

SNMMI 2022

# Scientific sessions of interest

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Saturday, June 11, 2022

Time (EDT)	Session and Title	Location	Abstract # and Title
3:15 p.m.-4:45 p.m.	SS01. Center for Therapy Excellence YIA Symposium	205/206	<b>2205.</b> Time-savings analysis of total tumor burden quantification on <sup>68</sup> Ga-PSMA-11 PET/CT with deep learning auto-segmentation of organs for automatic physiological uptake removal in men with metastatic castration-resistant prostate cancer (mCRPC)
3:15 p.m.-3:30 p.m.	SS04. Novel applications of myocardial blood flow: Informing diagnosis and prognosis in CAD	118/119/120	<b>2460.</b> Automated motion correction improves the reliability of myocardial blood flow quantification with rubidium-82 PET imaging
4:30 p.m.-4:45 p.m.	SS04. Novel applications of myocardial blood flow: Informing diagnosis and prognosis in CAD	118/119/120	<b>2465.</b> Prognostic significance of simultaneous analysis with global myocardial flow reserve and myocardial strain under vasodilator stress using cardiac PETMR
3:27 p.m.-3:20 p.m.	SS03. Physics, Instrumentation & Data Sciences YIA Symposium	118/119/120	<b>2515.</b> Towards Quantitative CT-less Total-body PET Scan
2:12 p.m.-2:24 p.m.	Integrated Session 1. Total Body PET systems: Latest Developments	205/206	<b>2599.</b> Activity optimization and evaluation of semi-quantitative performance for Biograph Vision Quadra™ PET/CT
2:48 p.m.-3:00 p.m.	Integrated Session 1. Total Body PET systems: Latest Developments	205/206	<b>2602.</b> Attenuation correction of Total Body PET using synthetic CT derived from the emission data.
3:15 p.m.-4:45 p.m.	SS01. Center for Therapy Excellence YIA Symposium	205/206	<b>2201.</b> Restoration of radioiodine uptake in Radioiodine-Refractory thyroid cancer by MAPK/BRAF Inhibition: The Single-Center Prospective Two-Arm ERRITI Trial
3:15 p.m.-4:45 p.m.	SS01. Center for Therapy Excellence YIA Symposium	205/206	<b>2202.</b> Clinical experience with <sup>225</sup> Ac-PSMA-617 TAT provided on an individual patient basis: a retrospective single-center multi-ethnics analysis of 233 patients

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Posters - Neurosciences - Clinical Neurosciences	Exhibit Hall A	<b>2925.</b> Multivariable model for diagnosis of neurodegenerative diseases using I-123 Ioflupane incorporating machine learning
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3185.</b> Feasibility of standard and generalized Patlak models for dynamic imaging of multiple organs using the uEXPLORER PET scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3192.</b> Shortened whole body dynamic PET $^{18}\text{F}$ -FDG Patlak imaging using a population input function and the Biograph Vision Quadra PET/CT
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3220.</b> Mapping FDG tracer kinetics and their uncertainties via the bootstrap using data from a Long-Axial FOV PET/CT Scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3252.</b> Data-driven gated (DDG) CT: An automated respiratory gating method to enable DDG PET/CT
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3295.</b> Phantom-based Y-90 whole-body PET image quality evaluation
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3307.</b> EARL compliance of Biograph Vision Quadra PET/CT
6:00 p.m.-8:00 p.m.	Posters - Molecular Targeting Probes-Radioactive & Nonradioactive - Dosimetry & Image Analysis	Exhibit Hall A	<b>2811.</b> Serial whole-body $^{177}\text{Lu}$ -SPECT quantitation for response assessment in metastatic, castration-resistant prostate cancer within a phase 1/2 trial of $^{177}\text{Lu}$ -PSMA-617 plus NOX66 (LuPIN)
6:00 p.m.-8:00 p.m.	Posters - Molecular Targeting Probes-Radioactive & Nonradioactive - Dosimetry & Image Analysis	Exhibit Hall A	<b>2820.</b> Accurate dosimetry with fewer scans: Evaluation of the prior-information approach to $^{177}\text{Lu}$ -DOTATATE dosimetry
6:00 p.m.-8:00 p.m.	Poster - Educational Exhibits - General Clinical Specialties	Exhibit Hall A	<b>2662.</b> Application of Lung perfusion only scan combined with SPECT/CT for the post-treatment evaluation of massive and sub-massive pulmonary embolism in the age of Covid-19 pandemic: case presentation and literature review
6:00 p.m.-8:00 p.m.	Poster - Educational Exhibits - Correlative Imaging (including instrumentation, image fusion and data analysis)	Exhibit Hall A	<b>2724.</b> Pitfalls in the development of artificial intelligence algorithms in nuclear medicine and how to avoid them

