

www.interscience.wiley.com/journal/jlcr

Journal of
**Labelled Compounds and
Radiopharmaceuticals**

18th International Symposium
on Radiopharmaceutical Sciences

Edmonton, Canada
12 – 17 July 2009

Abstracts of Presentations

Organized by the University of Alberta
in cooperation with the
Society of Radiopharmaceutical Sciences
and the assistance of the
Society of Nuclear Medicine

SRS Board of Directors

Heinz H Coenen (President), Germany
Wynn Volkert (President-Elect), USA
Tom Ruth (Secretary/Treasurer), Canada
William C Eckelman (Immediate Past President), USA
John Valliant (Member At Large), Canada
Carolyn Anderson, USA
Dae-Yoon Chi, Korea
Michael Eisenhut, Germany
Philip Elsinga, The Netherlands
Yashahika Fujibayashi, Japan
Ren Iwata, Japan
Silvia Jurisson, USA
Linda Knight, USA
Bengt Langström, Sweden
Tim Tewson, USA
Henry Van Brocklin, USA
Ulderico Mazzi (Ad Hoc Member), Italy
Suzanne Smith (Ad Hoc Member), Australia

International Scientific Committee

Tom Ruth (Chair), Canada
Heinz H. Coenen, Germany
Clemens DeChristoforo, Switzerland
Frederic Dolle, France
William C. Eckelman, USA
Yashahika Fujibayashi, Japan
Jason S. Lewis, USA
Steve McQuarrie, Canada
John Mercer, Canada
John F. Valliant, Canada
Wynn Volkert, USA
Frank Wuest, Canada

2009 Abstract Reviewers

- Adam, Michael, USA
Airaksinen, Anu, Finland
Alberto, Roger, Switzerland
Ametamey, Simon, USA
Anderson, Carolyn, USA
Antoni, Gunnar, Sweden
Baldwin, Ronald, USA
Barre, Louisa, France
Behe, M., Germany
Bergmann, Ralf, Germany
Blower, Phil, United Kingdom
Boschi, Stefano, Italy
Brechbiel, Martin, USA
Brenner, Winfried, Germany
Chen, Xiaoyuan, USA
Cheng, Zhen, USA
Chi, Dae, Korea
Choe, Yearn, Korea
Clark, John, United Kingdom
Coenen, Heinz, Germany
Cutler, C., USA
Dannals, Robert, USA
Decristoforo, Clemens, Austria
Del Vecchio, Silvana, Italy
Dolle, Frederic, France
Doudet, Doris, Canada
Duatti, Adriano, Italy
Eckelman, William, USA
Eisenhut, Michael, Germany
Elsinga, Philip, The Netherlands
Friebe, Matthias, Germany
Fujibayashi, Yasuhisa, Japan
Fukumura, Toshimitsu, Japan
Goodman, Mark, USA
Green, Mark, USA
Guerin, Brigitte, Canada
Haase, Cathleen, Germany
Haberkorn, Uwe, Germany
Halldin, Christer, Sweden
Hambley, Trevor, Australia
Haubner, Roland, Austria
Hoffman, Timothy, USA
Hoppmann, Susan, Germany
Horti, Andrew, USA
Hwang, Dah-Ren, Canada
Ishiwata, Kiichi, Japan
Jivan, Salma, USA
Johayem, Anass, Switzerland
Jurisson, Silvia, USA
Kassiou, Mickael, USA
Katzenellenbogen, John, USA
Kiyono, Yasushi, Japan
Kniess, Torsten, Germany
Koch, Cam, USA
Kopka, Klaus, Germany
Koziorowski, Jacek, Denmark
Krasikova, Raisa, Russia
Krohn, Kenneth, USA
Kuhnast, Bertrand, France
Kung, Hank, USA
Laforest, Richard, USA
Langstrom, Bengt, Sweden
Lapi, Suzanne, USA
Laverman, Peter, The Netherlands
LeBars, Didier, France
Lee, Dong Soo, Korea
Lewis, Jason, USA
Link, Jeanne, USA
Liu, Shuang, USA
Llop, Jordi, Spain
Luxen, Andre, Belgium
Mach, Robert, USA
Magata, Yasuhiro, Japan
Mamat, Constantin, Germany
Martiny, Lars, Denmark
Mather, Stephen, United Kingdom
Mazzi, Ulderico, Italy
McQuarrie, Steve, Canada
Mercer, John, Canada
Mikecz, Pal, Hungary
Mishani, Eyal, Israel
Mosch, Birgit, Germany
Mu, Linjing, Switzerland
Mukherjee, Jogeshwar, USA
Nagren, Kjell, Denmark
Neumaier, Bernd, Germany
Oltenfreiter, Ruth, Belgium
O'Neil, James, USA
Orvig, Chris, Canada
Passchier, Jan, United Kingdom
Peter, Blaeuenstein, Switzerland
Pietzsch, Jens, Germany
Pike, Victor, USA
Pillarsetty, NagaVaraKishore, USA
Pomper, Martin, USA
Raffel, David, USA
Santos, Isabel, Portugal
Schibli, Roger, Switzerland
Schirmacher, Ralf, Canada
Seimbille, Yann, Switzerland
Seneca, Nicholas, USA
Smith, Suzanne, Australia
Solin, Olof, Finland
Soloviev, Dmitry, United Kingdom
Sun, Xiankai, USA
Suzuki, Kazutoshi, Japan
Tamagnan, Gilles, USA
Tavitian, Bertrand, France
Tewson, Timothy, USA
Tseng, Hsian-Rong, USA
Valliant, John, Canada
VanBrocklin, Henry, USA
Vasdev, Neil, Canada
Walther, Martin, Germany
Welch, Michael, USA
Wester, Hans-Juergen, Germany
Westera, Gerritt, Switzerland
Windhorst, Bert, The Netherlands
Wolf, Susann, Germany
Wuest, Frank, Canada
Xia, Jiaoyun, China
Yoshii, Yukie, Japan
Zalutsky, Michael, USA
Zessin, Joerg, Germany
Zhang, Xianzhong, China
Zubieta, Jon, USA

ORAL PRESENTATIONS

Session 1: Radiochemistry: Novel labelling techniques and chelates

- NEW APPROACHES TO RADIOHALOGENATION USING SOLID-STATE BORONATED REAGENTS** S1
L. Yong, M. Yao, J. F. Green, K. Hall and G. W. Kabalka*
University of Tennessee, Departments of Radiology and Chemistry, Knoxville, TN
- RADIOFLUORINATION OF UNSYMMETRICAL META-SUBSTITUTED DIARYLIODONIUM SALTS WITHIN A MICRO-REACTOR** S2
J. Chun*, S. Lu and V. W. Pike
National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD
- APPROACHES TOWARDS RADIOLABELING OF TRIFLUORO-MISONIDAZOLE WITH ¹⁸F** S3
M. Suehiro¹, O. Ouerfelli¹, G. Torchon¹, J. Kozirowski², J. Humm¹, E. Ackerstaff¹ and J. Koutcher¹
1. Memorial Sloan Kettering Cancer Center, Dept. of Medical Physics and Organic Synthesis Core Facility, New York, NY; 2. Herlev University Hospital, Dept. of Physiology, Herlev, Denmark
- SYNTHESIS OF AN MGLUR5 RADIOLIGAND, [¹⁸F]SP203B, THROUGH RADIOFLUORINATION OF A DIARYLIODONIUM SALT PRECURSOR** S4
S. Telu*, J. Chun, F. G. Simeon, S. Lu and V. W. Pike
National Institutes of Health, NIMH, Molecular Imaging Branch, Bethesda, MD
- COPPER COMPLEXES FOR IMPROVED [¹¹C]CARBON MONOXIDE REACTIVITY** S5
S. Kealey¹, C. Plisson², L. Martarello², J. Barletta², N. Long¹ and A. Gee²
1. Imperial College, Department of Chemistry, London, United Kingdom; 2. GlaxoSmithKline, Clinical Imaging Centre, London, United Kingdom
- NEW PHOSPHONIC ACID DERIVATIVES OF CROSS-BRIDGED CYCLAM AS ⁶⁴Cu CHELATORS** S6
R. Ferdani¹, D. J. Stigers², C. Sherman¹, A. L. Fiamengo¹, L. Wei¹, G. R. Weisman², E. Wong² and C. J. Anderson¹
1. Washington University School of Medicine, Department of Radiology, Saint Louis, MO; 2. University of New Hampshire, Department of Chemistry, Durham, NH
- SYNTHESIS AND LABELING OF A NOVEL CAGED-LIKE BIFUNCTIONAL CHELATOR AMBASAR FOR PREPARATION OF ⁶⁴Cu-RADIOPHARMACEUTICALS** S7
H. Cai*, J. Fissekis and P. Conti
University of Southern California, Molecular Imaging Center, Department of Radiology, Los Angeles, CA

Session 2: Microfluidics and nanotechnology

- MICROFLUIDIC RADIOSYNTHESIS: ELECTROCHEMICAL PHASE TRANSFER FOR DRYING [¹⁸F]FLUORIDE** S8
C. Rensch¹, C. Boeld¹, B. Bachmann¹, S. Riese², G. Reischl³, W. Ehrlichmann³, N. Heumesser³, M. Baller¹ and V. Samper¹
1. GE Global Research, Garching b. Munich, Germany; 2. GE Healthcare, Germany; 3. University Hospital Tuebingen, Radiopharmacy, Tuebingen, Germany
- DEVELOPMENT OF ONE-FLOW SYNTHESIS METHOD FOR N-SUCCINIMIDYL 4-[F-18] FLUOROBENZOATE ([F-18]SFB) USING MICROREACTOR FOR 3-STEP-REACTION** S9
H. Kimura¹, K. Tomatsu¹, H. Kawashima², H. Nakanishi³, E. Ozeki³, H. Saiki³, R. Iwata⁴, Y. Kuge⁵, M. Ono¹ and H. Saji¹
1. Kyoto University, Graduate School of Pharmaceutical Sciences, Kyoto, Japan; 2. Kyoto University, Graduate School of Medicine, Kyoto, Japan; 3. Technology Research Laboratory, Shimadzu Corp, Kyoto, Japan; 4. Tohoku University, CYRIC, Sendai, Japan; 5. Hokkaido University, Graduate School of Medicine, Sapporo, Japan
- MICROFLUIDIC DROPLET MIXER FOR FLUORINE-18 LABELING OF BIOMOLECULES** S10
S. Olma, K. Liu, Y. Chen, R. van Dam and C. K. Shen*
UCLA, Crump Institute for Molecular Imaging, Los Angeles, CA
- MINI-FLUIDIC CHIP FOR THE TOTAL SYNTHESIS OF PET TRACERS** S11
S. Voccia¹, J. Morelle¹, J. Aerts², C. Lemaire², A. Luxen² and G. Phillipart¹
1. Trasis SA, Liege, Belgium; 2. Universite de Liege, Centre de recherches du cyclotron, Liege, Belgium
- MODIFIED NON-IONIC SOLID SUPPORTS: A WAY TO HIGH ACTIVITY FLUORINE-18 RADIOCHEMISTRY IN MICROFLUIDIC DEVICES** S12
J. Aerts*, S. Voccia, C. Lemaire, F. Giacomelli, D. Goblet, D. Thonon, A. Plenevaux and A. Luxen
Liege University, Cyclotron Research Center, Liege, Belgium

NOVEL MICROREACTOR TECHNOLOGIES FOR ¹¹C RADIOLABELLING	S13
P. Miller ¹ , N. Long ¹ , R. Vilar ¹ , A. de Mello ¹ , A. Gee ¹ , D. Bender ³ , H. Audrain ³ , L. Golonka ⁴ and K. Malecha ⁴	
1. Imperial College London, Department of Chemistry, London, United Kingdom; 3. PET Imaging Division, Aarhus University Hospital, Aarhus, Denmark; 4. Wroclaw University of Technology, Faculty of Microsystem Electronics and Photonics, Wroclaw, Poland	
KINETICS AND ENERGETICS OF THE RADIOFLUORINATION OF DIARYLIODONIUM CHLORIDES STUDIED WITH A MICROFLUIDIC REACTOR	S14
J. Chun [*] , S. Lu and V. W. Pike	
National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD	
Session 3: Radiochemistry: Diversity in tracers and targets	
F-18 LABELLED FLUOROMETHYL-NORBORNYL-WAY. A NEW RADIOPHARMACEUTICAL TO VISUALIZE THE 5-HT1A RECEPTOR	S15
R. Al Hussainy ¹ , J. Verbeek ¹ , H. Buiters ¹ , R. Klol ¹ , C. De Bruin ² , J. Booil ² and J. Herscheid ¹	
1. Department of Nuclear Medicine & PET Research, VU University Medical Center, Amsterdam, Netherlands; 2. Department of Nuclear Medicine, Academic Medical Centre, Amsterdam, Netherlands	
SYNTHESIS AND FLUORINE-18 LABELING OF CANDIDATE METABOLICALLY-RESISTANT MGLUR5 LIGANDS	S16
M. T. Wendahl, F. G. Simeon [*] and V. W. Pike	
National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD	
SYNTHESIS OF THE KAPPA OPIOID AGONIST LIGAND [¹¹C]GR103545 WITH HIGH SPECIFIC ACTIVITY: A FACILE, ONE-POT PROCEDURE THROUGH TRANSCARBOXYLATION	S17
N. Nabulsi [*] , M. Zheng, J. Ropchan, D. Labaree and Y. Huang	
PET Center, Department of Diagnostic Radiology, Yale University, New Haven, CT	
SYNTHESIS AND IN VIVO EVALUATION OF 2-{3-[1-CARBOXY-2-(4-[¹²⁵I]IODO-BENZYL-SULFANYL)-ETHYL]-UREIDO}-PENTANEDIOIC ACID ([¹²⁵I]DCIBC)	S18
C. L. Dusich, Y. Chen [*] , M. Pullambhatla, S. Nimmagadda, C. A. Foss, J. J. Fox, M. Castanares, R. C. Mease and M. G. Pomper	
Department of Radiology, Johns Hopkins University, Baltimore, MD	
Ga-68- AND In-111-LABELED SMALL MOLECULE INHIBITORS OF PSMA FOR PROSTATE CANCER IMAGING	S19
S. R. Banerjee [*] , M. Pullambhatla, Y. Byun, G. Green, J. J. Fox, A. G. Horti, R. Mease and M. G. Pomper	
Johns Hopkins University, Radiology, Baltimore, MD	
THE FIRST TECHNETIUM-LABELED SUBSTRATES FOR HUMAN THYMIDINE KINASE 1	S20
H. Struthers [*] and R. Schibli	
ETH Zurich, Department of Chemistry and Applied Bioscience, Zurich, Switzerland	
SYNTHESIS, RADIOLABELLING AND BIOLOGICAL EVALUATION OF TARGETED METALLACARBORANE (M = ^{99m}Tc) DERIVATIVES FOR IMAGING NEURORECEPTORS	S21
A. S. Louie ¹ and J. F. Valliant ²	
1. McMaster University, Department of Chemistry, Hamilton, ON, Canada; 2. McMaster University, Departments of Chemistry and Medical Physics, McMaster Institute of Applied Radiation Sciences, Hamilton, ON, Canada	
Session 4: Click chemistry: novel developments and applications	
ALPHA SELECTIVE EPOXIDE OPENING TO INTRODUCE ¹⁸F-INTO ORGANIC MOLECULES	S22
C. Waengler [*] , E. Schirrmacher, P. Lucas and R. Schirrmacher	
McGill University, McConnell Brain Imaging Centre, MNI, Montreal, QC, Canada	
A CLICK CHEMISTRY APPROACH FOR THE DEVELOPMENT OF METALLIC RADIOTRACERS AND THERAPEUTIC AGENTS	S23
T. L. Mindt ¹ , H. Struthers ² , L. Brans ³ , B. Spingler ⁵ , D. Tourwe ³ , E. Garcia-Garayoa ⁴ and R. Schibli ²	
1. Division of Radiological Chemistry, University Hospital, Basel, Switzerland; 2. Department of Chemistry and Applied Biosciences, ETH Zurich, Zurich, Switzerland; 3. Faculty of Science, Vrije Universiteit, Brussels, Belgium; 4. Center for Radiopharmaceutical Science ETH-PSI-US, Paul Scherrer Institute, Villigen, Switzerland; 5. Institute of Inorganic Chemistry, University of Zurich, Zurich, Switzerland	
CLICK FOR PET: DEVELOPMENT AND APPLICATION OF ACCELERATED 1,3-DIPOLAR CYCLOADDITIONS OF AZIDES AND ALKYNES TO [¹⁸F]-POSITRON EMISSION TOMOGRAPHY	S24
L. S. Campbell-Verduyn ¹ , L. Mirfeizi ² , R. A. Dierckx ² , P. H. Elsinga ² and B. L. Feringa ¹	
1. Stratingh Institute for Chemistry, Rijksuniversiteit Groningen, Department of Organic Chemistry, Groningen, Netherlands; 2. University Medical Center Groningen, Rijksuniversiteit Groningen, Department of Nuclear Medicine and Molecular Imaging, Groningen, Netherlands	

LABELING OF PROTEINS WITH FLUORINE-18 VIA CLICK CHEMISTRY	S25
T. Ramenda ¹ , T. Kniess ¹ , J. Steinbach ¹ and F. Wuest ²	
1. Forschungszentrum Dresden-Rossendorf, Institute of Radiopharmacy, Dresden, Germany; 2. University of Alberta, Cross Cancer Institute, Edmonton, AB, Canada	
PEPTIDE CLICK LABELING WITH 1-(AZIDOMETHYL)-4-[18F]-FLUOROBENZENE AND SOLID PHASE SYNTHESIS OF REFERENCE COMPOUNDS	S26
D. Thonon [*] , J. Paris, C. Kech, C. Lemaire and A. Luxen	
University of Liege, Cyclotron Research Center, Liege, Belgium	
LIGAND ACCELERATION AND EXPLORATION OF REACTION PARAMETERS OF F-18 CLICK CHEMISTRY	S27
L. Mirfeizi ¹ , L. S. Campbell-Verduyn ² , B. L. Feringa ² , R. A. Dierckx ¹ and P. H. Elsinga ¹	
1. University Medical Center Groningen, University of Groningen, Dept. of Nuclear Medicine and Molecular Imaging, Groningen, Netherlands; 2. University of Groningen, Stratingh Institute for Chemistry, Groningen, Netherlands	
SYNTHESIS OF AN F-18 LABELED RAPAMYCIN ANALOGUE FOR IMAGING THE EXPRESSION OF MAMMALIAN TARGET OF RAPAMYCIN (mTOR) IN BRAIN TUMORS	S28
D. Zhou ¹ , L. A. Jones, J. Xu, W. Chu and R. H. Mach	
Washington University School of Medicine, Mallinckrodt Institute of Radiology, Saint Louis, MO	
Session 5: Radiolabeled peptides for tumor imaging	
SYNTHESIS AND RADIOPHARMACOLOGICAL EVALUATION OF 18F-LABELED BOMBESIN ANALOG [18F]BX-00374436 FOR IMAGING OF GRP RECEPTOR-EXPRESSION PROSTATE CANCER	S29
T. Ramenda ¹ , R. Bergmann ¹ , M. Friebe ² , S. Borkowski ² , A. Srinivasan ² , L. Dinkelborg ² , J. Pietzsch ¹ , J. Steinbach ¹ and F. Wuest ³	
1. Institute of Radiopharmacy, Research Center Dresden-Rossendorf, Dresden, Germany; 2. Bayer-Schering Pharma, Global Drug Discovery, Berlin, Germany; 3. University of Alberta, Department of Oncology, Edmonton, AB, Canada	
INVESTIGATION OF A NEW BOMBESIN DERIVATIVE FOR THE MOLECULAR IMAGING OF PROSTATE, BREAST, AND PANCREATIC CANCERS	S30
B. Bottenus ¹ , T. Rold ¹ , G. Sieckman ¹ , S. Sublett ² , S. S. Jurisson ² and T. Hoffman ¹	
1. HS Truman VA Hospital, Columbia, MO; 2. University of Missouri, Columbia, MO	
IN VIVO EVALUATION OF [18F]FBA-FALGEEA-NH₂ AS A PET TRACER FOR EGFRνIII IMAGING	S31
C. L. Denholt ¹ , T. Binderup ² , M. Stockhausen ⁴ , H. S. Poulsen ⁴ , M. Spang-Thomsen ⁵ , P. Hansen ³ , N. M. Gillings ¹ and A. Kjaer ²	
1. Copenhagen University Hospital, Rigshospitalet, PET & Cyclotron Unit 3982, Copenhagen, Denmark; 2. University of Copenhagen, Cluster for Molecular Imaging, Copenhagen, Denmark; 3. University of Copenhagen, IGM-Bioorganic Chemistry, Frederiksberg, Denmark; 4. Copenhagen University Hospital, Rigshospitalet, The Department of Radiation Biology, Copenhagen, Denmark; 5. University of Copenhagen, Department of Biomedical Sciences, Copenhagen, Denmark	
RADIOSYNTHESIS AND BIODISTRIBUTION OF CYCLIC RGD PEPTIDES CONJUGATED WITH A NOVEL [18F]FLUORINATED N-METHYLAMINOXY CONTAINING PROSTHETIC GROUP	S32
D. Olberg ¹ , J. Arukwe ² , M. Solbakken ² , A. Cuthbertson ² , H. Gu ³ , A. Kristian ⁴ and O. Hjelstuen ²	
1. Department of Pharmaceutics & Biopharmaceutics, University of Tromsø, Tromsø, Norway; 2. GE Healthcare Medical Diagnostics R&D, Oslo, Norway; 3. Centre for Molecular Biology and Neuroscience (CMBN), University of Oslo, Oslo, Norway; 4. Department of Tumourbiology, Institutt for kreftforskning, Rikshospitalet, Montebello, Oslo, Norway	
IN VITRO AND IN VIVO EVALUATION OF STRUCTURALLY DIVERSE CU-64-LABELED RGD PEPTIDES FOR PET IMAGING OF ν3 EXPRESSION	S33
A. L. Fiamengo [*] , Y. Ye, S. Achilefu and C. J. Anderson	
Mallinckrodt Institute of Radiology, Washington University School of Medicine, Saint Louis, MO	
VPAC1 GENE PRODUCT TARGETED PET IMAGING OF BREAST CANCER: FROM RODENTS TO HUMANS	S34
M. Thakur [*] , K. Zhang, D. Kumar, D. Penn, A. Frangos, E. Wickstrom, B. Cavanaugh, K. Brill, A. Berger, A. Rosenberg, S. Kim and C. Intenzo	
Thomas Jefferson University, Dept of Radiology, Biochem, Surgery, Philadelphia, PA	
64Cu LABELED CHLOROTOXIN AS A POTENTIAL IMAGING AGENT FOR GLIOMA	S35
R. Ferdani ¹ , A. Zheleznyak ¹ , D. B. Jacoby ² , A. Sentissi ² , C. Sherman ¹ and C. J. Anderson ¹	
1. Washington University School of Medicine, Department of Radiology, Saint Louis, MO; 2. TransMolecular, Inc., Cambridge, MA	

