In Vivo Head-to-Head Comparison of ^{18}F JGTP1 with ^{18}F MK-6240 and ^{18}F PI-2620 in Alzheimer Disease

Emily Olafson, Matteo Tonietto, Gregory Klein, Edmond Teng, Andrew W. Stephens, David S. Russell, Karen Pickthorn, and Sandra Sanabria Bohorquez

286 Longitudinal Trajectory of Dopamine and Serotonin Transporters in Parkinson Disease

Yujin Song, Jae-Hyeok Lee, Han-Kyeol Kim, Jae Hoon Lee, Young Hoon Ryu, Han Soo Yoo, and Chul Hyoung Lyoo

Basic

293 Imaging Demyelinated Axons After Spinal Cord Injuries with PET Tracer ^{18}F 3F4AP

Karla M. Ramos-Torres, Sara Conti, Yu-Peng Zhou, Amal Tiss, Celine Caravagna, Kazue Takahashi, Miao He, Moses Q. Wilks, Sophie Eckl, Yang Sun, et al.

RADIOCHEMISTRY/RADIOPHARMACEUTICALS

Clinical

302 First-in-Human Study of ^{11}C NCGG401 for Imaging Colony-Stimulating Factor 1 Receptors in the Brain

Aya Ogata, Hiroshi Ikenuma, Fumihiko Yasuno, Takashi Nihashi, Saori Hattori, Yayoi Sato, Masanori Ichise, Kengo Ito, Takashi Kato, and Yasuyuki Kimura

AI/ADVANCED IMAGE ANALYSIS

Clinical

309 Preserved Serotonin Transporter Availability in Parkinson Disease Measured with Either ^{11}C MADAM or ^{11}C DASB: A Study Including 2 Separate Cohorts of Nondepressed Patients

Minyoung Oh, Joachim Brumberg, Vesna Sossi, and Andrea Varrone

PHYSICS AND INSTRUMENTATION

Basic

315 A Method for Validating PET and SPECT Cameras for Quantitative Clinical Imaging Trials Using Novel Radionuclides

Dale L. Bailey, Kathy P. Willowson, Graeme O'Keefe, Steven Goodman, Shaun Patford, George McGill, David A. Pattison, and Andrew M. Scott; on behalf of the I-FIRST investigators and ARTnet

323 Total-Body PET System Designs with Axial and Transverse Gaps: A Study of Lesion Quantification and Detectability

Min Gao, Margaret E. Daube-Witherspoon, Joel S. Karp, and Suleman Surti

THE ILLUSTRATED POST

330 Redifferentiation of a RET-Fusion, Radioiodine-Refractory, Differentiated Thyroid Cancer with Selpercatinib: Flip-Flop Between ^{18}F FDG PET/CT and ^{131}I Posttreatment Scanning

Floriane Barbry, Benjamin Chevalier, Amandine Beron, Georges Lion, Samuel Boury, Camille Marciniak, Clio Baillet, Christine Do Cao, and Arnaud Jannin

LETTER TO THE EDITOR

331 Maintaining the Evidence for In Vivo Brain Estrogen Receptor Density by Neuroendocrine Aging and Relationships with Cognition and Symptomatology

Lisa Mosconi, Matilde Nerattini, Valentina Berti, Dawn C. Matthews, Caroline Andy, Schantel Williams, Matthew Fink, Alberto Pupi, and Roberta Diaz Brinton