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Poster - Educational Exhibits - Correlative Imaging (including instrumentation, image fusion and data analysis)	Exhibit Hall A	<b>2725.</b> Best practices for evaluation of artificial intelligence-based algorithms for nuclear medicine: The RELIANCE guidelines
6:00 p.m.-8:00 p.m.	Poster - Educational Exhibits - Correlative Imaging (including instrumentation, image fusion and data analysis)	Exhibit Hall A	<b>2729.</b> Comparative assessment of attention-based deep learning and non-local mean filtering for joint noise reduction and partial volume correction in low-dose PET imaging
6:00 p.m.-8:00 p.m.	Poster - Educational Exhibits - Correlative Imaging (including instrumentation, image fusion and data analysis)	Exhibit Hall A	<b>2733.</b> Artificial intelligence ecosystem in nuclear medicine: Opportunities, Challenges, and Responsibilities
6:00 p.m.-8:00 p.m.	Poster - Education Exhibits - Professional Development & Quality Improvement	Exhibit Hall A	<b>2751.</b> Ethical risks in the development and deployment of artificial intelligence systems in nuclear medicine
6:00 p.m.-8:00 p.m.	Poster - General Clinical Specialties - Pulmonary	Exhibit Hall A	<b>2792.</b> Lung perfusion quantification using a SPECT/CT-based semi-automated segmentation workflow rather than planar perfusion scintigraphy
6:00 p.m.-8:00 p.m.	Posters - Neurosciences - Clinical Neurosciences (including neuro-oncology)	Exhibit Hall A	<b>2923.</b> Predicting cognitive decline due to Alzheimer's disease in MCI subjects by FDG-PET using assisted visual analysis
6:00 p.m.-8:00 p.m.	Posters - Neurosciences - Clinical Neurosciences (including neuro-oncology)	Exhibit Hall A	<b>2940.</b> Autoimmune encephalitis: Is FDG PET the key to diagnosis?
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - Endocrine/ Neuroendocrine Cancers	Exhibit Hall A	<b>2989.</b> FDG PET as a prognostic biomarker for unresectable PPGL treated with I-131 MIBG radiotherapy
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - Endocrine/ Neuroendocrine Cancers	Exhibit Hall A	<b>3004.</b> Utility of <sup>68</sup> Ga-DOTANOC PET/CT in culprit lesion localisation in rare entity like Tumor Induced Osteomalacia