Session 6: Cell death and intercellular matrix**DEVELOPMENT OF AN ISATIN-5-SULFONAMIDE BASED PET PROBE FOR IMAGING APOPTOSIS IN VIVO S36**G. Smith¹, Q. Nguyen¹, M. Glaser², M. Perumal¹, E. Arstad² and E. Aboagye¹

1. Comprehensive Cancer Imaging Centre, Imperial College, London, United Kingdom; 2. MDx Discovery (part of GE Healthcare) at Hammersmith Imanet Limited, Hammersmith Hospital, London, United Kingdom

MICROPET IMAGING OF APOPTOSIS USING RADIOLABELED PEPTIDES S37W. Kwak¹, K. Wang², B. Patel¹, G. Ahn³, B. Lee², I. Kim², T. Choi³, G. J. Cheon³, S. Lee⁴, B. Ahn⁴, J. Lee⁴ and J. Yoo¹

1. Kyungpook National University School of Medicine, Dept of Molecular Medicine, Daegu, Korea; 2. Kyungpook National University School of Medicine, Dept of Biochemistry, Daegu, Korea; 3. Korea Institute of Radiological & Medical Sciences, Seoul, Korea; 4. Kyungpook National University School of Medicine, Dept of Nuclear Medicine, Daegu, Korea

NONINVASIVE IMAGING OF DEAD AND DYING CELLS BY NOVEL ORGANO ARSENICALS S38K. Kuan, A. Naik, L. Przemyslaw, L. Chinen, A. Karwa, E. Warner, C. Hemenway, J. Macdonald, T. Massamiri, M. Dyszlewski and R. Pandurangi^{*}
Covidien, Nuclear Medicine, Hazelwood, MO**18F-LABELED ISATIN AS PUTATIVE BIOMARKER FOR THE SPECIFIC IMAGING OF ACTIVATED CASPASES IN APOPTOSIS S39**K. Kopka¹, A. Faust¹, S. Hermann¹, M. Kuhlmann², S. Wagner¹, J. Klohs³, O. Schober¹, A. Wunder³ and M. Schaefers²

1. University Hospital Muenster, Department of Nuclear Medicine, Muenster, Germany; 2. European Institute of Molecular Imaging (EIMI), University of Muenster, Muenster, Germany; 3. Charite Berlin, Experimental Neurology, Working Group Molecular Imaging, Berlin, Germany

18F-LABELED PYRIMIDINE-2,4,6-TRIONES AS POTENTIAL PROBES FOR IMAGING ACTIVATED MMPs S40S. Wagner¹, H. Breyholz¹, M. Schaefers², O. Schober¹ and K. Kopka¹

1. University Hospital Muenster, Department of Nuclear Medicine, Muenster, Germany; 2. University of Muenster, European Institute of Molecular Imaging (EIMI), Muenster, Germany

FLUORINE-18 LABELING AND EVALUATION IN RATS AND TUMOR-BEARING MICE OF THE TENASCIN-C-BINDING APTAMER TTA-01 USING [18F]FPyME S41B. Kuhnast¹, R. Boisgard¹, F. Hinnen¹, M. Hecht², L. Dinklerborg², M. Friebe², B. Tavitian¹ and F. Dolle¹

1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Schering AG, CRBA Diagnostics & Radiopharmaceuticals, Berlin, Germany

RADIOLABELLED MATRIX METALLOPROTEINASE (MMP) INHIBITORS FOR IN VIVO IMAGING OF UNSTABLE PLAQUES USING PET AND SPECT 1 S42V. Pinas¹, A. Windhorst¹, A. Lammertsma¹ and B. van Eck-Smit²

1. VU University Medical Centre, De Boelelaan, Dept Nuclear Medicine & PET Research, Amsterdam, Netherlands; 2. Academic Medical Centre (AMC) Meibergdreef 9, Dept Nuclear Medicine, Amsterdam, Netherlands

Session 7: Assessment of tumor biology with radiometal tracers**ASSESSMENT OF NATRIURETIC PEPTIDE CLEARANCE RECEPTOR WITH POSITRON EMISSION TOMOGRAPHY IN HINDLIMB ISCHEMIA MODEL S43**Y. Liu¹, D. Abendschein², P. Woodard¹ and M. J. Welch¹

1. Washington University School of Medicine, Department of Radiology, St Louis, MO; 2. Washington University School of Medicine, Department of Medicine, St Louis, MO

64Cu-AMD3100 - A NOVEL IMAGING AGENT FOR TARGETING CHEMOKINE RECEPTOR CXCR4 POSITIVE TUMORS S44O. Jacobson¹, I. D. Weiss², L. Szajek³, Y. Ma¹, J. M. Farber² and D. O. Kiesewetter¹

1. Positron Emission Tomography Radiochemistry Group, NIH, NIBIB, Bethesda, MD; 2. Laboratory of Molecular Immunology, NIH, NIAID, Bethesda, MD; 3. Positron Emission Tomography Department, NIH, CC, Bethesda, MD

SYNTHESES AND PRELIMINARY APPLICATION OF 68GA-SCHIFF BASE DERIVATIVES FOR IN VIVO IMAGING OF THE P-GLYCOPROTEIN STATUS IN TUMOURS S45M. Fellner¹, W. Dillenburger², O. Thews², F. Renz³ and F. Roesch¹

1. Johannes Gutenberg University, Nuclear Institute, Mainz, Germany; 2. University Medicine Mainz, Institute of Physiology and Pathophysiology, Mainz, Germany; 3. Leibniz University of Hannover, Inorganic Chemistry Department, Hannover, Germany

EVALUATION OF A [67Ga] THIOSEMICARBAZONE COMPLEX AS TUMOR IMAGING AGENT	S46
A. R. Jalilian ² , P. Mehdipour ² , M. Akhlaghi ¹ , M. Kamali-dehghan ¹ , F. Bolourinovin ¹ and S. Moradkhani ¹ 1. Nuclear Medicine Research Group, Agricultural, Medical and Industrial Research School (AMIRS), Karaj, Iran; 2. Faculty of Pharmacy, Islamic Azad University, Tehran, Iran	
NOVEL DIMERIC GALLIUM-68 LABELED TYROSINE-DERIVATIVES – POTENTIAL TUMOR TRACERS FOR PET	S47
C. Burchardt ¹ , P. Riss ¹ , F. Zoller ¹ , S. Maschauer ² , O. Prante ² , T. Kuwert ² and F. Roesch ¹ 1. Johannes Gutenberg-University, Institute of Nuclear Chemistry, Mainz, Germany; 2. Friedrich-Alexander University, Laboratory of Molecular Imaging, Clinic of Nuclear Medicine, Erlangen, Germany	
[99mTc]TRICARBONYL-LABELED PSMA INHIBITORS FOR PROSTATE CANCER IMAGING	S48
S. R. Banerjee [*] , M. Pullambhatla, Y. Byun, J. J. Fox, R. C. Mease and M. G. Pomper Johns Hopkins University, Radiology, Baltimore, MD	
EFFECT OF CHARGE ON UPTAKE AND RETENTION OF 2-NITROIMIDAZOLE-99mTc(CO)₃ COMPLEXES IN HYPOXIC TUMORS	S49
M. B. Mallia ¹ , S. Subramanian ¹ , A. Mathur ¹ , H. Sarma ² , M. Venkatesh ¹ and S. Banerjee ¹ 1. Bhabha Atomic Research Centre, RPhD, Mumbai, India; 2. Bhabha Atomic Research Centre, RB&HSD, Mumbai, India	
Session 8: Hybrid tracer and multimodality imaging	
DUAL-MODALITY NANOPARTICLES FOR PET/MR MOLECULAR IMAGING	S50
C. Glaus ¹ , A. Hagooly ² , M. J. Welch ² and G. Bao ¹ 1. Georgia Institute of Technology, Dept. of Biomedical Engineering, Atlanta, GA; 2. Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO	
STAUDINGER LIGATION AS A CONJUGATION STRATEGY FOR MULTI-MODALITY IMAGING AND THERAPY WITH PRETARGETED ANTIBODIES	S51
D. J. Vugts ¹ , A. Vervoort ¹ , M. S. Robillard ² , R. C. Vulders ² , J. D. Herscheid ³ and G. A. van Dongen ¹ 1. VU University Medical Center, Dept of Otolaryngology/Head and Neck Surgery, Amsterdam, Netherlands; 2. Philips Research, Biomolecular Engineering, Eindhoven, Netherlands; 3. VU University Medical Center, Dept of Nuclear Medicine & PET Research, Amsterdam, Netherlands	
TRI-MODALITY IRON OXIDE NANOPARTICLES FOR TUMOR IMAGING	S52
J. Xie ¹ , K. Chen ¹ , J. Huang ² , X. Li ² and X. Chen ¹ 1. Stanford University, The Molecular Imaging Program at Stanford (MIPS), Department of Radiology and Bio-X Program, Stanford University School of Medicine, Stanford, CA; 2. Peking University, Department of Chemistry, Beijing, China	
A PET/MRI HYBRID NANO-PROBE FOR SENTINEL LYMPH NODE IMAGING	S53
J. Park ¹ , J. Choi ² , H. Nah ² , S. Woo ³ , G. An ⁴ , K. Kim ⁴ , G. J. Cheon ⁴ , Y. Chang ⁵ , J. Cheon ² , S. Lee ⁶ , J. Lee ⁶ and J. Yoo ¹ 1. Kyungpook National University School of Medicine, Department of Molecular Medicine, Daegu, South Korea; 2. Yonsei University, Department of Chemistry, Seoul, South Korea; 3. Kyungpook National University, Department of Biomedical Engineering, Daegu, South Korea; 4. Korea Institute of Radiological and Medical Sciences, Molecular Imaging Research Center, Research Institute of Radiological and Medical Sciences, Seoul, South Korea; 5. Kyungpook National University School of Medicine and Hospital, Department of Diagnostic Radiology, Daegu, South Korea; 6. Kyungpook National University School of Medicine, Department of Nuclear Medicine, Daegu, South Korea	
SOMATOSTATIN TARGETED LIPOSOMES FOR MRI / SPECT DUAL IMAGING PROBES	S54
D. Abou ¹ , D. Schuhle ² , J. Peters ² and H. Wolterbeek ¹ 1. TUDelft, Radiation and Isotopes for Health, Delft, Netherlands; 2. TUDelft, Biocatalysis and Organic Chemistry, Delft, Netherlands	
USE OF A BETA MICROPROBE SYSTEM AS AN AFFORDABLE TRANSLATIONAL TOOL COMPARED TO PET – EXAMPLES USING FDG AND 18F-FALLYPRIDE BINDING	S55
G. Warnock ¹ , D. Goblet ¹ , C. Lemaire ¹ , F. Giacomelli ¹ , M. Bahri ¹ , X. Langlois ² , A. Luxen ¹ and A. Plenevaux ¹ 1. University of Liege, Cyclotron Research Centre, Liege, Belgium; 2. Johnson & Johnson Pharmaceutical Research & Development, A Division of Janssen Pharmaceutica N.V., Beerse, Belgium	
MULTIMODALITY IMAGING PROBE FOR MONITORING CELL TRANSPLANTATION AND MIGRATION	S56
S. Pandey [*] , A. Shah, S. Panchal, B. Easwaramoorthy, C. Constantinescu, R. Coleman, R. Kant and J. Mukherjee University of California-Irvine, Preclinical Imaging Facility, Department of Psychiatry and Human Behavior, Irvine, CA	
Session 9: Process optimization	
ADVANCES IN RADIOIODINE PRODUCTION BASED ON (P,N) REACTIONS	S57
J. Comor ¹ and G. Beyer ² 1. Elex Commerce, Belgrade, Yugoslavia; 2. Isotope Technologies Dresden GmbH, Dresden, Germany	

RADIOACTIVE LABELING OF DEFINED HPMA-BASED POLYMERIC STRUCTURES: USING [18F]FETOS FOR IN VIVO IMAGING BY POSITRON EMISSION TOMOGRAPHY (PET)	S58
M. Herth ¹ , M. Barz ² , M. Jahn ¹ , V. Kramer ² , R. Zentel ² and F. Roesch ¹	
1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. University of Mainz, Institute of Organic Chemistry, Mainz, Germany	
SYNTHESES OF 18F-FLUORINATED CLINICAL PET TRACERS USING MICROWAVE CHEMISTRY	S59
R. Ortlieb*, P. Kumar and L. Wiebe	
University of Alberta, Department of Oncology, Edmonton, AB, Canada	
IN PURSUIT OF [11C]CARBON DIOXIDE WITH INCREASED SPECIFIC ACTIVITY	S60
J. Eriksson ¹ , R. Mooij ² , F. L. Buijs ¹ , B. Lambert ³ , L. F. van Rooij ¹ , P. S. Kruijer ² and A. D. Windhorst ¹	
1. VU University Medical Center, Department of Nuclear Medicine & PET Research, Amsterdam, Netherlands; 2. BV Cyclotron VU, Amsterdam, Netherlands; 3. IBA Molecular, Fleurus, Belgium	
MEASUREMENT OF THE SPECIFIC RADIOACTIVITY OF ¹¹C-LABELED PET TRACERS WITH LC-MS/MS ALONE	S61
H. U. Shetty*, C. L. Morse, Y. Zhang and V. W. Pike	
National Institutes of Health, Molecular Imaging Branch, NIMH, Bethesda, MD	
IMPROVED GC-FID MEASUREMENT OF [11C]METHYL TRIFLATE AND/OR [11C]METHYL IODIDE: IT'S EVEN EASIER THAN WE THOUGHT	S62
B. H. Mock*, B. Glick-Wilson and B. Steele	
Indiana University School of Medicine, Department of Radiology, Indianapolis, IN	
IN SILICO AND IN VITRO PROPERTIES TO CONSIDER IN THE DEVELOPMENT OF PET IMAGING RADIOTRACERS	S63
E. Briard ¹ , Z. Jiang ² , S. Desrayaud ³ , J. Reilly ² , B. Everatt ² , P. Maguire ⁴ and Y. Auberson ¹	
1. Novartis Institute of Biomedical Research, Global Discovery Chemistry, Basel, Switzerland; 2. Novartis Institute of Biomedical Research, Global Discovery Chemistry, Horsham, United Kingdom; 3. Novartis Institute of Biomedical Research, Metabolism and Pharmacokinetics, Basel, Switzerland; 4. Novartis Institute of Biomedical Research, BioMarker Development, Basel, Switzerland	

Session 10: Special topics - International Atomic Energy Agency

INTERNATIONAL COOPERATION TO STRENGTHEN SUPPLIES OF MOLYBDENUM-99 AND THE IAEA ROLE	S64
N. Ramamoorthy ¹ , I. Goldman ² and P. Adelfang ³	
1. International Atomic Energy Agency, Division of Physical and Chemical Sciences, Vienna, Austria; 2. International Atomic Energy Agency, Division of Nuclear Fuel Cycle and Waste Technology, Vienna, Austria; 3. International Atomic Energy Agency, Division of Nuclear Fuel Cycle and Waste Technology, Vienna, Austria	
IAEA ACTIVITIES ON RADIOPHARMACEUTICAL SCIENCES FOR MEMBER STATES: PROGRESS DURING 2007-2009	S65
M. R. A Pillai*, M. Haji-Saeid and N. Ramamoorthy	
International Atomic Energy Agency, Division of Physical and Chemical Sciences, Vienna, Austria	
RING-OPENING OF AZIRIDINES WITH 18F-FLUORIDE: A DIRECT METHOD FOR LABELING BIOMOLECULES FOR PET STUDIES	S66
L. Mu ¹ , U. Roehn ² , J. Becaud ¹ , M. Slopianka ² , T. Stellfeld ² , A. Fitzner ² , K. Graham ² , L. Dinkelborg ² , P. A. Schubiger ¹ , S. M. Ametamey ¹ and A. Srinivasan ²	
1. Center for Radiopharmaceutical Science of ETH, PSI and USZ, ETH Hoenggerberg, Zuerich, Switzerland; 2. Bayer Schering Pharma AG, Global Drug Discovery, Berlin, Germany	

Session 11: Peptide labelling strategies

SYNTHESIS AND IMAGING OF AN 18F-LABELED RGD PEPTIDE FOR DETECTING $\alpha v \beta 3$ INTEGRIN EXPRESSION IN VIVO	S67
H. C. Kolb*, K. Chen, J. C. Walsh, G. Chen, U. Gangadharmath, D. Kasi, P. Scott, M. Haka, T. L. Collier, H. C. Padgett, Z. Zhu, Q. Liang, T. Zhao, J. Secrest and L. F. Gomez	
Siemens Biomarker Research, Culver City, CA	
SYNTHESIS, IN VITRO AND IN VIVO EVALUATION OF A METABOLICALLY STABILIZED GLYCOPEPTOID FOR PET IMAGING OF NEUROTENSIN RECEPTOR EXPRESSION	S68
S. Maschauer ¹ , J. Einsiedel ³ , C. Hocke ¹ , M. Ocker ² , H. Huebner ³ , P. Gmeiner ³ , T. Kuwert ¹ and O. Prante ¹	
1. Friedrich-Alexander University, Laboratory of Molecular Imaging, Clinic of Nuclear Medicine, Erlangen, Germany; 2. Friedrich-Alexander University, Department of Medicine 1, University Hospital Erlangen, Erlangen, Germany; 3. Friedrich-Alexander University, Department of Chemistry and Pharmacy, Erlangen, Germany	

SITE-SPECIFIC 11C-LABELING OF PEPTIDES USING [11C]METHYL-TRIFLATE	S69
E. Sauke-Lacelle*, E. Schirrmacher, D. Jolly, M. Kovacevic and R. Schirrmacher McGill University, McConnell Brain Imaging Centre, Montreal, QC, Canada	
DOTA-SIB, A TRIFUNCTIONAL PROSTHETIC GROUP FOR MULTI-MODAL LABELING	S70
G. Vaidyanathan*, B. White, D. Affleck, X. Zhao, P. Welsh and M. Zalutsky Duke University, Radiology, Durham, NC	
TECHNETIUM-99M LABELLED MACROCYCLIC PEPTIDES AS INTEGRATED RADIOPHARMACEUTICALS	S71
J. L. Hickey*, E. J. Simpson and L. G. Luyt The University of Western Ontario, Dept of Chemistry, London, ON, Canada	
RADIOSYNTHESIS OF [64CU((S)-P-MALEIMIDO-BENZYL-NOTA)]- AND PREPARATION OF HIGH EFFECTIVE SPECIFIC ACTIVITY [64CU]-MAN-EXENDIN-4(9-39) VIA SITE-SPECIFIC PRELABELING	S72
J. Schlesinger ¹ , J. Rajander ¹ , M. A. Avila-Rodriguez ² , V. Fagerholm ¹ , P. Nuutila ³ and O. Solin ¹ 1. Turku PET Centre, University of Turku and Abo Akademi University, Turku, Finland; 2. Unidad PET/CT-Ciclotron, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico; 3. Turku PET Centre, Turku University Central Hospital, Turku, Finland	
IMAGING SEROTONIN TRANSPORTER WITH [C-11]DASB AND [C-11]AFM: A COMPARATIVE STUDY IN HUMANS	S73
N. Nabulsi ¹ , W. Williams ² , A. Neumeister ² , J. Ropchan ¹ , D. Labaree ¹ , S. Lin ¹ , S. Najafzadeh ¹ , R. Hull ¹ , B. Planeta-Wilson ¹ and R. Carson ¹ 1. PET Center, Department of Diagnostic Radiology, Yale University, New Haven, CT; 2. Department of Psychiatry, Yale University, New Haven, CT	