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - Endocrine/ Neuroendocrine Cancers	Exhibit Hall A	<b>3005.</b> Cushing's syndrome: Role of <sup>68</sup> Ga-DOTANOC PET/CT in detection of culprit lesion
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - GI	Exhibit Hall A	<b>3038.</b> Impact of Y-90 glass microspheres residue measurement post-TARE using PET/CT on the tumor absorbed dose in comparison to planned dosimetry with <sup>99m</sup> Tc-MAA scintigraphy
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - GU	Exhibit Hall A	<b>3046.</b> Baseline imaging derived predictive factors of response following <sup>177</sup> Lu-PSMA-617 therapy in salvage metastatic castration-resistant prostate cancer; a lesion- and patient-based analysis
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - GU	Exhibit Hall A	<b>3051.</b> Variations of SUV <sub>max</sub> and functional tumor volume on <sup>18</sup> F-PSMA1007 PET/CT scanned at different time-points and using different segmentation methods
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - GU	Exhibit Hall A	<b>3054.</b> Lessons learned from real life clinical experience of using <sup>68</sup> Ga-PSMA-11 for BCR at low psa levels – IUH experience in over 1000 pts.
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - Hematologic Malignancies	Exhibit Hall A	<b>3123.</b> Stratification of Hodgkin lymphoma patients using metabolic tumor burden and tumor dissemination calculated from baseline <sup>18</sup> F-FDG-PET/CT imaging
6:00 p.m.-8:00 p.m.	Posters - Oncology: Clinical Therapy & Diagnosis (includes Phase 2, Phase 3, post approval studies) - Other Solid Tumors	Exhibit Hall A	<b>3149.</b> Role of <sup>18</sup> F-FDG PET/CT in the metastatic workup of angiosarcoma
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3166.</b> Effect of harmonization and oversampling methods on multi-center imbalanced PET datasets: Application to radiomics-based NSCLC-subtype prediction
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3172.</b> Evaluation of the prognostic value of tumor fragmentation on [18F]-FDG PET/CT on an independent cohort of diffuse large B-cell lymphoma patients (3172)

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3176.</b> Centiloid harmonisation across PET cameras without using paired data
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3183.</b> Evaluation of population-based input functions for kinetic modeling of $^{18}\text{F}$ -FDG datasets from a long axial FOV PET scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3190.</b> Impact of Fit Time Interval on Patlak Quantitation in Dynamic Total-Body Imaging using the uEXPLORER PET Scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3195.</b> Assessment and optimization of CT radiation dose for body PET/CT across different scanner systems and different anatomical ranges
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3202.</b> Automated liver reference region localization in PET/CT in presence of non-physiological tracer uptake
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Analysis and Management	Exhibit Hall A	<b>3210.</b> Patient-specific brain phantom SPECT database of cerebral perfusion analyzed with the 3D-data analysis platform Scenium
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3217.</b> PET as fast as CT: Ultra-fast PET imaging through a combination of digital PET/CT and post-reconstruction by artificial intelligence
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3246.</b> Dynamic FDG-PET shortened acquisition protocols determined using machine learning
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3250.</b> Multitask learning-to-rank neural network for predicting survival of diffuse large B-cell lymphoma patients from their unsegmented baseline $^{18}\text{F}$ -FDG-PET/CT scans
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3251.</b> Quantitative imaging of Pb-212
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3253.</b> Practice of domain knowledge in trustworthy deep learning for CT-free PET imaging
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3255.</b> Variability in quantification between SPECT/CT scanners with a low-count quantitative SPECT method for alpha-particle radiopharmaceutical therapies
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3271.</b> Maximum Likelihood Scatter and Prompt-Gamma Corrections for Myocardial Blood Flow Imaging using $^{82}\text{Rb}$ PET