Session 12: Tracers for monoaminergic receptors

DEVELOPMENT OF A PET RADIOLIGAND FOR THE 5-HT1B RECEPTOR FROM A COMPOUND LIBRARY: RADIOSYNTHESIS, CHARACTERIZATION IN THE PRIMATE BRAIN AND METABOLITE ANALYSIS	S74
J. Andersson ¹ , M. E. Pierson ² , S. J. Finnema ¹ , B. Gulyas ¹ , N. Seneca ¹ , J. R. Heys ² , C. Elmore ² , L. Farde ³ and C. Halldin ¹ 1. Karolinska Institutet, Department of Clinical Neuroscience, Stockholm, Sweden; 2. AstraZeneca Pharmaceuticals, CNS Discovery, Wilmington, DE; 3. AstraZeneca Pharmaceuticals, Clinical Neuroscience, Sodertalje, Sweden	
COMPARISON OF DOPAMINE RECEPTOR BINDING OF FALLYPRIDE AND NORFALLYPRIDE	S75
N. Gulati, S. Pandey, R. Kant, C. Constantinescu, R. Coleman, M. Pan and J. Mukherjee* University of California-Irvine, Preclinical Imaging Facility, Psychiatry and Human Behavior, Irvine, CA	
EFFECT OF FENFLURAMINE ON 5-HT1B BINDING OF [11C]AZ10419369 IN THE PRIMATE BRAIN	S76
S. J. Finnema ¹ , A. Varrone ¹ , T. J. Hwang ¹ , B. Gulyas ¹ , E. Pierson ² , L. Farde ¹ and C. Halldin ¹ 1. Karolinska Institutet, Department of Clinical Neuroscience, Stockholm, Sweden; 2. AstraZeneca Pharmaceuticals, CNS Discovery, Wilmington, DE	
SYNTHESIS AND EVALUATION OF A C-11 LABELED DOPAMINE D2 SELECTIVE IMAGING AGENT	S77
S. Vangveravong ¹ , Z. Tu ¹ , J. Xu ¹ , L. A. Jones ¹ , S. Li ¹ , M. Taylor ² , R. R. Luedtke ² and R. H. Mach ¹ 1. Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO; 2. University of North Texas Health Science Center, Department of Pharmacology and Neurosciences, Fort Worth, TX	
ATOMOXETINE PRODUCES HIGH OCCUPANCY OF BOTH THE NOREPINEPRINE AND SEROTONIN TRANSPORTERS AT CLINICALLY RELEVANT DOSES IN NON-HUMAN PRIMATES: IMPLICATIONS ON TREATMENT OF DEPRESSION AND ADHD	S78
Y. S. Ding ¹ , M. Naganawa ⁴ , J. Gallezot ¹ , D. Weinzimmer ¹ , P. Maguire ² , Y. Huang ¹ , R. Carson ¹ and M. Laruelle ³ 1. Yale University School of Medicine, Diagnostic Radiology, PET Center, New Haven, CT; 2. Pfizer Global R&D, Groton, CT; 3. GlaxoSmithKline, London, United Kingdom; 4. NIRS, Chiba, Japan	
INVESTIGATION OF ONE LABELED METABOLITE OF [11C]MADAM IN RAT AND MONKEY	S79
F. Gourand ¹ , P. Emond ² , J. Bergstrom ³ , A. Takano ³ , B. Gulyas ³ , D. Guilloteau ² , L. Barre ¹ and C. Halldin ³ 1. Cycleron, CEA/DSV/I2BM/ CI-NAPS LDM-TEP /UMR 6232 Universite de Caen Basse Normandie. Laboratoire de Developpements Methodologiques en Tomographie par Emission de Positons, Caen, France; 2. INSERM U930- Universite Francois Rabelais de Tours CHRU Bretonneau, Tours, France; 3. Karolinska Institutet, Department of Clinical Neuroscience, Section of Psychiatry, Stockholm, Sweden	

- IMPROVED BRAIN UPTAKE OF 99MTCN-NOET LOADED BY TARGETED STERICALLY STABILIZED LIPOSOMES IN ICR MICE** **S80**
 T. Zheng¹, H. Zhou², R. Chen¹, Z. Li¹, Y. Xie² and H. Jia^{1*}
 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals (Beijing Normal University), Ministry of Education, College of Chemistry, Beijing, China; 2. Peking University, Department of Pharmaceutical, School of Pharmaceutical Sciences, Beijing, China

Session 13: CNS receptor targeting and drug delivery

- CHEMICAL DELIVERY SYSTEM OF METAIODOBENZYLGUANIDINE (MIBG) TO THE CENTRAL NERVOUS SYSTEM** **S81**
 F. Gourand^{1*}, S. Duval², M. Dhilly¹, A. Abbas¹, O. Tirel¹, J. Henry³, P. Emond², D. Guilloteau², D. Debruyne¹ and L. Barre¹
 1. Cycecon, CEA/DSV/I2BM/ CI-NAPS LDM-TEP /UMR 6232 Universite de Caen Basse Normandie, Laboratoire de Developpements Methodologiques en Tomographie par Emission de Positons, Caen, France; 2. INSERM U930- Universite Francois Rabelais de Tours CHRU Bretonneau, Tours, France; 3. IFREMER UMR 100 Laboratoire de Biologie et Biotechnologies Marines, Physiologie et Ecophysiologie des Mollusques Marins, Universite de Caen Basse- Normandie, Caen, France

- BRAIN-SPECIFIC AND POLYFUNCTIONAL DENDRITIC RADIOPHARMACEUTICALS** **S82**
 G. Lamanna¹, D. Felder-Flesch¹, D. Brasse³ and J. Steibel²
 1. Institut de Physique et Chimie des Materiaux de Strasbourg, UMR CNRS/ULP 7504, Strasbourg Cedex 2, France; 2. Laboratoire d'imagerie et de Neurosciences Cognitives, UMR CNRS/ULP 7191, Strasbourg, France; 3. Institut Pluridisciplinaire Hubert Curien, Groupe IMABIO, Strasbourg Cedex 2, France

- SYNTHESIS AND EVALUATION OF N-(4-[11C]METHOXYPHENETHYL)ARACHIDONYLAMIDE AS PET RADIOLIGAND FOR IN VIVO IMAGING OF FATTY ACID AMIDE HYDROLASE IN THE BRAIN** **S83**
 L. Wyffels^{1*}, G. G. Muccioli², S. De Bruyne¹, L. Moerman¹, D. M. Lambert² and F. De Vos¹
 1. University Ghent, Lab. Radiopharm., Ghent, Belgium; 2. UCL, Dep. Pharm. Chem. Radiopharm., Brussels, Belgium

- IN VITRO AND IN VIVO CHARACTERIZATION OF [F-18]MK-1312: A PET TRACER FOR QUANTIFICATION OF MGLUR1 RECEPTOR OCCUPANCY BY MK-5435** **S84**
 W. Eng¹, H. Kawatomo², S. O'Malley¹, S. Krause¹, S. Patel¹, C. Ryan¹, K. Riffel¹, S. Ito², G. Suzuki², J. Cook¹, S. Ozaki², H. Ohta², D. Burns¹, R. Hargreaves¹ and E. Hosteller^{1*}
 1. Merck Research Laboratories, West Point, PA; 2. Merck Research Laboratories, Tsukuba, Japan

- SYNTHESIS AND PRELIMINARY EVALUATION OF [11C]JHU87728, A FLUOROPIPERIDINYL ANALOG OF THE CB1 RADIOLIGAND [11C]OMAR ([11C]JHU75528)** **S85**
 Y. Gao, D. P. Holt, H. T. Ravert, J. Hilton, H. Kuwabara, D. F. Wong, R. F. Dannals and A. G. Horti^{*}
 The Johns Hopkins University, Division of Nuclear Medicine, Baltimore, MD

- SYNTHESIS AND MICROPET EVALUATION OF THE RADIOLABELLED P-GLYCOPROTEIN INHIBITOR [11C]ELACRIDAR** **S86**
 B. Doerner^{1*}, F. Bauer¹, S. Mairinger³, C. Kuntner³, G. Stundner³, J. Bankstahl⁴, M. Mueller², T. Erker¹ and O. Langer³
 1. University of Vienna, Dept. of Medicinal Chemistry, Vienna, Austria; 2. Medical University of Vienna, Dept. of Clinical Pharmacology, Vienna, Austria; 3. Austrian Research Centers GmbH-ARC, Dept. of Radiopharmaceuticals & microPET Imaging, Seibersdorf, Austria; 4. University of Veterinary Medicine Hannover, Dept. of Pharmacology, Toxicology & Pharmacy, Hannover, Germany

- RADIOSYNTHESIS OF AN IMPROVED AMYLOID PROBE, [11C]AZD2184: PET CHARACTERIZATION IN THE CYNOMOLGUS MONKEY AND HUMAN BRAIN** **S87**
 J. Andersson^{1*}, K. Varnas¹, Z. Cselenyi², B. Gulyas¹, S. J. Finnema¹, B. Swahn³, S. Nyberg², L. Farde² and C. Halldin¹
 1. Karolinska Institutet, Department of Clinical Neuroscience, Stockholm, Sweden; 2. AstraZeneca Pharmaceuticals, Clinical Neuroscience, Sodertalje, Sweden; 3. AstraZeneca R&D, Department of Medical Chemistry, Sodertalje, Sweden

Session 14: Tracers for neuroinflammation and plaque imaging

- THREE NEW 18F-LABELLED PHENYLBENZOTHAZOLES AS POTENTIAL AMYLOID IMAGING AGENTS** **S88**
 K. Serdons^{1*}, K. Van Laere², P. Janssen³, H. Kung⁴, G. Bormans¹ and A. Verbruggen¹
 1. Laboratory for Radiopharmacy, K.U. Leuven, Leuven, Belgium; 2. Department of Nuclear Medicine, U.Z. Gasthuisberg, Leuven, Belgium; 3. Department of Neurophysiology, K.U.Leuven, Leuven, Belgium; 4. Department of Radiology, University of Pennsylvania, Philadelphia, PA

- [18F]FBTA2 AS A POTENTIAL RADIOLIGAND FOR IMAGING BRAIN BETA-AMYLOID** **S89**
 L. Cai^{*}, J. S. Liow, B. Houlihan, C. L. Morse, R. L. Gladding, R. B. Innis and V. W. Pike
 National Institute of Mental Health, National Institutes of Health, Molecular Imaging Branch, Bethesda, MD

SYNTHESIS AND EVALUATION OF AROMATIC FLUORINATED [F-18]PIB ANALOGS AS ABETA PLAQUE PET IMAGING AGENTS	S90
N. Mason ¹ , W. Klunk ² , M. Debnath ² , N. Flatt ¹ , G. Huang ¹ , L. Shao ² and C. A. Mathis ¹	
1. University of Pittsburgh, Radiology, PET Facility, Pittsburgh, PA; 2. University of Pittsburgh, Psychiatry, Pittsburgh, PA	
SYNTHESIS AND EVALUATION OF FLUORINE-18 LABELED BENZOTHAZOLE ANALOGUES FOR AMYLOID PLAQUE IMAGING PROBE	S91
B. C. Lee ¹ , J. S. Kim ¹ , B. S. Kim ¹ , Y. S. Jeon ¹ , J. Y. Son ¹ , B. S. Moon ² , J. Jeong ³ and S. E. Kim ¹	
1. Seoul National of University Bundang Hospital, Dept of Nuclear Medicine, University College of Medicine, Seongnam, South Korea; 2. Inha University, Dept of Chemistry, Incheon, South Korea; 3. Seoul National of University Hospital, Dept of Nuclear Medicine, University College of Medicine, Seoul, South Korea	
EVALUATION OF [11C]DAA1106 FOR IMAGING AND QUANTIFICATION OF NEUROINFLAMMATION IN A RAT MODEL OF HERPES ENCEPHALITIS	S92
J. Doorduyn ¹ , H. C. Klein ² , R. A. Dierckx ¹ and E. F. de Vries ¹	
1. University Medical Center Groningen, University of Groningen, Nuclear Medicine and Molecular Imaging, Groningen, Netherlands; 2. University Medical Center Groningen, University of Groningen, University Center of Psychiatry, Groningen, Netherlands	
CARBON-11 LABELING AND PRELIMINARY EVALUATION OF SSR180575, A HIGHLY PROMISING RADIOLIGAND FOR IMAGING THE PERIPHERAL BENZODIAZEPINE RECEPTOR WITH PET	S93
F. Dolle ¹ , H. Boutin ¹ , C. Thominaux ¹ , F. Chauveau ¹ , R. Boisgard ¹ , S. Demphel ¹ , S. Roy ² , S. Boisnard ² , T. Rooney ³ , J. Benavides ³ , P. Hantraye ⁴ and B. Tavitian ¹	
1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Sanofi Aventis, ICMS, Chilly Mazarin, France; 3. Sanofi Aventis, CNS Department, Vitry sur Seine, France; 4. CEA, I2BM MIRCen, Orsay, France	
IMPROVING TUMOR-TARGETING CAPABILITY AND THERAPEUTICAL EFFICACY OF 111IN/90Y LABELED CYCLIC RGD DIMER WITH PEG4 LINKERS	S94
J. Shi ¹ , B. Jia ¹ , X. Jin ¹ , Y. Kim ² , S. Liu ² and F. Wand ¹	
1. Peking University, Medical Isotopes Research Center, Beijing, China; 2. Purdue University, School of Health Sciences, West Lafayette, IN	
Session 15: Targeting strategies and therapy	
TARGETED RADIONUCLIDE THERAPY OF MELANOMA: ANTI-TUMOURAL EFFICACY OF A NEW IODINE-131 LABELLED AGENT	S95
M. Bonnet ¹ , J. Papon ¹ , F. Mishellany ² , P. Labarre ¹ , J. Maublant ³ , F. Penault-Llorca ² , A. Cayre ² , E. Miot-Noirault ¹ , J. Madelmont ¹ , J. Chezal ¹ and N. Moins ¹	
1. EA4231, Universite d'Auvergne, CJP, Clermont-Ferrand, France; 2. Laboratoire d'anatomo-pathologie, Centre Jean Perrin, Clermont-Ferrand, France; 3. Service de medecine nucleaire, Centre Jean Perrin, Clermont-Ferrand, France	
TO BE OR NOT TO BE – Tb OR Lu? – BIOLOGICAL EVALUATION OF Tb-161-DOTA-TYR3-OCTREOTATE	S96
C. S. Cutler ¹ , M. Cantorias ¹ , J. C. Kelsey ¹ , H. P. Engelbrecht ¹ , L. J. Forbis ¹ , M. F. Embree ¹ , S. L. Wilder ¹ , J. R. Lever ² , L. D. Watkinson ⁴ , T. L. Carmack ⁴ , M. R. Lewis ⁴ , H. M. Bigott-Hennkens ³ and S. F. Dannoon ³	
1. University of Missouri, Research Reactor Center, Columbia, MO; 2. University of Missouri, Department of Radiology, Columbia, MO; 3. University of Missouri, Chemistry Department, Columbia, MO; 4. Harry S. Truman Memorial Veterans Hospital, Columbia, MO	
STABILIZED SULFATED CHOLECYSTOKININ-8 (CCK-8) ANALOGUES LABELED WITH IN-111 FOR TARGETING CCK RECEPTOR-POSITIVE TUMORS	S97
P. Laverman ¹ , S. Roosenburg ¹ , A. Eek ¹ , W. Oyen ² , M. De Jong ³ , F. Rutjes ² , F. Van Delft ² and O. Boerman ¹	
1. Radboud University Nijmegen Medical Centre, Dept of Nuclear Medicine, Nijmegen, Netherlands; 2. Radboud University Nijmegen, Dept of Synthetic Organic Chemistry, Nijmegen, Netherlands; 3. Erasmus MC, Dept of Nuclear Medicine, Rotterdam, Netherlands	
INORGANIC NANOPARTICLE MONOCLONAL ANTIBODY CONJUGATES	S98
S. Mirzadeh ¹ , J. Woodward ² , R. F. Standaert ³ , A. J. Rondinone ² and S. J. Kennel ⁴	
1. Oak Ridge National Laboratory (ORNL), Nuclear Science and Technology Division, TN; 2. ORNL, Chemical Sciences Division, TN; 3. ORNL, Life Sciences Division, TN; 4. University of TN, Graduate School of Medicine, Knoxville, TN	
SITE-SPECIFICALLY 89ZR-RADIOLABELED MONOCLONAL ANTIBODIES FOR IMMUNOPET IMAGING	S99
J. Tinianow ¹ , H. Gill ¹ , A. Ogasawara ¹ , J. Flores ¹ , A. Vanderbilt ¹ , H. Raab ² , R. Vandlen ² , S. Williams ¹ and J. Marik ¹	
1. Biomedical Imaging, Genentech Inc., South San Francisco, CA; 2. Protein Chemistry, Genentech Inc., South San Francisco, CA	

COPPER-64 LABELING OF LIPOSOMES: POST-LABELING METHOD USING BIFUNCTIONAL LIGAND (BFL)	S100
J. Seo ¹ , C. F. Meares ² and K. W. Ferrara ¹	
1. University of California Davis, Dept of Biomedical Engineering, Davis, CA; 2. University of California Davis, Dept of Chemistry, Davis, CA	

POSTER PRESENTATIONS

Interdisciplinary research posters

P001	FOLATE RECEPTOR TARGETING WITH DENDRIMER 99MTc-PAMAM-FOLIC ACID CONJUGATE	S101
Y. Shen*, Y. Zhang, Y. Sun and X. Xu		
Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Radiopharmaceuticals Center, Shanghai, China		
P002	IN VIVO ANTIBODY UPTAKE AND PHYSIOLOGICAL MEASUREMENTS IN MOUSE LUNG AND MUSCLE: A COMPARTMENTAL PHYSIOLOGICALLY-BASED PHARMACOKINETIC (PBPK) MODELING APPROACH	S102
C. A. Boswell*, X. C. Lei, M. Schweiger, M. Reich, G. Z. Ferl, F. Theil, P. J. Fielder and L. A. Khawli		
Genentech, Inc., South San Francisco, CA		
P003	IN VIVO STABILITY OF RADIOLABELED BOMBESIN ANALOGS IN MICE	S103
W. A. Breeman*, E. de Blois, R. Schroeder and E. P. Krenning		
Erasmus MC, Nuclear Medicine, Rotterdam, NL, Netherlands		
P004	A POTENTIAL METHOD TO MONITOR ENZYME REPLACEMENT THERAPY FOR TREATMENT OF GAUCHER DISEASE USING PET	S104
C. P. Phenix ¹ , B. P. Rempel ² , M. J. Adam ¹ and S. G. Withers ²		
1. Nuclear Medicine, TRIUMF, Vancouver, BC, Canada; 2. Department of Chemistry, UBC, Vancouver, BC, Canada		
P005	TIME-DEPENDENT PREFERENTIAL IN VIVO D2 OCCUPANCY BY AMISULPRIDE IN THE MEDIAL STRIATUM – CONTINUOUS MEASUREMENT USING A BETA MICROPROBE SYSTEM	S105
G. Warnock ¹ , D. Goblet ¹ , C. Lemaire ¹ , F. Giacomelli ¹ , M. Bahri ¹ , X. Langlois ² , A. Luxen ¹ and A. Plenevaux ¹		
1. University of Liege, Cyclotron Research Centre, Liege, Belgium; 2. Johnson & Johnson Pharmaceutical Research & Development, A Division of Janssen Pharmaceutica N.V., Beerse, Belgium		
P006	THE USEFULNESS OF AN ARTERIOVENOUS SHUNT COMBINED WITH A BETA MICROPROBE FOR THE MEASUREMENT OF INPUT FUNCTION IN RATS	S106
G. Warnock ¹ , D. Goblet ¹ , C. Lemaire ¹ , F. Giacomelli ¹ , M. Bahri ¹ , X. Langlois ² , A. Luxen ¹ and A. Plenevaux ¹		
1. University of Liege, Cyclotron Research Centre, Liege, Belgium; 2. Johnson & Johnson Pharmaceutical Research & Development, A Division of Janssen Pharmaceutica N.V., Beerse, Belgium		
P007	EXPERIMENTAL ANIMAL STUDIES IN DEVELOPMENT AND EVALUATION OF NEW RADIOLABELED MOLECULES	S107
E. Janevik-Ivanovska ¹ , I. Djorgoski ² , K. Mladenovska ³ , B. Crcareva ¹ , M. Zdraveska Kocovska ¹ and M. Stojmirov ¹		
1. University St. Cyril and Methodius, Faculty of Medicine, Institute of Pathophysiology and Nuclear Medicine, Skopje, Macedonia; 2. University St. Cyril and Methodius, Faculty of Natural Science, Institute of Biology, Skopje, Macedonia; 3. University St. Cyril and Methodius, Faculty of Pharmacy, Skopje, Macedonia		
P008	COMPARISON OF REFERENCE TISSUE MODEL VERSUS TWO COMPARTMENT MODEL WITH INPUT FUNCTION FOR [18F]FALLYPRIDE MODELLING. A COMBINED MICROPET - BETA MICROPROBE STUDY IN RATS	S108
M. Bahri ¹ , G. Warnock ¹ , D. Goblet ¹ , C. Lemaire ¹ , X. Langlois ² , A. Seret ³ , A. Luxen ¹ and A. Plenevaux ¹		
1. University of Liege, Cyclotron Research Center, Liege, Belgium; 2. Johnson & Johnson Pharmaceutical Research & Development, A Division of Janssen Pharmaceutica N.V., Beerse, Belgium; 3. University of Liege, Experimental Medical Imaging, Liege, Belgium		
P009	RADIOCHEMICAL LIMITATIONS ENCOUNTERED DURING PREPARATIONS OF RADIOPEPTIDES FOR PEPTIDE RECEPTOR-MEDIATED PROCESSES IN ANIMAL SPECT	S109
W. A. Breeman*, E. deBlois and E. P. Krenning		
Erasmus MC, Department of Nuclear Medicine, Rotterdam, NL, Netherlands		
P010	SERUM STABILITY STUDIES OF F-18-ETHYL-RHODAMINE B	S110
V. Gottumukkala, T. K. Heinrich, S. T. Treves and A. B. Packard*		
Childrens Hospital, Boston, Division of Nuclear Medicine, Boston, MA		

P011	RADIO-ACTIVATION OF TiO₂ NANOPARTICLES FOR USE IN NANOTOXICOLOGY STUDIES, AND AS A MODEL SUBSTANCE FOR ACTIVATION OF PHARMACEUTICALLY RELEVANT NANOPARTICLES	S111
	N. Gibson, R. Del Torchio, M. Farina, F. Simonelli, I. Cydzik, U. Holzwarth and K. Abbas [*] Joint Research Centre, Institute for Health and Consumer Protection, Ispra (VA), Italy	
P012	FEASIBILITY OF USING C-14 LABELLED MP4A FOR THE ASSESSMENT OF ACETYLCHOLINESTERASE INHIBITOR IN TISSUE SAMPLES WITH MINIMAL DILUTION	S112
	T. Kikuchi [*] , T. Okamura, K. Fukushi and T. Irie National Institute of Radiological Sciences, Molecular Probe Group, Chiba, Japan	
P013	TOXICITY DETERMINATION OF COPPER LABELING THIOSEMICARBAZONES USING BRINE SHRIMP TEST	S113
	A. Novinrouz [*] , A. Jalilian, M. Heydariéh and A. Majdabadi Agricultural, Medical and Industrial Research School (AMIRS-NSTRI), Karaj, Iran	
P014	THE IMAGING PROBE DEVELOPMENT CENTER: FACILITATING INTERDISCIPLINARY IMAGING RESEARCH THROUGH THE PRODUCTION AND SUPPLY OF MOLECULAR PROBES	S114
	G. L. Griffiths [*] , C. M. Wilson, N. Shenoy, H. Wu, B. Teng, S. M. Cheal and Z. Shi National Institutes of Health, NHLBI, Imaging Probe Development Center, Rockville, MD	
P015	PREPARATION OF ^{99m}Tc-ISOSULFAN BLUE FOR USE IN AXILLARY LYMPH NODE LOCALIZATION IN RATS	S115
	D. Ilem ¹ , U. Yararbas ² , B. Zengel ³ , K. Koseoglu ² , G. Ertan ⁴ and M. Asikoglu ¹ 1. Ege University, Faculty of Pharmacy, Department of Radiopharmacy, Izmir, Turkey; 2. Ege University, Faculty of Medicine, Department of Nuclear Medicine, Izmir, Turkey; 3. Izmir Research and Training Hospital, General Surgery Department, Izmir, Turkey; 4. Ege University, Faculty of Pharmacy, Department of Pharmaceutical Technology, Izmir, Turkey	
P016	ESTIMATES FOR THE BIODISTRIBUTION AND DOSIMETRY OF ⁶⁸Ge IN ⁶⁸Ga PET IMAGING	S116
	M. Konijnenberg ¹ and W. A. Breeman ² 1. Covedien, R&D, Petten, Netherlands; 2. Erasmus MC, Dept Nuclear Medicine, Rotterdam, Netherlands	

Molecular targets: Inflammation & metabolic disease posters

P017	SYNTHESIS AND FLUORINE-18 LABELING OF 6-FLUORO-PBR28, A CANDIDATE FOR IMAGING THE PERIPHERAL BENZODIAZEPINE RECEPTOR WITH PET	S117
	A. Damont [*] , F. Hinnen, F. Lemee, B. Kuhnast, R. Boisgard, B. Tavitian and F. Dolle CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France	
P018	[¹⁸F]FB-IL2: A NOVEL PET TRACER FOR DETECTION OF ACTIVATED T-LYMPHOCYTES	S118
	V. Di Galleonardo ¹ , E. F. de Vries ¹ , M. Chianelli ³ , R. A. Dierckx ¹ and A. Signore ² 1. University Medical Center Groningen, University of Groningen, Department of Nuclear Medicine and Molecular Imaging, Groningen, Netherlands; 2. University Sapienza, Nuclear Medicine Unit, 2nd Faculty of Medicine, Rome, Italy; 3. Regina Apostolorum Hospital, Albano, Italy	
P019	SUITABILITY OF ENDOTHELIN RECEPTOR SUBTYPE A AS A TARGET FOR PET IMAGING OF ATHEROSCLEROTIC PLAQUES	S119
	T. L. Ross ¹ , M. Honer ¹ , S. Belli ⁴ , S. D. Kraemer ⁴ , J. Kelm ² , S. P. Hoerstrup ² , P. Kaufmann ³ , A. P. Schubiger ¹ and S. M. Ametamey ¹ 1. ETH Zurich, Animal Imaging Center - PET / Radiopharmaceutical Science, Zurich, Switzerland; 2. University Hospital Zurich, Cardiovascular Surgery Research, Tissue Engineering, Zurich, Switzerland; 3. University Hospital Zurich, Cardiovascular Research, Nuclear Medicine, Zurich, Switzerland; 4. ETH Zurich, Biopharmacy / Radiopharmaceutical Science, Zurich, Switzerland	
P020	[⁶⁸Ga]FZ.MZ: A POTENTIAL IMAGING AGENT FOR ARTERIOSCLEOTIC PLAQUES	S120
	F. Zoller ¹ , P. J. Riss ¹ , F. Montforts ² and F. Roesch ¹ 1. Johannes Gutenberg University, Institute of Nuclear Chemistry, Mainz, Germany; 2. Bremen University, Institute of Organic Chemistry, Bremen, Germany	
P021	A RADIOIODINATED LUMIRACOXIB DERIVATIVE: SYNTHESIS AND IN VITRO/IN VIVO EVALUATION AS A SPECT TRACER FOR CYCLOOXYGENASE-2 EXPRESSION	S121
	Y. Kuge ² , N. Obokata ¹ , H. Kimura ¹ , Y. Katada ¹ , T. Temma ¹ , Y. Sigimoto ¹ , K. Aita ² , K. Seki ² , N. Tamaki ² and H. Saji ¹ 1. Kyoto University, Graduate School of Pharmaceutical Sciences, Kyoto, Japan; 2. Hokkaido University, Graduate School of Medicine, Sapporo, Japan	
P022	[¹⁸F]DPA-714, [¹⁸F]PBR111 AND [¹⁸F]FEDAA1106 AS POTENT PBR PET-IMAGING CANDIDATES: RADIOSYNTHESIS AND COMPARATIVE STUDIES	S122
	A. Damont ¹ , N. van Camp ¹ , B. Kuhnast ¹ , F. Hinnen ¹ , R. Boisgard ¹ , F. Chauveau ¹ , H. Boutin ¹ , K. Probst ² , J. Clark ² , A. Katsifis ³ , M. Kassiou ⁴ , B. Tavitian ¹ and F. Dolle ¹ 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. University of Edinburgh, Queen's Medical Research Institute, Edinburgh, United Kingdom; 3. ANSTO, Radiopharmaceuticals Research Institute, Lucas Heights, Australia; 4. University of Sydney, Brain and Mind Research Institute, Sydney, Australia	

P023	SYNTHESIS AND EVALUATION OF [11C]DAC AS A NOVEL PERIPHERAL-TYPE BENZODIAZEPINE RECEPTOR PET LIGAND IN KAINIC ACID-LESIONED RAT	S123
	M. Zhang*, K. Yanamoto, K. Kumata, T. Yamasaki, J. Yui, K. Kawamura, A. Hatori and K. Suzuki National Institute of Radiological Sciences, Department of Molecular Probes, Molecular Imaging Center, Chiba, Japan	
P024	SYNTHESIS AND EVALUATION OF [18F]FEAC AND [18F]FEDAC AS TWO NOVEL POSITRON EMISSION TOMOGRAPHY LIGANDS FOR PERIPHERAL-TYPE BENZODIAZEPINE RECEPTOR IN THE BRAIN	S124
	M. Zhang*, K. Kumata, K. Yanamoto, T. Yamasaki, J. Yui, K. Kawamura, A. Hatori and K. Suzuki National Institute of Radiological Sciences, Department of Molecular Probes, Molecular Imaging Center, Chiba, Japan	
Molecular targets: Tissue and tumor microenvironment and metastasis posters		
P025	PREPARATION AND BIODISTRIBUTION OF [61CU] DIACETYL-BIS-(N4-METHYLTHIOSEMICARBAZONE) AS A POSSIBLE PET RADIOPHARMACEUTICAL	S125
	A. R. Jalilian ² , N. Rostampour ^{*1} , H. Zandi ³ , M. Akhlaghi ⁴ and P. Rowshanfarzad ⁵ 1. Hamadan University of Medical Sciences, Dept of Medical Physics, Hamadan, Iran; 2. Agricultural Medical and Industrial Research School (AMIRS, NSTRI), Nuclear Medicine Research Group, Karaj, Iran; 3. Azad Islamic Univeristy, Science and Research Branch, Young Researcher Club, Tehran, Iran; 4. Agricultural Medical and Industrial Research School (AMIRS, NSTRI), Nuclear Medicine Research Group, Karaj, Iran; 5. Agricultural Medical and Industrial Research School (AMIRS, NSTRI), Nuclear Medicine Research Group, Karaj, Iran	
P026	PREPARATION AND BIOLOGICAL EVALUATION OF [61CU]BLEOMYCIN COMPLEX AS A POSSIBLE PET RADIOPHARMACEUTICAL FOR FIBROSARCOMA TUMOR IMAGING	S126
	A. R. Jalilian ¹ , H. Zandi ² , A. Tavakol ² , N. Rostampour ³ , P. Roshan Farzad ¹ , M. Akhlaghi ¹ , M. Khoshdel ² and F. Bolourinovin ¹ 1. Nuclear Medicine Research Group, Agricultural, Medical and Industrial Research School (AMIRS), Karaj, Iran; 2. Islamic Azad University Science and Research Branch, Young Researchers Club, Tehran, Iran; 3. Department of Medical Physics, School of Medicine, Hamadan University of Medical Sciences, Hamadan, Iran	
P027	IN VITRO AND IN VIVO EVALUATION OF HYDROPHILIC 64CU-BIS(THIOSEMICARBAZONE) BIOCONJUGATES FOR PET IMAGING OF HYPOXIA	S127
	S. R. Bayly ¹ , H. M. Betts ¹ , M. B. Theobald ¹ , P. J. Barnard ¹ , R. Huetting ¹ , J. P. Holland ¹ , J. Declercq ³ , J. R. Dilworth ¹ , R. C. King ² , D. J. Honess ² and M. Christlieb ² 1. University of Oxford, Siemens Oxford Molecular Imaging Laboratory, Department of Chemistry, Oxford, United Kingdom; 2. University of Oxford, CRUK/MRC Gray Institute for Radiation Oncology and Biology, Oxford, United Kingdom; 3. Siemens Molecular Imaging, Oxford, United Kingdom	
P028	RADIOSYNTHESIS OF [I-131]IAZGP VIA NUCLEOPHILIC SUBSTITUTION AND ITS BIOLOGICAL EVALUATION AS A HYPOXIA MARKER IN COMPARISON WITH CONVENTIONALLY-PRODUCED [I-131]IAZGP	S128
	M. Suehiro*, P. Burgman, S. Carlin, S. Burke, G. Yang, O. Ouerfelli, J. O'Donoghue, C. Ling and J. Humm Memorial Sloan-Kettering Cancer Center, Dept. of Medical Physics and Organic Synthesis Core Facility, New York, NY	
P029	PHOSPHONATE-COMPLEXES OF GALLIUM-68 FOR BONE TUMOUR IMAGING	S129
	M. Fellner ^{*1} , N. Loktionova ¹ , P. Riss ¹ , O. Thews ² , I. Lukes ³ , C. Geraldès ⁴ and F. Roesch ¹ 1. Johannes Gutenberg University, Nuclear Institute, Mainz, Germany; 2. University Medicine, Institute of Physiology and Pathophysiology, Mainz, Germany; 3. Charles University, Inorganic Chemistry Department, Prague, Czech Republic; 4. University of Coimbra, Biochemistry Department, Coimbra, Portugal	
P030	pH LOW INSERTION PEPTIDE: RADIOIODINATION AND pH-DEPENDENT TUMOR CELL ACCUMULATION	S130
	A. Lebedev ¹ , V. Divilov ¹ , O. Andreev ² , D. M. Engelman ³ , Y. Reshetnyak ² and J. S. Lewis ¹ 1. Memorial Sloan-Kettering Cancer Center, Department of Radiology, New York, NY; 2. University of Rhode Island, Physics Department, Kingston, RI; 3. Yale University, Department of Molecular Biophysics and Biochemistry, New Haven, CT	
P031	FLUORINE-18 LABELING OF A NEW MELANIN-TARGETING TRACER FOR MELANOMA IMAGING WITH PET	S131
	B. Kuhnast ^{*1} , A. Maisoniais ² , F. Hinnen ¹ , R. Boisgard ¹ , J. Chezal ² , N. Moins ² , J. Madelmont ² , B. Tavitian ¹ and F. Dolle ¹ 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Universite Clermont 1, EA 4231, Clermont Ferrand, France	
P032	SYNTHESIS AND EVALUATION OF 99mTc COMPLEXES OF 4-NITROIMIDAZOLE AS POTENTIAL AGENTS FOR TARGETING TUMOR HYPOXIA	S132
	F. Wang, X. Zhang, J. Zhang, J. Lu and X. Wang* Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China	

P033	SYNTHESIS AND EVALUATION OF ^{99m}Tc COMPLEXES OF 2-METHYL-5-NITROIMIDAZOLE AS POTENTIAL AGENTS FOR TUMOR HYPOXIA IMAGING	S133
	F. Wang, X. Wang ¹ , X. Zhang, J. Zhang and J. Lu Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China	
P034	DISCOVERY AND EVALUATION OF A POTENTIAL MOLECULAR IMAGING AGENT FOR CATHEPSIN B	S134
	P. E. Edem ^{*1} and J. F. Valliant ² 1. McMaster University, Department of Chemistry, Hamilton, ON, Canada; 2. McMaster University, McMaster Institute for Applied Radiation Sciences, Hamilton, ON, Canada	
P035	SYNTHESIS AND BIOLOGICAL EVALUATION OF A NEGATIVELY CHARGED ^{99m}Tc-LABELLED AMINOETHYLBENZENE SULFONAMIDE CONJUGATE FOR IN VIVO VISUALISATION OF CARBONIC ANHYDRASE IX (CA IX) EXPRESSION AS A SURROGATE MARKER OF TUMOR HYPOXIA	S135
	V. Akurathi ¹ , L. Dubois ² , N. Lieuwes ² , S. K. Chitneni ¹ , B. Cleyhens ¹ , A. Verbruggen ¹ , P. Lambin ² and G. Bormans ^{*1} 1. Katholieke Universiteit Leuven, Laboratory for Radiopharmacy, Leuven, Belgium; 2. University of Maastricht, Department of Radiation Oncology (MAASTRO), Maastricht, Netherlands	
Novel radiochemistry: F18 posters		
P036	AUTOMATED SYNTHESIS OF ¹⁸F-LABELLED ANALOGUES OF ETOMIDATE, VOROZOLE AND HARMINE USING COMMERCIAL PLATFORM	S136
	O. Rahman ^{*1} , M. Erlandsson ² , E. Blom ² and B. Langstrom ² 1. GE Healthcare, Uppsala Applied Science Laboratory, Uppsala, Sweden; 2. Uppsala University, Department of Biochemistry and Organic Chemistry, Uppsala, Sweden	
P037	¹⁸F LABELED GALACTOSYL-NEOGLYCOALBUMIN FOR IMAGING THE HEPATIC ASIALOGLYCOPROTEIN RECEPTOR	S137
	W. Yang ¹ , T. Mou ¹ , C. Peng ² , X. Zhang ¹ , Z. Wu ³ , Y. Ma ² and F. Li ³ 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals (Beijing Normal University), Ministry of Education, College of Chemistry, Beijing, China; 2. Capital Medical University, PET Center of Xuanwu Hospital, Beijing, China; 3. CAMS and PUMC, Department of Nuclear Medicine, PUMC Hospital, Beijing, China	
P038	[¹⁸F]FEANGA: A PET TRACER FOR EXTRACELLULAR BETA-GLUCURONIDASE	S138
	I. Antunes ^{*1} , E. F. de Vries ¹ , P. H. Elsinga ¹ , H. Haisma ² and R. A. Dierckx ¹ 1. University Medical Center Groningen, University of Groningen, Dept. of Nuclear Medicine and Molecular Imaging, Groningen, Netherlands; 2. University Center for Pharmacy, University of Groningen, Dept. of Therapeutic Gene Modulation, Groningen, Netherlands	
P039	AUTOMATED SYNTHESIS OF ¹⁸F-LABELED CELL-PENETRATION PEPTIDE AS PET TRACER	S139
	G. Tang ¹ , X. Tang ² , X. Zhang ¹ , X. Wang ³ , B. Li ³ and M. Wang ³ 1. PET-CT Center, The First Affiliated Hospital, Sun Yat-Sen University, Guangzhou, China; 2. Science College, South China Agricultural University, Guangzhou, China; 3. PET Center, Nan Fang Hospital, Southern Medical University, Guangzhou, China	
P040	SIMPLIFIED AND AUTOMATED PREPARATION METHOD FOR ¹⁸F-FLUOROMETHYLCHOLINE USING A NEW SYNTHESIS MODULE	S140
	B. Maas ^{*1} , G. Westera ² , J. Medema ¹ , L. van der Vliet ³ and P. H. Elsinga ¹ 1. University Medical Center Groningen, University of Groningen, Dept. of Nuclear Medicine and Molecular Imaging, Groningen, Netherlands; 2. Universitaetsklinikum Zurich, Zurich, Switzerland; 3. Veenstra Instruments, Joure, Netherlands	
P041	[¹⁸F]SiFA-ISOTHIOCYANATE IS AN EFFICIENT LABELING AGENT FOR PROTEINS	S141
	E. Schirrmacher ^{*1} , B. Waengler ² , L. Iovkova ³ , G. Boening ² , A. Reader ¹ , K. Jurkschat ³ and P. Rosa-Netto ¹ 1. McGill University, McConnell Brain Imaging Centre, Montreal, QC, Canada; 2. Ludwig-Maximilians-University, Department of Nuclear Medicine, Munich, Germany; 3. University of Dortmund, Department of Inorganic Chemistry II, Dortmund, Germany	
P042	RADIOFLUORINATION VIA STAUDINGER LIGATION	S142
	C. Mamat ^{*1} , M. Pretze ¹ , J. Steinbach ¹ and F. Wuest ² 1. Research Centre Dresden-Rossendorf, Institute of Radiopharmacy, Dresden, Germany; 2. Department of Oncologic Imaging, Cross Cancer Institute, University of Alberta, Edmonton, AB, Canada	
P043	SYNTHESIS AND BIOEVALUATION OF [¹⁸F]FB-MPPPA AS POTENTIAL BRAIN IMAGING AGENT	S143
	T. Mou ¹ , W. Yang ¹ , C. Peng ² , X. Zhang ¹ and Y. Ma ² 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals (Beijing Normal University), Ministry of Education, College of Chemistry, Beijing, China; 2. Capital Medical University, PET Center of Xuanwu Hospital, Beijing, China	
P044	FLUORINE-18 LABELING OF PHOSHOPEPTIDES: A CONVENIENT APPROACH FOR THE EVALUATION OF PHOSHOPEPTIDE METABOLISM IN VIVO	S144
	S. Richter ^{*1} , R. Bergmann ¹ , J. Steinbach ¹ , J. Pietzsch ¹ and F. Wuest ² 1. Forschungszentrum Dresden-Rossendorf, Institute of Radiopharmacy, Dresden, Germany; 2. University of Alberta, Department of Oncology, Cross Cancer Institute, Edmonton, Canada	