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3272.</b> Direct Joint Attenuation and Scatter Correction of 68-Ga-PSMA PET Images Using Deep Neural Network: A Dual-Scanner Study
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3273.</b> Quantitative evaluation of <sup>90</sup> Y Bremsstrahlung SPECT image quality in the presence of <sup>99m</sup> Tc
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3275.</b> Positron Range Correction Improves Rubidium-82 PET Myocardial Perfusion Image Quality
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3308.</b> Platform development of easily customizable brain phantoms using 3D-printing workflow
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3310.</b> NeuroVision: Initial Investigation into a Novel Brain PET Imaging Scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3313.</b> Effect of <sup>68</sup> Ga radiotracer on NEMA NU-2 2018 PET-CT performance for Biograph Horizon™ scanner
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3315.</b> A systematic evaluation of potential clinical impact of improved image quality from a long axial field of view PET/CT
6:00 p.m.-8:00 p.m.	Posters - PIDS - Instrumentation	Exhibit Hall A	<b>3319.</b> A virtual-pinhole PET device for enhancing contrast recovery and improving lesion detectability of a one-meter-long PET scanner
	could not locate	Exhibit Hall A	<b>3329.</b> Application of list-mode based retrospective gating in patients with and without arrhythmia for myocardial perfusion SPECT
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3356.</b> Quantitative analysis of SPECT lung ventilation/perfusion imaging in the efficacy evaluation of balloon pulmonary angioplasty in the treatment of chronic thromboembolic pulmonary hypertension
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3361.</b> Reproducibility of <sup>99m</sup> Tc-pyrophosphate SPECT/CT cardiac amyloidosis quantitation
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3363.</b> Usefulness of FDG-PET/CT for diagnosis of myocardial rejection after heart transplantation
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3366.</b> The effect of semi-quantitative and quantitative analysis of SPECT V/Q scan on the efficacy of pulmonary endarterectomy in treatment of CTEPH and predicting postoperative residual pulmonary hypertension

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3371.</b> Absolute quantitation of cardiac <sup>123</sup> I-MIBG sympathetic nerve imaging using SPECT/CT
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3374.</b> xSPECT-based myocardial perfusion scintigraphy: feasibility of myocardial uptake quantitation in patients with suspected coronary artery disease — a pilot study
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3376.</b> Simultaneous assessment of myocardial mechanical dyssynchrony using integrated PETMR system — Direct comparison of PET phase analysis and MR feature tracking
6:00 p.m.-8:00 p.m.	Poster - Oncology, Basic & Translational - Technical Advances & Quantification (this would include image-guided diagnostics/therapy)	Exhibit Hall A	<b>4001.</b> Preliminary analysis of reproducibility of [ <sup>68</sup> Ga]DOTATATE PET/CT imaging of neuroendocrine tumours (NETS)
6:00 p.m.-8:00 p.m.	Poster - Oncology, Basic & Translational - Technical Advances & Quantification (this would include image-guided diagnostics/therapy)	Exhibit Hall A	<b>4006.</b> “Snake” Reference Region for Aortic Input Function Extraction from Dynamic PET Data
6:00 p.m.-8:00 p.m.	Technologists Posters	Exhibit Hall A	<b>4116.</b> Image characteristics of brain perfusion SPECT/CT using a new multi-focal collimator: Comparison with conventional SPECT with LEHR collimator
6:00 p.m.-8:00 p.m.	Posters - Molecular Targeting Probes-Radioactive & Nonradioactive - Dosimetry & Image Analysis	Exhibit Hall A	<b>2812.</b> Precision in dosimetric analysis and generation of a benchmark dosimetry dataset - An IAEA study
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3223.</b> 2.5D Nouveau VAE model for <sup>11</sup> C-DASB PET image denoising and uncertainty estimation
6:00 p.m.-8:00 p.m.	Posters - PIDS - Data Science	Exhibit Hall A	<b>3231.</b> Generative Adversarial Network-Based Method for Generating DMSA Kidney SPECT Attenuation Maps from Scatter Data
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3280.</b> TI-208 2.6 MeV emission is the major contributor to the energy spectra when imaging Ra-224 and Pb-212
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3289.</b> Evaluation of Novel Methods for Motion Correction in Simultaneous PET/MR