P045	DIRECT LABELING OF PEPTIDES WITH [18F]FDG C. Hultsch ¹ , R. Bergmann ¹ , M. Berndt ¹ and F. Wuest ² 1. Institute of Radiopharmacy, Research Center Dresden-Rossendorf, Dresden, Germany; 2. University of Alberta, Department of Oncology, Edmonton, AB, Canada	S145
P046	A FULLY AUTOMATED TWO-STEP SYNTHESIS OF A 18F-LABELED TYROSINE KINASE INHIBITOR FOR EGFR KINASE ACTIVITY IMAGING IN TUMORS D. Kobus, Y. Giesen and B. Neumaier [*] Max Planck Institute for Neurological Research, Dept of Radiochemistry, Cologne, Germany	S146
P047	SYNTHESIS AND PRECLINICAL IMAGING OF 18F-HX4: A NEW TRIAZOLE CONTAINING 2-NITROIMIDAZOLE TRACER FOR IMAGING HYPOXIC TISSUE IN VIVO H. C. Kolb [*] , J. C. Walsh, U. Gangadharath, P. Scott, H. C. Padgett, B. Duclos, C. Yu, M. Haka, Z. Zhu, T. L. Collier, Q. Liang, D. Z. Gao, J. Secrest, L. F. Gomez and D. Kasi Siemens Biomarker Research, Culver City, CA	S147
P048	FAST AND EFFICIENT RADIOSYNTHESIS OF FLUORINE-18 LABELED SULFONAMIDES USING CLICK REACTION L. Zhang ¹ , F. Guo ² , L. Shi ¹ and J. Li ¹ 1. Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Radiopharmaceutical Research Center, Shanghai, China; 2. China Institute of Atomic Energy, Beijing, China	S148
P049	SYNTHESIS AND EVALUATION OF ARYL-SUBSTITUTED DIARYLPROPIONITRILES, SELECTIVE LIGANDS FOR ESTROGEN RECEPTOR β, AS POTENTIAL POSITRON-EMISSION TOMOGRAPHIC IMAGING AGENTS B. S. Moon ¹ , K. C. Lee ² , K. E. Carlson ³ , J. A. Katzenellenbogen ³ , T. H. Choi ² , D. Y. Chi ⁴ , J. Y. Kim ² , G. J. Cheon ² , H. Y. Koh ¹ and G. An ² 1. Inha University, Department of Chemistry, Incheon, South Korea; 2. Korea Institute of Radiological and Medical Sciences, Molecular Imaging Research Center, Seoul, South Korea; 3. University of Illinois, Urbana-Champaign, Department of Chemistry, Urbana, IL; 4. Sogang University, Department of Chemistry, Seoul, South Korea	S149
P050	ONE-STEP 18F-LABELING OF BOMBESIN ANALOGS FOR PROSTATE CANCER IMAGING L. Mu ¹ , J. Becaud ¹ , M. Martic ¹ , M. Honer ¹ , P. A. Schubiger ¹ , S. M. Ametamey ¹ , K. Graham ² , T. Stellfeld ² , L. Lehmann ² , D. Suelzle ² , L. Dinkelborg ² and A. Srinivasan ² 1. Center for Radiopharmaceutical Science of ETH, PSI and USZ, ETH Hoenggerberg, Zuerich, Switzerland; 2. Bayer Schering Pharma AG, Global Drug Discovery, Berlin, Germany	S150
P051	SYNTHESIS AND EVALUATION OF (18F) FNBG, A POTENTIAL PET IMAGING AGENT G. Li ¹ , S. Zhang ¹ , Y. He ¹ , J. Xu ¹ , X. Wang ¹ , H. Liu ¹ , C. Qi ¹ and C. Peng ² 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals, College of Chemistry, Beijing, China; 2. Xuan Wu Hospital, Center of PET, Beijing, China	S151
P052	SYNTHESIS OF 18F RADIOLABELED COX189, A SELECTIVE COX-2 INHIBITOR D. Murali ¹ , K. Bordeaux ² , T. Ray ² , G. Ciszewska ² , F. Tse ² , R. J. Nickles ¹ and O. T. DeJesus ¹ 1. University of Wisconsin, Dept of Medical Physics, Madison, WI; 2. Novartis Institutes for BioMedical Research, Translational Sciences, East Hanover, NJ	S152
P053	EFFICIENT RADIOSYNTHESIS AND EVALUATION OF FLUORINE-18 LABELED BENZIMIDAZOL DERIVATIVES FOR PERIPHERAL TUMOR IMAGING S. Zhang ¹ , Y. He ¹ , X. Wang ¹ , G. Li ¹ , R. Ding ¹ , J. Xu ¹ , M. Feng ¹ , H. Liu ¹ , C. Qi ¹ and C. Peng ² 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals, College of Chemistry, Beijing, China; 2. Xuan Wu Hospital, Center of PET, Beijing, China	S153
P054	THE EFFECT OF SOLVENT IN NUCLEOPHILIC 18F-FLUORINATION T. Koivula [*] , K. Helariutta and A. Airaksinen University of Helsinki, Department of Chemistry, Laboratory of Radiochemistry, Helsinki, Finland	S154
P055	RADIOSYNTHESIS AND PHARMACOKINETIC PROPERTIES OF 18F-NIFEDIPINE: A NEW PET TRACER OF CALCIUM CHANNELS H. Sadeghpour ¹ , A. Jalilian ² , A. Shafiee ⁴ , M. Akhlaghi ³ , M. Mirzaei ⁶ and R. Miri ⁵ 1. Faculty of Pharmacy, Shiraz University of Medical Sciences, Department of Medicinal Chemistry, Shiraz, Iran; 2. Agricultural, Medical and Industrial Research School, Nuclear Medicine Research Group, Karaj, Iran; 3. Agricultural, Medical and Industrial Research School, Nuclear Medicine Research Group, Karaj, Iran; 4. Faculty of Pharmacy and Pharmaceutical Sciences, Tehran University of Medical Sciences, Department of Medicinal Chemistry, Tehran, Iran; 5. Shiraz University of Medical Sciences, Medicinal and Natural Products Chemistry Research Center, Shiraz, Iran; 6. Agricultural, Medical and Industrial Research School, Nuclear Medicine Research Group, Karaj, Iran	S155
P056	STRUCTURE OF 2-METHYLPHENYL(2-METHOXYPHENYL)IODONIUM CHLORIDE DIMER Y. S. Lee ¹ , J. Chun ² and V. W. Pike ² 1. National Institutes of Health, Center for Information Technology, Division of Computational Bioscience, Center for Molecular Modeling, Bethesda, MD; 2. National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD	S156

P057	TWO STEP ORGANIC PHASE SYNTHESSES OF [18F]N-SUCCINIMIDYL-4-FLUOROBENZOATE AND 4-[18F]FLUOROBENZYL BROMIDE	S157
	E. G. Robins [*] , M. Glaser, J. Idris, B. Shan, E. Arstad and S. K. Luthra GE Healthcare, MDx Discovery, Hammersmith Hospital, London, United Kingdom	
P058	PROBING THE ORTHO-EFFECT IN THE RADIOFLUORINATION OF DIARYLIODONIUM SALTS	S158
	J. Chun [*] , S. Lu and V. W. Pike National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD	
P059	RADIOFLUORINATION OF UNSYMMETRICAL DIARYLIODONIUM SALT COMPLIES WITH THE CURTIN-HAMMETT PRINCIPLE	S159
	J. Chun ¹ , S. Lu ¹ , Y. S. Lee ² and V. W. Pike ¹ 1. National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD; 2. National Institutes of Health, Center for Information Technology, Division of Computational Bioscience, Center for Molecular Modeling, Bethesda, MD	
P060	2-TRIMETHYLAMMONIUM NICOTINIC ACID TFP-ESTER: A NOVEL PYRIDINE BASED SYSTEM FOR THE ONE-STEP LABELLING OF BIOMOLECULES WITH FLUORINE-18	S160
	D. Olberg ¹ , J. Arukwe ² , D. Grace ² and O. Hjelstuen ² 1. Department of Pharmaceutics & Biopharmaceutics, University of Tromso, Tromso, Norway; 2. GE Healthcare Medical Diagnostics R&D, Oslo, Norway	
P061	SITE-SPECIFIC ADDITION OF AN 18F-N-METHYLAMINOXY CONTAINING PROSTHETIC GROUP TO A VINYL SULFONE MODIFIED PEPTIDE	S161
	D. Olberg ¹ , O. Hjelstuen ² , M. Solbakken ² , J. Arukwe ² , K. Dyrstad ² and A. Cuthbertson ² 1. Department of Pharmaceutics & Biopharmaceutics, University of Tromso, Tromso, Norway; 2. GE Healthcare Medical Diagnostics R&D, Oslo, Norway	
P062	INFLUENCE OF OXYANIONS AND ALUMINA ON 18F LABELING	S162
	A. Svadberg ¹ , K. Dyrstad ² and O. Hjelstuen ² 1. University of Tromso, Department of Pharmaceutics & Biopharmaceutics, Tromso, Norway; 2. GE Healthcare, Medical Diagnostics Development, Oslo, Norway	
P063	THREE-STEP SYNTHESIS OF 2-[18F]FLUORO-L-PHENYLALANINE VIA ISOTOPIC EXCHANGE	S163
	J. Castillo [*] , J. Ermert, F. M. Wagner and H. H. Coenen Forschungszentrum Juelich GmbH, Institut fuer Neurowissenschaften und Biophysik, INM-5: Nuklearchemie, Juelich, Germany	
P064	RADIOSYNTHESIS OF A NOVEL ADENOSINE A3 RECEPTOR LIGAND, 5-ETHYL 2,4-DIETHYL-3-((2-[18F]FLUOROETHYL)SULFANYLCARBONYL)-6-PHENYLPYRIDINE-5-CARBOXYLATE ([18F]FE@SUPPLY:2)	S164
	W. Wadsak ¹ , D. Haeusler ¹ , L. Mien ¹ , K. Shanab ² , R. Lanzenberger ³ , E. Schirmer ² , H. Spreitzer ² and M. Mitterhauser ¹ 1. Medical University of Vienna, Dept of Nuclear Medicine and PET, Vienna, Austria; 2. University of Vienna, Dept of Drug and Natural Product Synthesis, Vienna, Austria; 3. Medical University of Vienna, Dept of Psychiatry and Psychotherapy, Vienna, Austria	
P065	PREPARATION OF ANHYDROUS F-18 FLUORIDE	S165
	T. Tewson [*] University of Iowa, Department of Radiology, Division of Nuclear Medicine, Iowa City, IA	
P066	CONVENIENT N-SUCCINIMIDYL-4-[F-18]FLUOROBENZOATE ([F-18]SFB) SYNTHESIS AND LABELING OF BIOMOLECULES	S166
	S. Olma [*] , S. J. Sirk, E. Lepin, T. Olafsen, A. M. Wu, R. van Dam and C. K. Shen UCLA, Crump Institute for Molecular Imaging, Los Angeles, CA	
P067	RADIOSYNTHESIS OF 1, 3, 4, 6-TETRA-O-ACETYL-2-DEOXY-2-([18F]FLUOROACETAMIDO)-D-GLUCOPYRANOSE FOR IMAGING OF BACTERIAL INFECTIONS	S167
	M. E. Martinez Pozo ⁴ , T. Ido ⁵ , Y. Kiyono ¹ , S. Noriki ² , K. Inai ³ , K. Mandap ¹ , M. Kobayashi ¹ and Y. Fujibayashi ¹ 1. University of Fukui, Biomedical Imaging Research Center, Fukui, Japan; 2. University of Fukui, Department of Tumor Pathology, Fukui, Japan; 3. University of Fukui, Department of Molecular Pathology, Fukui, Japan; 4. Finlay Institute, Research and Development, Havana, Cuba; 5. Japan Radioisotope Association, Tokyo, Japan	
P068	RADIOSYNTHESIS OF THE DOPAMINE D4 LIGAND 6-(4-[4-[18F]FLUOROBENZYL]PIPERAZINE-1-YL)BENZODIOXANE AND DERIVATIVES FOR OPTIMIZING THEIR UNSPECIFIC BINDING BEHAVIOR	S168
	F. Kuegler [*] , W. Sihver, J. Ermert and H. H. Coenen Forschungszentrum Juelich GmbH, Institut fuer Neurowissenschaften und Medizin, INM-5: Nuklearchemie, Juelich, Germany	
P069	DEVELOPING A RADIOLABELING STRATEGY FOR 2-[F-18]FLUORO-HEAT	S169
	J. R. Grierson ¹ , S. A. Stekhova ¹ , S. Minoshima ¹ and E. C. Petrie ³ 1. University of Washington, Department of Radiology, Seattle, WA; 3. Veterans Affairs Puget Sound Healthcare System, Mental Illness Research Education and Clinical Center (MIRECC), Seattle, WA	

P070	FLUORINE-18 LABELING OF SUBSTITUTED BENZILS FOR IMAGING CARBOXYLESTERASE	S170
	C. P. Surdock ² , P. M. Potter ¹ , M. K. Danks ¹ and S. E. Snyder ¹ 1. St. Jude Children's Research Hospital, Memphis, TN; 2. University of Tennessee Health Science Center, College of Pharmacy, Memphis, TN	
P071	ON THE SOURCE OF CARRIER IN FLUORINE-18	S171
	J. M. Hersh ¹ , S. M. Apana ¹ and M. S. Berridge ² 1. 3D Imaging LLC, Maumelle, AR; 2. University of Arkansas for Medical Sciences, Dept. of Radiology, Little Rock, AR	
P072	[18F]JHU88868, A NOVEL RADIOLIGAND FOR PET IMAGING OF CANNABINOID CB1 RECEPTORS	S172
	Y. Gao, H. T. Ravert, R. F. Dannals and A. G. Horti [*] The Johns Hopkins University, Division of Nuclear Medicine, Baltimore, MD	
P073	INVESTIGATION OF META-SUBSTITUTED [18F]FLUOROBENZENE REACTIONS	S173
	M. Pun [*] , S. Joseph, J. Blecha and H. VanBroeklin University of California San Francisco, Department of Radiology and Biomedical Imaging, San Francisco, CA	
P074	FLUORINE-18 LABELED GLP-1 PEPTIDES FOR BETA CELL IMAGING	S174
	B. Behnam Azad ¹ , V. Rota ³ , S. Dhanvantari ³ , M. Kovacs ² and L. G. Luyt ¹ 1. University of Western Ontario, Department of Chemistry, London, ON, Canada; 2. University of Western Ontario, Department of Medical Imaging, London, ON, Canada; 3. University of Western Ontario, Department of Medical Biophysics, London, ON, Canada	
P075	IMPROVED SYNTHESIS OF 4-[18F]FLUOROBENZYLAMINE: A USEFUL BUILDING BLOCK IN 18F CHEMISTRY	S175
	I. Koslowsky ² , J. Mercer ¹ and F. Wuest ¹ 1. University of Alberta, Department of Oncology, Edmonton, AB, Canada; 2. University of Alberta, Faculty of Pharmacy and Pharmaceutical Sciences, Edmonton, AB, Canada	
P076	DEVELOPMENT OF A NOVEL PET OXYTOCIN RECEPTOR BIOMARKER	S176
	A. Smith ¹ , S. Freeman ² , R. J. Voll ¹ , L. Young ² and M. M. Goodman ¹ 1. Department of Radiology, Emory University, Atlanta, GA; 2. Department of Behavioral Neuroscience, Emory University, Atlanta, GA	
P077	SYNTHESIS OF 18F- RADIOTRACERS IN HIGH SPECIFIC ACTIVITY USING THE FLUOROUS APPROACH	S177
	C. Sundararajan ¹ , B. Miriyala ² , M. S. Yu ² and J. F. Valliant ¹ 1. McMaster University, Departments of Chemistry and Medical Physics & Applied Radiation Sciences, Hamilton, ON, Canada; 2. Fluorous Technologies Inc., Pittsburgh, PA	
P078	FAST AND RELIABLE METHOD FOR THE PREPARATION OF VARIOUS [18F]FLUOROBENZYL HALIDES	S178
	C. Lemaire [*] , L. Libert, A. Plenevaux and A. Luxen University of Liege, Cyclotron Research Center, Leige, Belgium	
P079	RADIOSYNTHESIS OF AN [18F]-FLUORO-PEG DERIVATIVE OF TZTP AS A POTENTIAL TRACER FOR THE MUSCARINIC M4 RECEPTOR	S179
	E. M. van Oosten ¹ , J. Chio ¹ , A. A. Wilson ² , A. K. Yudin ¹ , S. Houle ² and N. Vasdev ² 1. University of Toronto, Department of Chemistry, Toronto, ON, Canada; 2. Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada	
P080	NEW [18F]-FLUOROAMINES BY RING-OPENING OF AZIRIDINES WITH [18F]-FLUORIDE	S180
	E. M. van Oosten ¹ , A. A. Wilson ² , A. K. Yudin ¹ , S. Houle ² and N. Vasdev ² 1. University of Toronto, Department of Chemistry, Toronto, ON, Canada; 2. Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada	
P081	[18F]D4-36, A FLUORINE-18 LABELED APTAMER TARGETING THE TRANSMEMBRANE RECEPTOR TYROSINE KINASE RET	S181
	B. Kuhnast [*] , F. Hinnen, C. Pestourie, F. Duconge, B. Tavitian and F. Dolle CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France	
P082	SYNTHESIS OF A POTENTIAL TYROSINE KINASE INHIBITOR BY KNOEVENAGEL CONDENSATION OF OXINDOLE WITH 4-[18F]FLUOROBENZALDEHYDE	S182
	T. Kniess ¹ , M. Kuchar ¹ , J. Steinbach ¹ and F. Wuest ² 1. Forschungszentrum Dresden-Rossendorf, Institute of Radiopharmacy, Dresden, Germany; 2. University of Alberta, Department of Oncology, Edmonton, Canada	
P083	STUDIES ON THE NUCLEOPHILIC AROMATIC SUBSTITUTION USING [18F]FLUORIDE IN METHOXY-SUBSTITUTED ORTHO-NITROBENZALDEHYDES	S183
	B. Shen ¹ , D. Loeffler ¹ , K. P. Zeller ² , H. J. Machulla ¹ and G. Reischl ¹ 1. University Hospital Tuebingen, Radiopharmacy, Tuebingen, Germany; 2. University of Tuebingen, Institute for Organic Chemistry, Tuebingen, Germany	
P084	PEG-[18F]FPyZIDE AND PEG-[18F]FPyKYNE, TWO NEW FLUOROPYRIDINE-BASED REAGENTS FOR THE FLUORINE-18 LABELING OF MACROMOLECULES USING CLICK CHEMISTRY	S184
	B. Kuhnast [*] , A. Damont, F. Hinnen, C. Huss and F. Dolle CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France	

- P085 DEVELOPMENT OF [F-18]FLUORINE-SUBSTITUTED 6-ARYL-1,4-DIHYDROBENZO[d][1,3]-OXAZINE-2-THIONES AS PROGESTERONE RECEPTOR IMAGING AGENTS FOR PET** **S185**
 J. Lee¹, H. Zhou¹, C. S. Dence², K. E. Carlson¹, M. J. Welch² and J. A. Katzenellenbogen¹
 1. University of Illinois at Urbana-Champaign, Department of Chemistry, Urbana, IL; 2. Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO
- P086 SYNTHESIS AND PRELIMINARY EVALUATION OF [18F]FDM FOR TUMOR IMAGING** **S186**
 S. Furumoto¹, R. Shinbo², T. Yoshioka⁴, E. Nakata³, Y. Ishikawa², R. Iwata² and H. Fukuda¹
 1. Tohoku Univ, IDAC, Sendai, Japan; 2. Tohoku Univ, CYRIC, Sendai, Japan; 3. Tohoku Univ, Grad Sch Health Sci, Sendai, Japan; 4. Yamagata Univ, Grad Sch Med Sci, Yamagata, Japan
- P087 INFLUENCE OF METHYL SUBSTITUENTS ON NUCLEOPHILIC 18F-FLUORINATION OF ORTHO-NITROBENZALDEHYDES AND ORTHO-HALOBENZALDEHYDES** **S187**
 D. Loeffler¹, B. Shen¹, K. P. Zeller², H. J. Machulla¹ and G. Reischl¹
 1. University Hospital Tuebingen, Radiopharmacy, Tuebingen, Germany; 2. University of Tuebingen, Institute for Organic Chemistry, Tuebingen, Germany
- P088 MODIFIED AUTOMATED RADIOSYNTHESIS OF N-SUCCINIMIDYL-4-[18F]FLUOROBENZOATE** **S188**
 J. Kapyt¹, S. Shahhosseini², F. Wuest¹ and J. Mercer¹
 1. University of Alberta, Department of Oncology, Division of Oncologic Imaging, Edmonton, AB, Canada; 2. Cross Cancer Institute, Oncologic Imaging, Edmonton, AB, Canada
- P089 3D-QSAR, SYNTHESIS AND EVALUATION OF INDANONE DERIVATIVES AS NOVEL ACETYLCHOLINESTERASE INHIBITORS** **S189**
 L. Chunkai and Z. Huabei
 Beijing Normal University, College of Chemistry, Key Laboratory of Radiopharmaceuticals, Ministry of Education, Beijing, China
- P090 THE SYNTHESIS OF 6-DEOXY-6-[18F]FLUORO-D-FRUCTOSE FOR USE WITH PET** **S190**
 T. N. Grant¹, B. Trayner¹, C. I. Cheeseman¹, F. G. West² and J. Mercer³
 1. University of Alberta, Dept of Physiology, Edmonton, AB, Canada; 2. University of Alberta, Dept of Chemistry, Edmonton, AB, Canada; 3. University of Alberta, Dept of Oncology, Div of Oncologic Imaging, Edmonton, AB, Canada
- P091 SYNTHESIS AND EVALUATION OF FLUORINE-18 LABELED 2-FLUOROETHYL-6-PHENYLMIDAZO[2,1-B]THIAZOLE AS A POTENTIAL MITOCHONDRIAL COMPLEX 1 INHIBITOR** **S191**
 W. Seo^{*}, R. J. Voll, L. Williams, V. M. Camp, E. Malveaux and M. M. Goodman
 Emory University, Department of Radiology, Atlanta, GA
- P092 OPTIMISED RADIOSYNTHESIS AND METABOLITE ANALYSIS OF [F-18]NS10743, A RADIOLIGAND FOR NEUROIMAGING OF ALPHA-7 NICOTINIC ACETYLCHOLINE RECEPTOR (ALPHA-7 nAChR)** **S192**
 S. Fischer^{*1}, W. Deuther-Conrad¹, A. Hiller¹, E. Oestergaard Nielsen², D. Brunicardi Timmermann², D. Peters², P. Brust¹ and J. Steinbach¹
 1. Institute of Interdisciplinary Isotope Research, Dept. of Radiopharmacy, Leipzig, Germany; 2. NeuroSearch A/S, Ballerup, Denmark
- P093 ARE IONIC LIQUIDS USEFUL FOR FLUORINE-18 LABELING?** **S193**
 J. Aerts^{*}, C. Lemaire, A. Plenevaux and A. Luxen
 Liege University, Cyclotron Research Center, Liege, Belgium
- P094 SYNTHESIS OF 18F-FACPC AND ITS BIOLOGICAL EVALUATION IN 9L GLIOSARCOMA CELLS AND 9L TUMOR BEARING RATS** **S194**
 N. Jarkas^{*}, R. J. Voll, V. M. Camp, L. Williams, E. Malveaux and M. M. Goodman
 Emory University Center for Systems Imaging WWHC, Radiology Dpt., Atlanta, GA
- P095 RADIOFLUORINATION OF L-THREO-3-(3,4-DIHYDROXYPHENYL)SERINE: SYNTHESIS OF POTENTIAL F-18 LABELLED PET TRACERS FOR NOREPINEPHRINE** **S195**
 R. Ashique^{*1}, N. Vasdev², S. Kish², S. Houle² and R. Chirakal¹
 1. Hamilton Health Sciences, Department of Nuclear Medicine, Hamilton, ON, Canada; 2. Centre for Addiction and Mental Health, Toronto, ON, Canada
- P096 NEW IMPROVEMENTS IN THE ENANTIOSELECTIVE SYNTHESIS OF 2-[18F]FLUORO-L-TYROSINE AND 6-[18F]FLUORO-L-DOPA** **S196**
 L. Libert^{*}, C. Lemaire, T. Denoel, A. Plenevaux, J. Aerts and A. Luxen
 University of Liege, Cyclotron Research Center, Liege, Belgium
- P097 SYNTHESIS AND BIOLOGICAL EVALUATION OF NOVEL FLUORO-18 LABELED POSITRON EMISSION TOMOGRAPHY (PET) IMAGING AGENTS FOR HYPOXIC TISSUES** **S197**
 E. Laurens^{*1}, U. Ackermann², J. White¹, H. Tochon-Danguy², S. Yeoh² and A. Scott³
 1. The University of Melbourne, School of Chemistry, Parkville, Australia; 2. Austin Health, Center for PET and Nuclear Medicine, Heidelberg, Australia; 3. Ludwig Institute for Cancer Research, The Melbourne Center for Clinical Sciences, Heidelberg, Australia