## Saturday, June 11, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
6:00 p.m.-8:00 p.m.	Posters - PIDS - Image Generation	Exhibit Hall A	<b>3293.</b> Reconstruction Parameter Assessment for Small Animal Imaging on a Clinical SiPM PET/CT
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3384.</b> Prognostic value of global myocardial flow reserve derived from <sup>99m</sup> Tc-sestamibi dynamic SPECT in patients with intermediate coronary stenosis
6:00 p.m.-8:00 p.m.	Poster - Cardiovascular - Clinical Science	Exhibit Hall A	<b>3395.</b> Incidental extracardiac 82-rubidium uptake in myocardial perfusion PET-CT in a veteran population
6:00 p.m.-8:00 p.m.	Poster - Oncology, Basic & Translational - Technical Advances & Quantification (this would include image-guided diagnostics/therapy)	Exhibit Hall A	<b>4007.</b> Dual-Energy CT Bone-Fraction Correction for Total-Body PET Kinetic Quantification of Bone Marrow
6:00 p.m.-8:00 p.m.	Poster - Oncology, Basic & Translational - In vitro and In vivo Oncology	Exhibit Hall A	<b>4047.</b> Whole-tumor MRI radiomics capture treatment response in orthotopic organoid-based patient-derived mouse model of endometrial cancer
6:00 p.m.-8:00 p.m.	Poster - General Clinical Specialties - Infectious and Inflammatory Disease/Hematology/Musculoskeletal	Exhibit Hall A	<b>2770.</b> Role of 18-F-FDG PET/CT for extent of disease and response assessment to anti fungal treatment in patients of Histoplasmosis.
6:00 p.m.-8:00 p.m.	Poster - Oncology, Basic & Translational - Early Phase Human Studies	Exhibit Hall A	<b>2531.</b> A novel SSTR antagonist <sup>68</sup> Ga-DATA5m-LM4: from bench (radiolabeling) to bedside (first-in-human study)

## Sunday, June 12, 2022

Time (EDT)	Session and Title	Location	Abstract # and Title
12:30 p.m.-2:00 p.m.	SS10. Image Generation 1: Reconstruction and Quantitation	109	<b>2396.</b> Artifact free scatter correction of <sup>68</sup> Ga-RDG cervical cancer PET scans
3:00 p.m.-4:30 p.m.	SS15. Image Generation 2: Denoising & Motion	109	<b>2402.</b> Respiratory signal estimation and compensation using finely sampled projection data in pediatric <sup>99m</sup> Tc-labeled dimercaptosuccinic acid (DMSA) SPECT imaging: A simulation study
3:00 p.m.-4:30 p.m.	SS15. Image Generation 2: Denoising & Motion	109	<b>2403.</b> Quantification in Respiratory-Gated PET Acquisition: Can data-driven methods replace device-based systems?



## Sunday, June 12, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
3:00 p.m.-4:30 p.m.	SS15. Image Generation 2: Denoising & Motion	109	<b>2406.</b> Deep Learning for Inter-modal Image Registration with PET/CT
12:30 p.m.-2:00 p.m.	SS10. Image Generation 1: Reconstruction and Quantitation	109	<b>2395.</b> Evaluation of energy-based scatter compensation methods in clinical whole-body PET

## Monday, June 13, 2022

Time (EDT)	Session and Title	Location	Abstract # and Title
10:00 p.m.-11:30 p.m.	SS17. Somatostatin Receptor imaging and PRRT	110	<b>2210.</b> Real-World Lesion and Renal Dosimetry for Peptide Receptor Radionuclide Therapy (PRRT)
10:00 p.m.-11:30 p.m.	SS17. Somatostatin Receptor imaging and PRRT	110	<b>2215.</b> Predicting <sup>177</sup> Lu-DOTATATE Kidney Dosimetry before Treatment from a Single <sup>68</sup> Ga-DOTATATE PET Scan and Clinical Biomarkers
1:00 p.m.-2:30 p.m.	SS21. Advances in atherosclerosis and inflammation imaging	116/117	<b>2219.</b> FAP-directed In-Vivo Molecular Imaging Identifies Increased Fibroblast Activation in Non-Calcified Plaque
1:00 p.m.-2:30 p.m.	SS21. Advances in atherosclerosis and inflammation imaging	116/117	<b>2220.</b> Coronary computed tomography angiography derived radiomic predictors of <sup>18</sup> F-sodium fluoride PET uptake
1:00 p.m.-2:30 p.m.	SS21. Advances in atherosclerosis and inflammation imaging	116/117	<b>2221.</b> Improved Quantification of Biologic Activity of Atherosclerosis Using Dynamic Whole-Body Positron Emission Tomography with Direct Patlak Reconstruction
10:00 a.m.-11:30 a.m.	Integrated Session 6. Advances in Tau imaging	205/206	<b>2225.</b> Head-to-head comparison of Relative Cerebral Blood Flow derived from dynamic <sup>18</sup> F-florbetapir and <sup>18</sup> F-flortaucipir PET studies in subjects with Subjective Cognitive Decline
10:00 a.m.-11:30 a.m.	Integrated Session 6. Advances in Tau imaging	205/206	<b>2226.</b> World Trade Center First Responders Exhibit Potentially Unique Tau Neuropathology: A Pilot PET/MRI Study
10:00 a.m.-11:30 a.m.	Integrated Session 6. Advances in Tau imaging	205/206	<b>2227.</b> Optimization of imaging time for <sup>18</sup> F-AV45 PET using SUVR in cognitive impairment with or without CAA by total-body dynamic PET/CT
10:00 a.m.-11:30 a.m.	SS18. Artificial Intelligence-Based Image Processing and Prediction	118/119/120	<b>2253.</b> Deep Transformer Based Direct Attenuation Correction of Myocardial Perfusion SPECT Images

## Monday, June 13, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
10:00 a.m.-11:30 a.m.	SS18. Artificial Intelligence-Based Image Processing and Prediction	118/119/120	<b>2255.</b> Forecasting the pharmacokinetics in dynamic brain PET imaging using Neural Ordinary Differential Equation: a step forward for dual-tracer studies
1:00 p.m.-2:30 p.m.	SS23. PSMA-targeted therapy	118/119/120	<b>2547.</b> Prostate-specific membrane antigen radioligand therapy using $^{177}\text{Lu}$ -PSMA I&T and $^{177}\text{Lu}$ -PSMA-617 in patients with metastatic castration-resistant prostate cancer: comparison of safety, biodistribution and dosimetry
1:00 p.m.-2:30 p.m.	SS23. PSMA-targeted therapy	118/119/120	<b>2552.</b> Whole-body D50: a pragmatic quantitative SPECT-based dosimetric index for personalized PSMA radiopharmaceutical therapy with $^{177}\text{Lu}$ -PSMA-I&T
1:00 p.m.-2:30 p.m.	SS23. PSMA-targeted therapy	118/119/120	<b>2554.</b> Feasibility of single time point image-based dosimetry using prior knowledge: application to $^{177}\text{Lu}$ -PSMA-617 and $^{177}\text{Lu}$ -PSMA-I&T therapy of prostate cancer
10:00 a.m.-11:30 a.m.	SS16. Radiotherapy and Radiotheranostics	116/117	<b>2564.</b> FAP-targeted molecular radiotherapy synergizes with checkpoint inhibitor immunotherapy to attenuate tumor growth in a murine model of non-small cell lung cancer
10:00 a.m.-11:30 a.m.	SS16. Radiotherapy and Radiotheranostics	116/117	<b>2567.</b> Preclinical evaluation of a novel radioligand therapy for patients with prostate cancer: biodistribution and efficacy of $^{177}\text{Lu}$ -rhPSMA-10.1 in comparison with $^{177}\text{Lu}$ -PSMA-I&T
10:00 a.m.-11:30 a.m.	SS18. Artificial Intelligence-Based Image Processing and Prediction	118/119/120	<b>2252.</b> Generative adversarial network-based attenuation correction for $^{99\text{m}}\text{Tc}$ -TRODAT-1 brain SPECT
1:00 p.m.-2:30 p.m.	Integrated Session 7. Novel developments in prostate and liver imaging and therapy	205/206	<b>2477.</b> In the search of new chelator to improve prostate cancer radiotheranostic, the study of $^{64}\text{Cu}/^{177}\text{Lu}$ -CT-PCTA-PSMA
4:00 p.m.-5:30 p.m.	Integrated Session 8. Novel neuroreceptor radiotracers and brain/whole body applications	205/206	<b>2480.</b> An investigation of the “brain-GI” relationships in Parkinson’s disease by imaging dopamine transporter in dynamic $^{11}\text{C}$ -CFT total-body PET/CT