P098	USE OF ORGANIC BASES FOR 18F-FLUORIDE ANION EXCHANGE ELUTION AVOIDING THE CLASSICAL AZEOTROPIC DRYING STEP BEFORE LABELING	S198
	C. Lemaire ¹ , J. Aerts ¹ , S. Voccia ² , A. Plenevaux ¹ and A. Luxen ¹ 1. University of Liege, Cyclotron Research Center, Liege, Belgium; 2. Trasis SA, ULg, Liege, Belgium	
P099	CLICK CHEMISTRY BASED 18F-LABELING AND GLYCOSYLATION OF AN RGD PEPTIDE FOR PET IMAGING OF $\alpha v \beta 3$ INTEGRIN EXPRESSION	S199
	S. Maschauer ¹ , R. Haubner ³ , C. Hocke ¹ , M. Ocker ² , T. Kuwert ¹ and O. Prante ¹ 1. Friedrich-Alexander University, Laboratory of Molecular Imaging, Clinic of Nuclear Medicine, Erlangen, Germany; 2. Friedrich-Alexander University, Department of Medicine 1, University Hospital Erlangen, Erlangen, Germany; 3. Medical University of Innsbruck, Department of Nuclear Medicine, Innsbruck, Austria	
P100	ONE-STEP SYNTHESIS OF 18F LABELED [18F]-N-SUCCINIMIDYL 4-FLUOROBENZOATE FOR A20 AND A20-36 PEPTIDES LABELING	S200
	M. Panico ¹ , L. Lang ² , M. Larobina ¹ , A. Greco ³ , S. Gargiulo ³ , E. Iaccino ⁴ , C. Palmieri ⁴ , G. Scala ⁴ , B. Alfano ¹ and M. Salvatore ³ 1. CNR Biostructures and Bioimaging Institute, Napoli, Italy; 2. PET Department, Clinical Center, National Institutes of Health, Bethesda, MD; 3. University of Medicine Federico II, Napoli, Italy; 4. Department of Clinical and Experimental Medicine, University, Catanzaro, Italy	
P101	SYNTHESIS OF 5-[18F]FLUOROISOUQUINOLIN-1-OL BY MODIFIED BALZ-SCHIEMANN REACTION	S201
	H. Kim ¹ , D. Kim ¹ , J. Park ² , S. Kim ² , M. Hur ² , S. Yang ² and K. Yu ¹ 1. Dongguk University, Dept. of Chemistry, Seoul, Korea; 2. Korea Atomic Energy Research Institute, Radiation Research Division for Industry & Environment, Jeonggeup, Korea	
P102	NOVEL 18F-LABELED VALINE DERIVATIVES: SYNTHESIS AND BIODISTRIBUTION IN MICE BEARING S180 TUMOR	S202
	H. Liu ¹ , J. Xu ¹ , Y. He ¹ , G. Li ¹ , R. Ding ¹ , S. Zhang ¹ , X. Wang ¹ , M. Feng ¹ , C. Qi ¹ and C. Peng ² 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Beijing, China; 2. Xuan Wu Hospital, Center of PET, Beijing, China	
P103	PRODUCTION OF [18F]-FLUOROETHYLCHOLINE AND [18F]-FLUOROETHYL-L-TYROSINE IN HIGH YIELD ON AN AUTOMATED SYNCHROM SYNTHESIS MODULE	S203
	J. Schmaljohann ² , S. Kuerpig ¹ and S. Guhlke ¹ 1. University Bonn, Department of Nuclear Medicine, Bonn, Germany; 2. raytest GmbH, Straubenhardt, Germany	
P104	TERTIARY ALCOHOLS TO AVOID EVAPORATION IN FLUORINE-18 LABELING	S204
	J. Aerts ¹ , S. Voccia ² , C. Lemaire ¹ , D. Thonon ¹ , A. Plenevaux ¹ and A. Luxen ¹ 1. Liege University, Cyclotron Research Center, Liege, Belgium; 2. Trasis SA, Liege, Belgium	
P105	LABELLING OF AN ANTISENSE OLIGONUCLEOTIDE WITH [F-18]FPY5YNE	S205
	J. A. Inkster ² , M. J. Adam ¹ , T. Storr ² and T. J. Ruth ¹ 1. TRIUMF, Nuclear Medicine Division, Vancouver, BC, Canada; 2. Simon Fraser University, Dept. of Chemistry, Burnaby, BC, Canada	
P106	TEMPERATURE EFFECT ON THE STEREOSPECIFICITY OF NUCLEOPHILIC FLUORINATION: FORMATION OF [18F]TRANS-4-FLUORO-L-PROLINE DURING THE SYNTHESIS OF [18F]CIS-4-FLUORO-L-PROLINE	S206
	B. Behnam Azad ¹ , R. Ashique ¹ , R. Labiris ² and R. Chirakal ¹ 1. Hamilton Health Sciences, Department of Nuclear Medicine, Hamilton, ON, Canada; 2. McMaster University, Department of Medicine, Hamilton, ON, Canada	
P107	COMPARISON OF ALPHA- AND BETA-[18F]FAZDR WITH WELL-KNOWN HYPOXIA IMAGING AGENTS [18F]FAZA AND [18F]FMISO IN A SMALL ANIMAL PET STUDY	S207
	F. Maier ² , W. Ehrlichmann ¹ , D. Lamparter ¹ , M. Kneilling ³ , F. Hammerschmidt ⁴ , A. Schweifer ⁴ , B. J. Pichler ² , H. J. Machulla ¹ and G. Reischl ¹ 1. University Hospital Tuebingen, Radiopharmacy, Tuebingen, Germany; 2. University Hospital Tuebingen, Preclinical Imaging, Tuebingen, Germany; 3. University Hospital Tuebingen, Clinic for Dermatology, Tuebingen, Germany; 4. University of Vienna, Institute for Organic Chemistry, Vienna, Austria	
P108	NOVEL PROSTHETIC GROUP FOR F-18 LABELING OF BIOMOLECULES	S208
	B. Lee ¹ , B. Lee ² , S. Lee ¹ , S. Oh ³ and D. Chi ¹ 1. Sogang University, Dept of Chemistry, Seoul, Korea; 2. FutureChem Co. Ltd., Research Institute of Labeling, Seoul, Korea; 3. Asan Medical Center, University of Ulsan College of Medicine, Dept of Nuclear Medicine, Seoul, Korea	
P109	POLYMER-SUPPORTED PRECURSORS VIA CLICK LINKAGE FOR SIMPLE PURIFICATION OF F-18 LABELED COMPOUNDS	S209
	S. Chu ¹ , J. Lee ² , B. Lee ¹ , S. Lee ² , S. Oh ³ and D. Chi ² 1. FutureChem Co. Ltd., Research Institute of Labeling, Seoul, Korea; 2. Sogang University, Dept of Chemistry, Seoul, Korea; 3. Asan Medical Center, University of Ulsan College of Medicine, Dept of Nuclear Medicine, Seoul, Korea	

- P110 IN VIVO EVALUATION OF m-(3-[F-18]FLUOROPROPYL)-BENZYLGUANIDINE ([F-18]FPBG) FOR PET IMAGING AND METABOLISM IN THE HEART S210**
 J. S. Kim¹, B. S. Kim¹, J. Y. Son¹, S. K. Hong¹, S. H. Kang², S. K. Kim², B. S. Moon³, H. S. Kil³, D. Y. Chi³, Y. K. Kim¹, W. W. Lee¹, B. C. Lee¹ and S. E. Kim¹
 1. Seoul National University Bundang Hospital, Dept of Nuclear Medicine, Seongnam, South Korea; 2. National Cancer Center, Molecular Imaging & Therapy Branch, Goyang, South Korea; 3. Inha University, Dept of Chemistry, Incheon, South Korea
- P111 AMMONIUM SALT-SUPPORTED PRECURSORS VIA CLICK LINKAGE FOR SIMPLE PURIFICATION OF F-18 LABELED COMPOUNDS S211**
 S. Lim¹, S. Chu², B. Lee², S. Lee³, S. Oh⁴, H. Koh¹ and D. Chi³
 1. Inha University, Dept of Chemistry, Incheon, Korea; 2. FutureChem Co. Ltd., Research Institute of Labeling, Seoul, Korea; 3. Sogang University, Dept of Chemistry, Seoul, Korea; 4. Asan Medical Center, University of Ulsan College of Medicine, Dept of Nuclear Medicine, Seoul, Korea
- P112 SYNTHESIS AND AROMATIC [F-18]FLUORINATION OF meta-POSITION ON PHENYL RING OF DONEPEZIL USING IODONIUM SALTS S212**
 Y. S. Jeon¹, B. S. Moon², J. S. Kim¹, S. E. Kim¹ and B. C. Lee¹
 1. Seoul National University Bundang Hospital, Dept of Nuclear Medicine, University of College of Medicine, Seongnam, South Korea; 2. Inha University, Dept of Chemistry, Incheon, South Korea
- P113 SYNTHESIS OF F-18 LABELED RGD DIMER USING CLICK CHEMISTRY S213**
 D. H. Kim^{*}, Y. S. Choe, K. Y. Yoon, J. Y. Choi, Y. Choi, K. H. Lee and B. T. Kim
 Samsung Medical Center, Sungkyunkwan University School of Medicine, Dept of Nuclear Medicine, Seoul, South Korea
- P114 EVALUATION OF 4-[F-18]FLUORO-1-BUTYNE AS A RADIOLABELED SYNTHON FOR CLICK CHEMISTRY WITH AZIDO COMPOUNDS S214**
 D. H. Kim^{*}, Y. S. Choe, I. Lee, K. Y. Yoon, J. Y. Choi, Y. Choi, K. H. Lee and B. T. Kim
 Samsung Medical Center, Sungkyunkwan University School of Medicine, Dept of Nuclear Medicine, Seoul, South Korea

Novel radiochemistry: Radiohalogens (excluding F-18) posters

- P115 NON-SEQUENTIAL CHROMATOGRAPHIC BEHAVIOUR OF AROMATIC ASTATINE COMPOUNDS S215**
 G. J. Meyer¹, A. Hiller², J. Steinbach² and W. H. Knapp¹
 1. Medical School Hannover, Dpt. Nuclear Medizin, Hannover, Germany; 2. Interdisciplinary Inst. Isotopes, Leipzig, Germany
- P116 USING H₃PO₂ IN THE CU⁺ -NUCLEOPHILIC RADIOIODINATION; AN "EASY-TO-MAKE" REACTION MIXTURE S216**
 J. Eersels¹, J. Mertens² and J. Herscheid¹
 1. VU University Medical Center, Department of Nuclear Medicine & PET Research, Amsterdam, Netherlands; 2. Vrije Universiteit Brussel, Department of Radiochemistry, BEFY, Brussel, Belgium
- P117 UNEXPECTED DIFFERENCES IN KIDNEY CLEARANCE AND TUMOR ACCUMULATION OF THE SAME CLOSO-DECABORATE(2-)-HYDRAZONE LINKED ANTIBODY FAB FRAGMENT LABELED WITH I-125 AND AT-211 S217**
 D. Wilbur^{*}, M. Chyan and D. Hamlin
 Department of Radiation Oncology, University of Washington, Seattle, WA
- P118 EVALUATION OF AN BR-76 LABELED ERB-041 ANALOGUE AS ESTROGEN BETA RECEPTOR SELECTIVE LIGAND: NO-CARRIER-ADDED RADIOLABELING AND IN VIVO BIODISTRIBUTION STUDY S218**
 D. Zhou¹, H. Zhou², C. C. Jenks¹, T. L. Sharp¹, E. E. Parent², J. Lee², J. A. Katzenellenbogen² and M. J. Welch¹
 1. Washington University, Mallinckrodt Institute of Radiology, Saint Louis, MO; 2. University of Illinois, Chemistry Dept, Urbana, IL
- P119 123I-NIODENE: A NEW SPECT TRACER FOR IMAGING NICOTINIC RECEPTORS S219**
 S. Pandey^{*}, S. Pan, R. Kant, R. Coleman, C. Constantinescu, M. Pan and J. Mukherjee
 University of California-Irvine, Preclinical Imaging Facility, Department of Psychiatry and Human Behavior, Irvine, CA
- P120 SYNTHESIS OF RADIOLABELED (I-123) 2-ACETAMIDO-4-iodo-2-DEOXY--D-HEXOPYRANOSSES AS POTENTIAL IMAGING AGENTS FOR THE DETECTION OF ALZHEIMER'S DISEASE S220**
 G. W. Kabalka^{*}, S. Marepally and M. Yao
 University of Tennessee, Departments of Radiology and Chemistry, Knoxville, TN
- P121 TRIOLBORATES: WATER-SOLUBLE COMPLEXES OF ORGANOBORONIC ACIDS AS PRECURSORS FOR NO-CARRIER-ADDED RADIO-HALOGENATIONS S221**
 M. Akula, M. Yao, D. Townsend and G. W. Kabalka^{*}
 University of Tennessee, Departments of Radiology and Chemistry, Knoxville, TN

- P122 SYNTHESIS OF NOVEL 125I-DERIVATIVES OF HYDROXYSTILBENES AND THEIR PRELIMINARY EVALUATION IN BINDING STUDIES WITH MCF-7 CELLS** **S222**
M. Dhyani¹, A. G. Korde¹, U. Pandey¹, S. Chattopadhyay², M. Venkatesh¹ and S. Banerjee¹
1. Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India; 2. Bhabha Atomic Research Centre, Bio-Organic Division, Mumbai, India
- P123 [123I]CUBYL-DWAY AS LIGAND FOR THE 5-HT1A RECEPTOR** **S223**
R. Al Hussainy¹, J. Verbeek¹, A. Windhorst¹, R. Klol¹, J. Booil² and J. Herscheid¹
1. Department of Nuclear Medicine & PET Research, VU University Medical Center, Amsterdam, Netherlands; 2. Department of Nuclear Medicine, Academic Medical Centre, Amsterdam, Netherlands
- P124 SYNTHESIS OF 1-(2-DEOXY-BETA-D-RIBOFURANOSYL)-2,4-DIFLUORO-5-[124I]IODOBENZENE (DRF[124I]IB) – A STABLE, NON-POLAR PET TRACER MIMICKING THYMIDINE** **S224**
A. Stahlschmidt¹, L. I. Wiebe², E. E. Knaus², H. J. Machulla¹ and G. Reischl¹
1. University Hospital Tuebingen, Radiopharmacy, Tuebingen, Germany; 2. University of Alberta, Pharmacy and Pharmaceutical Sciences, Edmonton, AB, Canada
- Novel technologies: Hybrid tracer and multimodality imaging posters**
- P125 PREPARATION AND BIOLOGICAL EVALUATION OF [67Ga]-LABELED-SUPERPARAMAGNETIC NANOPARTICLES IN NORMAL RATS** **S225**
A. Panahifar¹, A. R. Jalilian², M. Akhlaghi² and H. Zandi³
1. Islamic Azad University-Science and Research Branch, Department of Engineering and Technology, Tehran, Iran; 2. Agricultural, Medical and Industrial Research School (AMIRS), Nuclear Medicine Research Group (NMRG), Karaj, Iran; 3. Islamic Azad University-Science and Research Branch, Young Researchers Club, Tehran, Iran
- P126 SMALL ANIMAL PET IMAGING OF TUMORS WITH 64CU-LABELED RGD-BOMBESIN HETERODIMER** **S226**
Z. Liu¹, Z. Li¹, Q. Cao¹, S. Liu¹, F. Wand² and X. Chen¹
1. Stanford University, Department of Radiology, Stanford, CA; 2. Peking University, Medical Isotopes Research Center, Beijing, China
- P127 FLUORINE-18 LABELING OF QUANTUM DOTS FOR IN VIVO PET IMAGING** **S227**
B. Kuhnast¹, F. Hinnen¹, T. Pons², C. Pestourie¹, F. Duconge¹, B. Theze¹, B. Mahler², B. Dubertret², B. Tavitian¹ and F. Dolle¹
1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. CNRS UPRA0005, ESPCI, Paris, France
- P128 FACILE FABRICATION OF ANIMAL-SPECIFIC POSITIONING MOLDS FOR MULTIMODALITY IMAGING** **S228**
J. Park¹, W. Kwak¹, S. Woo², K. Kim³, Y. Chang⁴, S. Lee⁵, J. Lee⁵ and J. Yoo¹
1. Kyungpook National University School of Medicine, Department of Molecular Medicine, Daegu, South Korea; 2. Kyungpook National University, Department of Biomedical Engineering, Daegu, South Korea; 3. Korea Institute of Radiological and Medical Sciences, Molecular Imaging Research Center, Research Institute of Radiological and Medical Sciences, Seoul, South Korea; 4. Kyungpook National University School of Medicine and Hospital, Department of Diagnostic Radiology, Daegu, South Korea; 5. Kyungpook National University School of Medicine, Department of Nuclear Medicine, Daegu, South Korea
- P129 NEW IODINATED AND FLUORINATED RADIOTRACERS FOR PET/SPECT IMAGING AND TARGETED RADIONUCLIDE THERAPY OF MELANOMA** **S229**
A. Maisoniai¹, J. Papon², R. Boisgard³, M. Bonnet-Duquennoy², B. Kuhnast³, J. Deloye⁴, S. Askienazy⁴, J. Maublant², B. Tavitian³, F. Dolle³, J. Madelmont², N. Moins² and J. Chezal²
1. Universite d'Auvergne - EA 4231, Laboratoires Cyclopharma SA, Clermont-Ferrand, France; 2. Universite d'Auvergne, EA 4231, Clermont-Ferrand, France; 3. CEA, I2BM, Service Hospitalier Frederic Joliot, Orsay, France; 4. Laboratoires Cyclopharma SA, Saint Beauzire, France
- P130 SYNTHESIS AND EVALUATION OF A NOVEL GD-DOTA COMPLEX AS AN INTRACELLULAR MRI CONTRAST AGENT USING GD-153** **S230**
D. Oltmanns¹, U. Wagner-Utermann², U. Bauder-Wuest¹ and M. Eisenhut¹
1. German Cancer Research Center, Dept. of Radiopharmaceutical Chemistry, Heidelberg, Germany; 2. German Cancer Research Center, Dept. of Preclinical Target Development, Heidelberg, Germany

Radionuclide production posters

- P131 PRODUCTION OF CERIUM RADIOISOTOPES FOR NANOTECHNOLOGY STUDIES: EXPERIMENTAL MEASUREMENTS OF THE EXCITATION FUNCTIONS natCe(d,x)139g/141/143Ce AND 142Pr** **S231**
K. Abbas^{*}, F. Simonelli, I. Cydzik, U. Holzwarth and N. Gibson
Joint Research Centre, European Commission, Institute for Health and Consumer Protection, Ispra (VA), Italy
- P132 SEPARATION OF MICRO AMOUNT OF SCANDIUM FROM MACRO AMOUNT OF TITANIUM USING ION EXCHANGE CHROMATOGRAPHY** **S232**
D. Pawlak, J. L. Parus and R. Mikolajczak^{*}
Institute of Atomic Energy Radioisotope Centre POLATOM, Otwock - Swierk, Poland