## Tuesday, June 14, 2022

Time (EDT)	Session and Title	Location	Abstract # and Title
1:00 p.m.-2:30 p.m.	Integrated Session 11. AI for Nuclear Medicine and Molecular Imaging	205/206	<b>2229.</b> Federated Learning on $^{18}\text{F}$ -FDG PET/CT Uptake Classification in Lung Cancer, Lymphoma and Head and Neck Cancer
1:00 p.m.-2:30 p.m.	Integrated Session 11. AI for Nuclear Medicine and Molecular Imaging	205/206	<b>2230.</b> Comparison of handcrafted radiomics and 3D-CNN models to diagnose striatal dopamine deficiency in Parkinson's Disease based on $^{18}\text{F}$ -FDOPA PET images
1:00 p.m.-2:30 p.m.	Integrated Session 11. AI for Nuclear Medicine and Molecular Imaging	205/206	<b>2232.</b> A Patlak-regularized deep learning inter-frame motion correction framework for whole-body dynamic PET
8:00 a.m.-9:30 a.m.	SS27. Applied & Novel Dosimetry in Clinical Applications	114/115	<b>2247.</b> Total-body perfusion imaging using $^{11}\text{C}$ -butanol
8:00 a.m.-9:30 a.m.	SS27. Applied & Novel Dosimetry in Clinical Applications	114/115	<b>2249.</b> Comparison of pre therapeutic and post therapeutic dosimetry with $^{177}\text{Lu}$ -Trastuzumab in patients with HER-2 positive metastatic breast cancer
8:00 a.m.-9:30 a.m.	SS26. Artificial Intelligence: Augmenting Cardiac Imaging	110	<b>2263.</b> Low-count Rb-82 cardiac PET/CT image denoising via deep learning for clinical dose reduction with preserved quantification accuracy
10:00 a.m.-11:30 a.m.	SS31. Basic Oncology: Early Phase Human Studies I	116/117	<b>2266.</b> $^{68}\text{Ga}$ -Pentixafor PET/CT for imaging CXCR4/CXCL12 receptor-ligand axis in lung cancer- A head -to- head comparison with $^{18}\text{F}$ -FDG PET/CT
10:00 a.m.-11:30 a.m.	SS31. Basic Oncology: Early Phase Human Studies I	116/117	<b>2269.</b> Peptide Targeted Radiotherapy using cancer-associated fibroblasts as target in solid tumors: first clinical experience with the $^{177}\text{Lu}$ -, $^{225}\text{Ac}$ - and $^{90}\text{Y}$ -labeled peptide 3BP-3940 (single isotope and TANDEM) targeting the Fibroblast Activating Protein
1:00 p.m.-2:30 p.m.	SS36. Basic Oncology: Early Phase Human Studies II	116/117	<b>2278.</b> Imaging of well-differentiated neuroendocrine tumors with the optimized SSTR antagonist $^{68}\text{Ga}$ -DATA5m LM4: first-in-human results
8:00 a.m.-9:30 a.m.	Integrated Session 9. Cardiac Amyloidosis: Advances in Imaging and clinical applications	205/206	<b>2293.</b> $^{99\text{m}}\text{Tc}$ -PYP SPECT/CT and $^{11}\text{C}$ -PIB PET/CT for cardiac involvement of transthyretin and light-chain amyloidosis
1:00 p.m.-2:30 p.m.	SS39. Gastrointestinal Malignancies	110	<b>2375.</b> Radioembolization for HCC Patients with Personalized Yttrium-90 Dosimetry for Curative Intent (RAPY90D): an interim analysis
1:00 p.m.-2:30 p.m.	SS39. Gastrointestinal Malignancies	110	<b>2376.</b> Choice of Tyrosine Kinase Inhibitor (TKI) or Immune Check-point Inhibitor guided by dual-tracer ( $^{11}\text{C}$ -acetate and $^{18}\text{F}$ -FDG) PET/CT improves the progression-free survival in patients with advanced or metastatic HCC

## Tuesday, June 14, 2022 (continued)

Time (EDT)	Session and Title	Location	Abstract # and Title
8:00 a.m.-9:30 a.m.	SS29. Pediatric nuclear medicine: FDG PET, total body PET and beyond	116/117	<b>2385.</b> Total-body PET/CT using half-dose $^{18}\text{F}$ -FDG in pediatric malignancies
8:00 a.m.-9:30 a.m.	SS29. Pediatric nuclear medicine: FDG PET, total body PET and beyond	116/117	<b>2392.</b> Role of $^{18}\text{F}$ -DOPA PET-CT in suspected congenital Hyperinsulinism
8:00 a.m.-9:30 a.m.	SS30. Image Segmentation, prognostic biomarkers	109	<b>2409.</b> Preliminary Evaluation of Lung Segment Parcellation for Lung Image Analysis
8:00 a.m.-9:30 a.m.	SS30. Image Segmentation, prognostic biomarkers	109	<b>2410.</b> $^{18}\text{F}$ -FDG-PET maximum intensity projections and artificial intelligence: a win-win combination to easily measure prognostic biomarkers in DLBCL patients
3:00 p.m.-4:30 p.m.	SS41. Kinetic modeling, quantification and dosimetry	114/115	<b>2431.</b> FDG-PET kinetic model identifiability and selection using machine learning
3:00 p.m.-4:30 p.m.	SS41. Kinetic modeling, quantification and dosimetry	114/115	<b>2435.</b> Triple time-point SPECT/CT to assess critical organ dosimetry in $^{177}\text{Lu}$ -DOTATATE radionuclide therapy for pediatric neuroblastoma: a relatively large cohort study
10:00 a.m.-11:30 a.m.	SS35. Novel tracers, therapies and applications in clinical oncology	109	<b>2493.</b> Assessment of the Prognostic value of PERCIST 1.0 and Simplified PERCIST ("SPERCIST") FDG PET in Patients with Advanced Melanoma Treated with Immune Check-point Inhibitors
10:00 a.m.-11:30 a.m.	SS33. PSMA-targeted imaging	118/119/120	<b>2538.</b> PSMA PET mapping of postoperative local recurrence and impact on prostate fossa contouring guidelines for salvage radiation therapy
10:00 a.m.-11:30 a.m.	SS33. PSMA-targeted imaging	118/119/120	<b>2542.</b> Percutaneous transgluteal $^{68}\text{Ga}$ -PSMA PET/CT guided prostate biopsy: Is it the future?
10:00 a.m.-11:30 a.m.	SS33. PSMA-targeted imaging	118/119/120	<b>2544.</b> Optimal $^{68}\text{Ga}$ -PSMA PET/CT imaging in assessment of prostate cancer: feasibility of only delayed acquisition using a total-body PET/CT scanner?
3:00 p.m.-4:30 p.m.	SS44. CNS PET of neuroreceptors, vesicular transporters, synaptic vesicles and clinical applications	118/119/120	<b>2311.</b> Whole-body dynamic nicotine acetylcholinergic receptor PET imaging of abstaining smokers, a first in human study using the PennPET Explorer

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