P133	LONG-TERM EVALUATION OF A COMMERCIALY AVAILABLE Ge-68/Ga-68 GENERATOR FOR PET IMAGING	S233
	T. Mori*, A. Hagooly, R. Rossin, C. Glaus and M. J. Welch Washington University School of Medicine, Department of Radiology, Saint Louis, MO	
P134	INCREASING SPECIFIC ACTIVITY IN CU-64 PRODUCTION BY REPROCESSING THE NI-64 TARGET MATERIAL	S234
	J. Rajander* ¹ , J. Schlesinger ¹ , M. A. Avila-Rodriguez ² and O. Solin ¹ 1. Turku PET Centre, University of Turku and Abo Akademi University, Turku, Finland; 2. Unidad PET/CT-Ciclotron, Facultad de Medicina, Universidad Nacional Autonoma de Mexico, Mexico City, Mexico	
P135	CHARACTERISTICS OF GMP-PRODUCED SNO2-BASED 68GE-68GA GENERATOR	S235
	W. A. Breeman*, E. de Blois, H. S. Chan, R. de Zanger and E. P. Krenning Erasmus MC, Nuclear Medicine, Rotterdam, NL, Netherlands	
P136	PURIFICATION AND CONCENTRATION OF ELUATE FROM GMP-PRODUCED SNO2-BASED 68GE-68GA GENERATOR BY ANION OR CATION EXCHANGE	S236
	W. A. Breeman*, E. de Blois, H. S. Chan and E. P. Krenning Erasmus MC, Nuclear Medicine, Rotterdam, NL, Netherlands	
P137	PRODUCTION OF POSITRON EMITTING RADIONUCLIDES AT THE TURKU PET CENTRE CC-18/9 CYCLOTRON	S237
	A. Kirjavainen*, S. Johansson, P. Eriksson, J. Rajander, T. Wikstrom, J. Bergman, S. Heselius and O. Solin Turku PET Centre, University of Turku, Abo Akademi University, Turku, Finland	
P138	EVALUATION OF A NOVEL GALLIUM-68 GENERATOR	S238
	J. Kelsey, E. Chang, C. Roberts, H. P. Engelbrecht, G. Ehrhardt and C. S. Cutler* University of Missouri, Research Reactor Center, Columbia, MO	
P139	PREPARATION OF A 5 mCi PROTOTYPE 44Ti/44Sc RADIONUCLIDE GENERATOR	S239
	N. S. Loktionova* ¹ , D. V. Filosofov ² and F. Roesch ¹ 1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. DLNP Joint Institute of Nuclear Research, Dubna, Russia	
P140	PRODUCTION OF SN-117M IN THE BR2 AND HFIR RESEARCH REACTORS	S240
	B. Ponsard* ¹ , M. Garland ² , R. Knapp ² , S. Mirzadeh ² , S. Srivastava ³ and L. Mausner ³ 1. Belgian Nuclear Research Centre, SCK.CEN, BR2 Reactor, Mol, Belgium; 2. Oak Ridge National Laboratory, ORNL, Nuclear Science and Technology Division, Oak Ridge, TN; 3. Brookhaven National Laboratory, BNL, Radionuclide and Radiopharmaceutical Research Division, Upton, NY	
P141	NEW CROSS SECTION MEASUREMENTS FOR THE PRODUCTION OF THE AUGER ELECTRON EMITTERS BR-77 AND BR-80M	S241
	I. Spahn* ¹ , D. Steyn ² , C. Vermeulen ² , Z. Kovacs ³ , F. Szelecsenyi ³ , M. Shehata ¹ , S. Spellerberg ¹ , B. Scholten ¹ , H. H. Coenen ¹ and S. Qaim ¹ 1. Forschungszentrum Juelich GmbH, Institut für Neurowissenschaften und Medizin, INM-5: Nuklearchemie, Juelich, Germany; 2. iThemba LABS, Radionuclide Production Group, Somerset West, South Africa; 3. Institute of Nuclear Research of the Hungarian Academy of Sciences (ATOMKI), Cyclotron Department, Debrecen, Hungary	
P142	USE OF ALPHA PARTICLE BEAM IN MEDICAL RADIONUCLIDE PRODUCTION	S242
	S. Qaim* and H. H. Coenen Forschungszentrum Juelich GmbH, Institut fuer Neurowissenschaften und Medizin, INM-5: Nuklearchemie, Juelich, Germany	
P143	PRODUCTION OF CARRIER-FREE 86Y FOR NUCLEAR MEDICAL APPLICATION USING ENRICHED 86SrO	S243
	D. Lukic* ¹ , C. Tamburella ¹ , F. Buchegger ¹ , G. J. Beyer ¹ , J. Comor ² and Y. Seimbille ¹ 1. Cyclotron Unit, University Hospital of Geneva, Geneva, Switzerland; 2. Vinca INS, Laboratory of Physics, Belgrade, Yugoslavia	
P144	A NOVEL METHOD FOR CYCLOTRON PRODUCTION OF HIGH PURE 86Y	S244
	M. Sadeghi*, M. Aboudzadeh and A. Zali Agricultural & Medical & Industrial Research School, Nuclear Science and Technology Research Institute, Karaj, Iran	
P145	RADIOCHEMICAL SPEARATION FOR NO-CARRIER-ADDED PRODUCTION OF 68Ga	S245
	M. Sadeghi*, T. Kakavand* ¹ and L. Mokhtari ¹ 1. Physics Faculty, University of Zanjan, Iran, Zanjan, Iran; 2. Agricultural & Medical & Industrial Research School, Nuclear Science and Technology Research Institute, Karaj, Iran	
P146	CYCLOTRON PRODUCTION OF Cu-64 FROM TANGENTIAL AND CUP TARGETS OF Zn-64 METAL	S246
	L. Szajek*, P. Plascjak and P. Herscovitch NIH Clinical Center, PET Department, Bethesda, MD	
P147	IMPROVING [11C]CO2 SPECIFIC ACTIVITY ON SIEMENS ECLIPSE CYCLOTRONS - THE GSK CLINICAL IMAGING CENTRE EXPERIENCE	S247
	L. Martarello*, J. Parmar, G. Dyer, C. Plisson, S. Pampols-Maso, I. Bennacef, M. Huiban, J. Passchier, T. Bonasera, R. Reiley, C. Marzano and A. Gee GlaxoSmithKline - Clinical Imaging Centre, London, United Kingdom	

P148	OVERVIEW ON THE PRODUCTION OF RADIOACTIVE NANOPARTICLES FOR BIOSCIENCE APPLICATIONS AT THE JRC CYCLOTRON	S248
	K. Abbas [*] , F. Simonelli, N. Gibson and U. Holzwarth Joint Research Centre, Institute for Health and Consumer Protection, Ispra (VA), Italy	
P149	EVALUATION OF 67 GA-LABELED-OXYTOCIN FOR RECEPTOR	S249
	A. Jalilian ¹ , M. Tajik ² , H. Zandi ² , M. Akhlaghi ¹ , J. Grousi ¹ , F. Bolourinovin ² , S. Moradkhany ¹ and A. Tavakol ² 1. Nuclear Medicine Research Group, Agricultural, Medical and Industrial Research School (ARS), Karaj, Iran; 2. Islamic Azad University Science and Research Branch, Young Researchers Club, Tehran, Iran	
P150	INVESTIGATING WASTE STREAMS FROM 68GA CHEMISTRY	S250
	E. de Blois [*] , W. A. Breeman and E. P. Krenning Erasmus MC, Nuclear Medicine, Rotterdam, NL, Netherlands	
P151	A NOVEL ELECTROCHEMICAL 90Sr/90Y GENERATOR	S251
	J. Comor ^{*1} and G. Beyer ² 1. Elex Commerce, Belgrade, Yugoslavia; 2. Isotope Technologies Dresden GmbH, Dresden, Germany	
P152	POST-PROCESSING OF 44Ti/44Sc-RADIONUCLIDE-GENERATOR FOR MEDICAL APPLICATION	S252
	N. S. Loktionova ^{*1} , D. V. Filosofov ³ , M. Pruszyński ² and F. Roesch ¹ 1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. Institute of Nuclear Chemistry and Technology, Warszawa, Poland; 3. DLNP, Joint Institute of Nuclear Research, Dubna, Russia	
P153	PRODUCTION AND QUALITY CONTROL OF HIGH SPECIFIC ACTIVITY NCA Re-186 BY CYCLOTRON IRRADIATION	S253
	F. Groppi ^{*1} , M. L. Bonardi ¹ , S. Manenti ¹ , M. Marchetti ¹ , L. Gini ¹ , K. Abbas ² , U. Holzwarth ² and F. Simonelli ² 1. Università degli Studi di Milano and INFN Sez. di Milano, L.A.S.A. - Radiochemistry Laboratory, Segrate (MI), Italy; 2. JRC-Ispra, EC, Institute for Health and Consumer Protection, IHCP, Ispra (VA), Italy	
P154	AUTOMATED PROCESSING OF COPPER AND HALOGEN RADIONUCLIDES AT WASHINGTON UNIVERSITY	S254
	M. Kume [*] , L. Tang, G. Gaehele, J. Willits, C. Jenks, T. Voller and M. Welch Washington University School of Medicine, Mallinckrodt Institute of Radiology, Saint Louis, MO	
P155	INVESTIGATION OF PRODUCTION OF THE MEDICAL RADIOISOTOPE 167TM VIA CHARGED PARTICLE INDUCED REACTIONS	S255
	B. Kiraly ^{*1} , F. Tarkanyi ¹ , A. Hermanne ² , S. Takacs ¹ , F. Ditroi ¹ , M. Baba ³ , H. Yamazaki ³ , I. Spahn ⁴ and A. V. Ignatyuk ⁵ 1. Institute of Nuclear Research of the Hungarian Academy of Sciences (ATOMKI), Cyclotron Department, Debrecen, Hungary; 2. Vrije Universiteit Brussel (VUB), Brussels, Belgium; 3. Tohoku University, Cyclotron and Radioisotope Center (CYRIC), Sendai, Japan; 4. Forschungszentrum Jülich GmbH, Institut für Nuklearchemie, Jülich, Germany; 5. Institute of Physics and Power Engineering (IPPE), Obninsk, Russia	
Radiopharmaceuticals & process optimization posters		
P156	PRE-RELEASE DETERMINATION OF ENDOTOXIN IN SHORT-LIVED RADIOPHARMACEUTICALS USING AN ENDOSAFE-PTS	S256
	S. Pampols-Maso ^{*1} , M. Reynolds ² and T. Bonasera ¹ 1. GlaxoSmithKline Clinical Imaging Centre, Hammersmith Hospital, Imperial College London, London, United Kingdom; 2. Charles River Laboratories, Endosafe Europe, L'Arbesle Cedex, France	
P157	UTILITY OF COMMERCIAL RADIOSYNTHETIC MODULES IN CAPTIVE SOLVENT [11C]-METHYLATION REACTIONS	S257
	A. A. Wilson [*] , A. Garcia and N. Vasdev Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada	
P158	FULLY AUTOMATED SYNTHESSES OF [11C]FALLYPRIDE AND [18F]FALLYPRIDE	S258
	B. Mock, M. Gao, M. Wang, B. Glick-Wilson, K. Yoder, G. Hutchins and Q. Zheng [*] Indiana University, Department of Radiology, Indianapolis, IN	
P159	AUTOMATED PRODUCTION OF [18F]FDDNP USING A TRACERLAB MXFDG	S259
	J. Vercoullie ^{*1} , C. Prenant ⁵ , S. Maia ² , P. Emond ¹ , S. Guillouet ³ , J. Barrio ⁴ , J. Deloye ⁵ , L. Barre ³ and D. Guilloteau ² 1. INSERM U930, Université François-Rabelais, Tours, France; 2. CHRU, Hôpital Bretonneau, Service de Médecine Nucléaire, Tours, France; 3. CEA-DSV-I2BM-CI-NAPS-LDM TEP UMR 6232, Groupe de Developpements Methodologiques en TEP, Caen, France; 4. Division of Nuclear Medicine, Department of Molecular and Medical Pharmacology, Los Angeles, CA; 5. Cyclopharma, Saint Beauzire, France	
P160	FULLY AUTOMATED SYNTHESIS AND INITIAL PET EVALUATION OF [11C]PBR28	S260
	M. Wang, K. Yoder, B. Mock, M. Gao, W. Winkle, A. Saykin, G. Hutchins and Q. Zheng [*] Indiana University, Department of Radiology, Indianapolis, IN	
P161	LC-MS EVALUATED THE PET TRACERS OF 5-HT1A LIGANDS [BR]-WAY	S261
	Y. Ma [*] , L. Lang, A. Bhattachatjee, Y. Shi and D. Kiesewetter PET Radiochemistry Group, National Institute of Biomedical Imaging and Bioengineering (NIBIB), National Institutes of Health, Bethesda, MD	

P162	AN AFFORDABLE AND FLEXIBLE ONE STOP SHOP LIMS	S262
	M. Yrvehed ¹ and K. Huxford ² 1. Herlev University Hospital, Dept. Nucl. Med., Herlev, Denmark; 2. Autoscribe Ltd., Riseley, United Kingdom	
P163	⁶⁸Ga-LABELLING OF PEPTIDES USING DIFFERENT STRATEGIES FOR A DISPOSABLE CASSETTE SYSTEM	S263
	M. Ocak ¹ , M. Petrik ¹ , R. Knopp ² , E. von Guggenberg ¹ , N. Bergisadi ³ and C. Decristoforo ¹ 1. Clinical Department of Nuclear Medicine, Innsbruck Medical University, Innsbruck, Austria; 2. Eckert & Ziegler Eurotope GmbH, Berlin, Germany; 3. Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Istanbul, Istanbul, Turkey	
P164	TOWARDS THE DEVELOPMENT OF PHARMACEUTICAL KIT FOR GALLIUM-68 LABELLING OF DOTATATE	S264
	D. Pawlak ¹ , Z. Wygoda ² , W. Wojdowska ¹ and R. Mikolajczak ¹ 1. Institute of Atomic Energy Radioisotope Centre POLATOM, Swierk-Otwock, Poland; 2. Comprehensive Cancer Centre, Maria Sklodowska-Curie Memorial Institute, Gliwice, Poland	
P165	NOVEL ANALOGUES OF 3-(1-METHYL-2(S)-PYRROLIDINYL METHOXY)PYRIDINE (A-84543) AS HIGHLY SELECTIVE AGENTS FOR NEURONAL NICOTINIC ACETYLCHOLINE RECEPTORS (nAChRs)	S265
	A. Liang and H. Zhang [*] Beijing Normal University, College of Chemistry, Beijing, CA, China	
P166	A CONVENIENT RADIOLABELING OF [C-11](R)-PK11195 USING LOOP METHOD IN AUTOMATIC SYNTHESIS MODULE	S266
	H. Lee [*] , J. Jeong and Y. Lee Seoul National University College of Medicine, Department of Nuclear Medicine, Seoul, SK, Korea	
P167	HIGHLY EFFICIENT AUTOMATED SYNTHESIS OF [18F]FLUOROCHOLINE USING A MULTIPURPOSE CHEMISTRY MODULE	S267
	C. Sauvage ¹ , C. Kech ¹ , B. Lambert ¹ and M. Kiselev ² 1. IBA Molecular, Fleurus, Belgium; 2. IBA Molecular, Sterling, VA	
P168	PREPARATION OF ¹¹¹In LABELED MORPHOLINO OLIGOMER FOR PRETARGETING OF ABDOMINAL SITES	S268
	G. Liu ¹ , S. Dou ¹ , M. Rusckowski ¹ , D. Greiner ² and D. Hnatowich ¹ 1. University of Massachusetts Medical School, Department of Radiology, Worcester, MA; 2. University of Massachusetts Medical School, Department of Medicine, Worcester, MA	
P169	DOSIMETRY OF ⁶¹CU-BLEOMYCINE: A TUMOR IMAGING AGENT FOR POSITRON EMISSION TOMOGRAPHY (PET)	S269
	A. Tavakol ¹ , A. R. Jalilian ² , H. Zandi ¹ , H. Sadeghpour ³ , A. Panahifar ¹ , P. Roshan Farzad ² , B. Maashkar ¹ , M. Akhlagh ¹ and J. Garousi ¹ 1. Islamic Azad University Science and Research Branch, Young Researcher Club, Tehran, Iran; 2. Nuclear Medicine Research Group, Agricultural Medical and Industrial Research School (ARS), Karaj, Iran; 3. Faculty of Pharmacy and Pharmaceutical Sciences Research Center, Tehran University of Medical Sciences, Tehran, Iran	
P170	MAINTAINING RADIOCHEMICAL PURITY OF RADIOPEPTIDES FOR RECEPTOR-TARGETING	S270
	W. A. Breeman ¹ , E. de Blois ¹ , M. Konijnenberg ² , J. L. Erion ³ and E. P. Krenning ¹ 1. Erasmus MC, Nuclear Medicine, Rotterdam, NL, Netherlands; 2. Mallinckrodt Medical B.V., R&D, Petten, NL, Netherlands; 3. BioSynthema, R&D, St Louis, MO	
P171	A RELIABLE AND INEXPENSIVE PLATFORM FOR ASSEMBLING AUTOMATED CHEMISTRY MODULES TO COMPOUND C-11 AND F-18 LABELED RADIOPHARMACEUTICALS	S271
	G. G. Gaehle [*] , C. D. Bognar, S. M. Moerlein and R. H. Mach Washington University School of Medicine, Mallinckrodt Institute of Radiology, Saint Louis, MO	
P172	¹⁸F-LABELING AND EVALUATION OF NOVEL ¹⁸F-LABELED MDL 100907 DERIVATIVES	S272
	M. Herth ¹ , F. Debus ² , V. Kramer ¹ , M. Piel ¹ , H. Lueddens ² and F. Roesch ¹ 1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. University of Mainz, Department of Psychiatry and Psychotherapy, Mainz, Germany	
P173	A PRACTICAL PREPARATION OF [18F]FEPPA USING A PROTIC SOLVENT SYSTEM	S273
	K. Hatano ¹ , H. Toyama ² , T. Yamada ¹ , G. Kudo ² , H. Suzuki ³ , M. Ichise ⁴ , A. A. Wilson ⁵ , M. Sawada ³ and K. Ito ¹ 1. National Institute for Longevity Sciences, Obu, Japan; 2. Fujita Health University, Toyoake, Japan; 3. Nagoya University, Nagoya, Japan; 4. Columbia University, New York, NY; 5. University of Toronto, Toronto, ON, Canada	
P174	AUTOMATED RADIOSYNTHESIS OF [F-18]EF-5 FOR IMAGING HYPOXIA IN HUMAN	S274
	F. T. Chin ¹ , M. Subbarayan ¹ , J. Sorger ² , S. S. Gambhir ¹ and E. E. Graves ³ 1. Stanford University School of Medicine, Department of Radiology, Stanford, CA; 2. Varian Medical Systems, Palo Alto, CA; 3. Stanford University School of Medicine, Department of Radiation Oncology, Stanford, CA	

P175	OPTIMIZATION OF LUTETIUM-177 PROCESSING TO MEET ICH Q7A QUALITY STANDARDS	S275
	C. S. Cutler*, M. A. Flagg, M. J. Whithaus and M. C. Wilder University of Missouri, Research Reactor Center, Columbia, MO	
P176	FORMULATION OF A Ga-68 LABELING KIT FOR MYOCARDIAL PET	S276
	B. Yang*, J. Jeong, Y. Kim, Y. Lee, D. Lee, J. Chung and M. Lee Seoul National University College of Medicine, Nuclear Medicine, Seoul, Korea	
P177	PEDANT 99mTc TRICARBONIL OR BISOXO DIAMINE COMPLEXES OF CARBOHYDRATES AS POTENTIAL TUMOR SPECT IMAGING AGENT	S277
	F. L. Marques ¹ , T. Storr ² , M. R. Okamoto ¹ , A. H. Otake ⁴ , C. L. Ferreira ⁵ , C. A. Buchpiguel ¹ , R. Chammas ⁴ , M. J. Adam ⁶ and C. Orvig ³ 1. Universidade de Sao Paulo, Faculdade de Medicina, Centro de Medicina Nuclear, Sao Paulo, Brazil; 2. Simon Fraser University, Department of Chemistry, Vancouver, BC, Canada; 3. University of British Columbia, Department of Chemistry, Vancouver, BC, Canada; 4. Universidade de Sao Paulo, Faculdade de Medicina, Laboratorio de Oncologia Experimental, Sao Paulo, Brazil; 5. MDS Nordion, Vancouver, BC, Canada; 6. TRIUMF, PET Chemistry, Vancouver, BC, Canada	
P178	PREPARATION AND BIOLOGICAL EVALUATION OF β-ELEMENE-99mTc(CO)₃ DERIVATIVES AS POTENTIAL RADIOPHARMACEUTICALS	S278
	Y. Sun ¹ , Y. Ren ² , Y. Zhang ² , H. Zhu ² , G. Liu ² , L. Huang ² , Y. Qi ¹ and Y. Shen ¹ 1. Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Research Center of Radiopharmaceuticals, Shanghai, China; 2. Graduate School of the Chinese Academy of Sciences, Beijing, China	
P179	PRODUCTION OF THE DAT PET-RADIOLIGAND [18F]LBT-999 ON A TRACERLAB FX-FN SYNTHESIZER	S279
	B. Kuhnast ¹ , F. Hinnen ¹ , P. Emond ² , J. Le Gaillard ³ , J. Deloye ⁴ , D. Guilloteau ² and F. Dolle ¹ 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. INSERM U930, Tours, France; 3. Orphachem, Saint Beuzire, France; 4. Cyclopharma, Saint Beuzire, France	
P180	LARGE SCALE SYNTHESIS OF NO-CARRIER-ADDED [123I]mIBG, USING TWO DIFFERENT STANNYLATED PRECURSORS	S280
	D. D. Rossouw ¹ and L. Macheli ² 1. iThemba Labs, Radionuclide Production Unit, Faure, South Africa; 2. National University of Lesotho, Maseru, Lesotho	
P181	ASSISTING THE ALKYLATION REACTION IN THE PREPARATION OF (R)-[11C]PK11195 BY SOLVATING KOH IN ADDED WATER	S281
	J. W. Engle ¹ , T. E. Barnhart ¹ , D. Murali ¹ , A. K. Converse ² and R. J. Nickles ¹ 1. University of Wisconsin, Department of Medical Physics, Madison, WI; 2. University of Wisconsin, Waisman Laboratory for Brain Imaging and Behavior, Madison, WI	
P182	AUTOMATED RADIOSYNTHESIS OF DOPAMINE D₂,D₃ RECEPTOR AGONIST LIGAND [11C]PHNO FOR HUMAN PET IMAGING STUDIES	S282
	C. Plisson*, M. Huiban, S. Pampols-Maso, S. Hill, T. Bonasera and A. Gee GlaxoSmithKline, Clinical Imaging Centre - Imperial College, London, United Kingdom	
P183	STUDIES ON THE AUTOMATED PRODUCTION OF [18F]FLUOROBENZOATE SYNTHONS	S283
	D. O. Kiesewetter*, O. Jacobson and L. Lang Natl Institutes Health, NIBIB, Bethesda, MD	
P184	AUTOMATED RADIOSYNTHESIS AND SPECIFIC ACTIVITIES OF MULTIPLE C-11 LABELLED PET TRACERS USING SIEMENS GPC AND CH₃ CHEMISTRY MODULES	S284
	N. C. Murphy* Siemens Medical Solutions, Knoxville, TN	
P185	PRODUCTION OF [F18]ISO-1 USING THE ECKERT AND ZIEGLER MODULAR - LAB	S285
	C. Bognar*, G. G. Gaehle, Z. Tu and R. H. Mach Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO	
P186	PRODUCTION OF [18F]FALLYPRIDE ON A TRACERLAB FX-FN SYNTHESIZER	S286
	B. Kuhnast*, F. Hinnen and F. Dolle CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France	
P187	INVESTIGATION ON THE SYNTHESIS AND WORKUP OF [18F]FLUMAZENIL FOR HUMAN PET STUDIES	S287
	G. Massarweh ¹ , E. Schirmmacher ¹ , M. Kovacevic ¹ , C. Waengler ¹ , C. La Fougere ² , A. Thiel ³ and R. Schirmmacher ¹ 1. McGill University, McConnell Brain Imaging Centre, Montreal, QC, Canada; 2. Ludwig-Maximilians-Universitaet, Department of Nuclear Medicine, Munich, Germany; 3. McGill University, Neurology & Neurosurgery, Montreal, QC, Canada	
P188	PREPARATION OF 6-[¹⁸F]FLUORO-L-DOPA USING CARRIER ADDED [¹⁸F]F₂ PRODUCED BY A COMMERCIALY AVAILABLE PROTON TARGET	S288
	D. Stimson* and J. G. Smith Royal Brisbane & Women's Hospital, Department of Nuclear Medicine & Queensland PET Service, Herston, Australia	

CONTENTS

P189	AUTOMATED SYNTHESIS OF N-SUCCINIMIDYL 4-[18F]FLUOROBENZOATE ([18F]SFB) AND N-[2-(4-18F-FLUOROBENZAMIDO)ETHYL]MALEIMIDE ([18F]-FBEM) USING A CUSTOMISED IBA SYNTHESISER	S289
	S. Yeoh [*] , U. Ackermann, H. Tochon-Danguy, J. Sachinidis, R. Mulligan and S. Poniger Austin Health Centre, PET and Nuclear Medicine, Heidelberg, Australia	
P190	QUALITY CONTROL OF Ga-68, In-111, Y-90 AND Lu-177 LABELED DOTA-DERIVATISED PEPTIDE ANALOGS USING A COMBINATION OF HPLC AND TLC	S290
	M. Ocak ¹ , C. Decristoforo ¹ , N. Bergisadi ² , L. Kabasakal ³ and E. von Guggenberg ^{*1} 1. Clinical Department of Nuclear Medicine, Innsbruck Medical University, Innsbruck, Austria; 2. Department of Pharmaceutical Technology, Faculty of Pharmacy, University of Istanbul, Istanbul, Turkey; 3. Department of Nuclear Medicine, Cerrahpaşa Medical Faculty, Aksaray Istanbul, Istanbul, Turkey	
P191	STERILE VIAL FILLING WITH PET RADIOPHARMACEUTICALS	S291
	L. Martarello [*] , J. Parmar, G. Dyer, C. Plisson, J. Barletta, C. Marzano, J. Passchier, I. Bennacef, S. Pampols-Maso, R. Reiley, A. Gee, M. Huiban and T. Bonasera GlaxoSmithKline - Clinical Imaging Centre, London, United Kingdom	
P192	LARGE SCALE PREPARATION OF [18F]FLUOROMETHOXYBENZYL BROMIDES, KEY PRECURSORS FOR 2-[18F]FLUORO-L-TYROSINE AND 6-[18F]FLUORO-L-DOPA SYNTHESIS	S292
	L. Libert ¹ , C. Lemaire ^{*1} , L. Wouters ² , A. Plenevaux ¹ , X. Franci ² and A. Luxen ¹ 1. University of Liege, Cyclotron Research Center, Liege, Belgium; 2. GE Healthcare, Loncin, Belgium	
P193	ELECTRONIC INVENTORY SYSTEM	S293
	M. Huiban [*] , S. Hill and J. Passchier GlaxoSmithKline Clinical Imaging Centre, PET and Radiotracer Development, London, United Kingdom	
P194	RECONFIGURATION OF A SIEMENS EXPLORA GN+LC SYSTEM TO ALLOW BOTH SYNTHESIS AND REFORMULATION	S294
	M. Huiban [*] , S. Hill and J. Passchier GlaxoSmithKline Clinical Imaging Centre, PET and Radiotracer Development, London, United Kingdom	
P195	SIMPLE AND RAPID SYNTHESIS OF N-SUCCINIMIDYL-4-[18F]FLUOROBENZOATE AND N-[2-(4-[18F]FLUOROBENZAMIDO)ETHYL]MALEIMIDE FOR PROTEIN AND PEPTIDE LABELING	S295
	K. Nishijima ^{*1} , K. Aita ¹ , S. Zhao ¹ , H. Akizawa ² , K. Ohkura ² , N. Tamaki ¹ , K. Seki ¹ and Y. Kuge ¹ 1. Graduate School of Medicine, Hokkaido University, Sapporo, Japan; 2. Faculty of Pharmaceutical Sciences, Health Sciences University of Hokkaido, Hokkaido, Japan	
P196	FULLY AUTOMATED PREPARATION OF [18F]FPyBr IN A MODULAR SYNTHESIS SYSTEM	S296
	E. von Guggenberg ^{*1} , J. Sader ² , J. Wilson ² , S. Shahhosseini ² , I. Koslowsky ² , F. Wuest ² and J. Mercer ² 1. Clinical Department of Nuclear Medicine, Medical University Innsbruck, Innsbruck, Austria; 2. Edmonton PET Centre, Cross Cancer Institute, Edmonton, AB, Canada	
P197	PRE-RELEASE DETERMINATION OF RESIDUAL SOLVENTS IN SHORT-LIVED RADIOPHARMACEUTICALS	S297
	S. Pampols-Maso ^{*1} , J. Ejimadu ² , C. Devos ³ and T. Bonasera ¹ 1. GlaxoSmithKline Clinical Imaging Centre, Hammersmith Hospital - Imperial College London, London, United Kingdom; 2. GlaxoSmithKline Analytical Sciences Chemical Development, Medicines Research Centre, Stevenage, United Kingdom; 3. Research Institute for Chromatography, Kortrijk, Belgium	
P198	[18F]FALLYPRIDE SYNTHESIS WITH PROTIC SOLVENT MIXTURE	S298
	B. Vuong [*] , J. Kusmierze and M. Channing NIH Clinical Center, PET Dept., Bethesda, MD	
P199	SYNTHESIS AND EVALUATION OF RADIOIODINE LABELED 1,5-ANHYDRO-2,3-DIDEOXY-2-(5-IODOURACIL-1-YL)-D-ARABINOHEXITOL FOR HSV-TK IMAGING AGENT	S299
	M. Hong [*] , J. Y. Kim, E. Kim, T. H. Choi, K. C. Lee, G. An, H. Park and G. J. Cheon Korea Institute of Radiological and Medical Sciences, Molecular Imaging Research Center, Seoul, Korea	
P200	NON-HPLC METHODS FOR THE PRODUCTION OF F-18 AND C-11 RADIOPHARMACEUTICALS	S300
	A. Yordanov ^{*1} , M. Combs ¹ , S. Shulman ¹ , R. Galloway ² , M. Mueller ³ , D. LeBars ⁴ , G. Hiatt ² , D. Trump ² , A. Soylu ⁵ and H. Bagci ⁵ 1. Bioscan, Inc., Washington, DC; 2. Spectron mrc, South Bend, IN; 3. ABX Advanced Biochemical Compounds, Radeberg, Germany; 4. CERMEP, Lyon, France; 5. Eczacibasi-Monrol, Ankara, Turkey	
P201	A PORTABLE SYSTEM FOR BACTERIAL ENDOTOXIN QUANTIFICATION IN RADIOPHARMACEUTICALS BY THE KINETIC CHROMOGENIC METHOD	S301
	N. Fukumori [*] , D. Campos, L. Silva, A. Fernandes, J. Mengatti, C. Silva and M. Matsuda IPEN-CNEN/SP, Radiopharmacy Directory, Sao Paulo, Brazil	
P202	RADIOCHEMICAL ANALYSIS OF [F-18]FLUOROTHYMININE PRODUCED FROM BOC-PRECURSOR AND PURIFIED WITH A COMBINATION COLUMN OF ANION-EXCHANGER AND ALUMINA	S302
	S. K. Nandy [*] , N. V. Krishnamoorthy and R. M. Rajan Dept of Atomic Energy, B.A.R.C., B.R.I.T., Radiation Medicine Centre, Medical Cyclotron Facility, Mumbai, India	

P203	FULLY AUTOMATED RADIOSYNTHESIS OF [F-18]FLUOROESTRADIOL BY ALKALI HYDROLYSIS AND SIMPLIFIED COLUMN PURIFICATION	S303
	S. K. Nandy [*] and R. M. Rajan Dept of Atomic Energy, B.A.R.C., B.R.I.T., Radiation Medicine Centre, Medical Cyclotron Facility, Mumbai, India	
P204	DEVELOPMENT OF ^{99m}Tc-NTP 15-5, A NEW TECHNETIUM LABELED RADIOPHARMACEUTICAL FOR FUNCTIONAL IMAGING OF CARTILAGINOUS DISEASES	S304
	A. Vidal ¹ , P. Auzeloux ⁴ , E. Noirault ¹ , F. Cachin ² , S. Askienazy ³ and J. Chezal ¹ 1. University of Auvergne, EA 4231, Clermont-Ferrand, France; 2. Jean Perrin Center, Division of Nuclear Medicine, Clermont-Ferrand, France; 3. Cyclopharma Laboratories SA, Saint-Beauzire, France; 4. University of Auvergne UFR Pharmacy, Laboratoire de Chimie Physique et Minerale, Clermont-Ferrand, France	
P205	A MULTIPURPOSE AUTOMATED SYSTEM FOR CLINICAL PRODUCTION OF RADIOPHARMACEUTICALS FOR PET USING DISPOSABLE KITS	S305
	K. Takahashi ¹ , A. Tachibana ¹ , M. Shigematsu ¹ , K. Osaki ² , Y. Mizukawa ² , Y. Endo ² , S. Yamazaki ² , A. Aota ³ , K. Mawatari ⁴ , Y. Kikutani ³ and T. Kitamori ⁵ 1. RIKEN Center for Molecular Imaging Science, Molecular Imaging Integration Unit, Kobe, Japan; 2. JFE Engineering Corporation, Yokohama, Japan; 3. Institute of Microchemical Technology, Kawasaki, Japan; 4. Kanagawa Academy of Science and Technology, Micro Chemistry Group Special Research Laboratory, Kawasaki, Japan; 5. The University of Tokyo, Graduate School of Engineering, Department of Applied Chemistry, Tokyo, Japan	
P206	PRE-CLEAN-UP OF REACTION MIXTURES IN RADIOPHARMACEUTICAL MANUFACTURING BY ON-LINE SOLID PHASE EXTRACTION USING HPLC	S306
	F. Fuechtner [*] , P. Maeding, S. Preusche, J. Zessin and J. Steinbach Institute of Radiopharmacy, Forschungszentrum Dresden-Rossendorf, Dresden, Germany	
P207	SYNTHESIS OF NOVEL WAY 100635 DERIVATIVES CONTAINING A NORBORNENE GROUP AND RADIOFLUORINATION OF [18F]AH1.MZ	S307
	M. Herth [*] , V. Kramer and F. Roesch University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany	
P208	AUTOMATED SYSTEM FOR RADIOPHARMACEUTICAL FORMULATION AND [F-18]SODIUM FLUORIDE PRODUCTION	S308
	J. Santiago [*] Siemens Healthcare USA, Molecular Imaging, Knoxville, TN	
P209	AN INTUITIVE, MODULAR, EASY-TO-MAINTAIN [C-11] ACETATE PRODUCTION SYSTEM WITH TOUCH-SCREEN PANEL INTERFACE	S309
	C. E. Erdahl ¹ , B. R. Bender ¹ , M. K. Schultz ² , T. J. Tewson ¹ and G. L. Watkins ¹ 1. University of Iowa Health Care, PET Imaging Center - Radiology, Iowa City, IA; 2. University of Iowa Health Care, Radiation Oncology, Iowa City, IA	
P210	AUTOMATED RADIOSYNTHESIS OF [18F]PBR111 AND [18F]PBR102 – SELECTIVE RADIOLIGANDS FOR IMAGING THE PERIPHERAL BENZODIAZEPINE RECEPTOR WITH PET	S310
	T. Pham ¹ , T. Bourdier ¹ , D. Henderson ² , C. Fookes ¹ , I. Greguric ¹ , T. Jackson ¹ , P. Lam ² and A. Katsifis ¹ 1. ANSTO, Radiopharmaceuticals Research Institute, Lucas Heights, Australia; 2. Royal Prince Alfred Hospital, Department of PET and Nuclear Medicine, Camperdown, Australia	
P211	LYOPHILIZED DMSA (V) KIT FOR LABELING WITH ^{99m}Tc	S311
	T. d. Brambilla and J. A. Osso Jr. [*] Instituto de Pesquisas Energeticas e Nucleares, Sao Paulo, SD, Brazil	
P212	A TIME-EFFECTIVE MICROWAVE ENHANCED FLUORINATION METHOD: ENTRIES FOR HIGH DIRECT LABELLING YIELDS OF TROPANES	S312
	P. J. Riss [*] and F. Roesch Johannes Gutenberg University, Institute of Nuclear Chemistry, Mainz, Germany	
P213	CAPTIVE SOLVENT METHYLATIONS IN THE INJECTOR LOOP OF THE TRACERLAB CARBON-11 MODULE	S313
	M. Kuznetsov [*] , D. Soloviev, R. Harper, R. Canales-Candela and F. I. Aigbirhio University of Cambridge, Wolfson Brain Imaging Centre, Cambridge, United Kingdom	
P214	A VERSATILE RADIONUCLIDE DELIVERY SYSTEM FOR PET OPERATIONS	S314
	J. Passchier ¹ , T. Oakley ² , J. Barletta ¹ , I. Bennacef ¹ , G. Dyer ¹ , A. Gee ¹ , S. Hill ¹ , M. Huiban ¹ , L. Martarello ¹ , C. Marzano ¹ , S. Pampols-Maso ¹ , J. Parmar ¹ , C. Plisson ¹ , R. Reiley ¹ and T. Bonasera ¹ 1. GlaxoSmithKline Clinical Imaging Centre, Hammersmith Hospital - Imperial College London, London, United Kingdom; 2. SciTech Engineering Ltd, Connaught House, Send, United Kingdom	
P215	FULLY AUTOMATED SYSTEM FOR [18F]FALLYPRIDE ROUTINE PRODUCTION WITH TRACERLAB MX MODULE	S315
	D. Lukic ¹ , C. Tamburella ¹ , A. Filannino ² , L. Lemoucheux ² and Y. Seimbille ¹ 1. Cyclotron Unit, University Hospital of Geneva, Geneva, Switzerland; 2. Advanced Accelerator Applications, Saint Genis Pouilly, France	

P216	AUTOMATED PRODUCTION OF [18F]F-A-85380 USING TRACERLAB MX SYNTHESIZER	S316
	D. Lukic ¹ , C. Tamburella ¹ , F. Picard ² and Y. Seimille ¹ 1. Cyclotron Unit, University Hospital of Geneva, Geneva, Switzerland; 2. Neurobiology Division, University Hospital of Geneva, Geneva, Switzerland	
P217	PET IMAGING OF MELANOMA WITH 18F-LABELED RECCMSH(ARG11)	S317
	X. Zhang ¹ , F. Gallazzi ² , M. Weichelt ³ and T. Quinn ¹ 1. University of Missouri, Biochemistry, Columbia, MO; 2. University of Missouri, Research Core Facilities, Columbia, MO; 3. Essential Isotopes, University of Missouri Research Reactor, Columbia, MO	
P218	ONE POT SYNTHESIS OF [18F]FPEB IN A SEMI-AUTOMATED MODULE	S318
	M. S. Ansari ¹ , C. K. Jones ² , A. S. Felts ² , C. W. Lindsley ² , D. Alagille ³ , G. D. Tamagnan ³ , R. M. Kessler ¹ and R. M. Baldwin ¹ 1. Vanderbilt University Medical Center, Radiology & Radiological Sciences/VUIIS, Nashville, TN; 2. Vanderbilt University Medical Center, Pharmacology, Nashville, TN; 3. Institute for Neurodegenerative Disorders, New Haven, CT	
P219	APPLICATION OF MICROWAVE ACCELERATION TO RADIOFLUORINATION OF RADIOPHARMACEUTICALS	S319
	M. S. Ansari ¹ , R. M. Kessler and R. M. Baldwin Vanderbilt University Medical Center, Radiology & Radiological Sciences/VUIIS, Nashville, TN	
P220	DUAL PET ISOTOPE LABELING A σ_2 RECEPTOR LIGAND FOR IMAGING STUDIES OF SOLID TUMORS	S320
	Z. Tu ¹ , D. Zhou, S. Li, Z. Zhang, J. Xu, R. Laforest and R. H. Mach Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO	

Molecular targets: Gene expression posters

P221	IMAGING SOMATOSTATIN 2 RECEPTOR GENE TRANSFER WITH GA-68 DOTATATE AND PET	S321
	L. Aloj ¹ , M. Aurilio ¹ , G. Cotugno ² , V. Rinaldi ¹ , A. Faella ² , M. Di Tommaso ² and A. Auricchio ² 1. Istituto Nazionale Tumori, Fondazione G. Pascale, Medicina Nucleare, Napoli, Italy; 2. Telethon Institute of Genetics in Medicine (TIGEM), Napoli, Italy	
P222	MOLECULAR TARGETING OF BREAST CANCER WITH CU-64 LABELED PNA-PEPTIDE CONJUGATES	S322
	F. Jia ² , S. F. Dannoon ³ , B. S. Balaji ² , V. C. Ruthengael ² , W. Qin ⁴ , E. R. Sauter ⁴ and M. R. Lewis ¹ 1. Harry S. Truman VA Hospital, Research Service, Columbia, MO; 2. University of Missouri-Columbia, Department of Veterinary Medicine and Surgery, Columbia, MO; 3. University of Missouri-Columbia, Department of Chemistry, Columbia, MO; 4. University of North Dakota, Department of Research Affairs, Grand Forks, ND	
P223	SYNTHESIS AND BIOLOGICAL EVALUATION OF C11-LABELED β-GALACTOSYL TRIAZOLES AS POTENTIAL PET TRACERS FOR IN VIVO IMAGING OF LACZ REPORTER GENE EXPRESSION	S323
	S. Celen ¹ , B. J. Cleynhens ¹ , C. M. Deroose ² , T. de Groot ² , A. Verbruggen ¹ and G. Bormans ¹ 1. Katholieke Universiteit Leuven, Laboratorium voor Radiofarmacie, Leuven, Belgium; 2. Katholieke Universiteit Leuven, UZ Gasthuisberg, Departement Nucleaire Geneeskunde, Leuven, Belgium	
P224	EVALUATION OF NOVEL BIODEGRADABLE VECTORS FOR IMPROVED CELLULAR UPTAKE OF RADIOLABELED OLIGONUCLEOTIDES	S324
	E. von Guggenberg ¹ , S. Shahhosseini ² , I. Koslowsky ² , A. Lavasanifar ³ , D. Murray ⁴ and J. Mercer ⁴ 1. Clinical Department of Nuclear Medicine, Medical University Innsbruck, Innsbruck, Austria; 2. Edmonton PET Centre, Cross Cancer Institute, Edmonton, AB, Canada; 3. Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada; 4. Experimental Oncology, Cross Cancer Institute, Edmonton, AB, Canada	

Molecular targets: Receptors, transporters and ion channels posters

P225	PREPARATION, BIOLOGICAL EVALUATION AND PHARMACOKINETICS OF 86Y-CHX-A''-DTPA-PANITUMUMAB FOR QUANTITATIVE PET IMAGING OF HER1-EXPRESSING CANCER	S325
	T. Nayak ¹ , K. Garmestani, K. Baidoo, D. Milenic and M. Brechbiel Radioimmune & Inorganic Chemistry Section, ROB, NCI/NIH, Bethesda, MD	
P226	DEVELOPMENT OF [67GA]-DTPA-GONADORELIN IN NORMAL RATS	S326
	S. Shanehazzadeh ¹ and A. Jalilian ² 1. Tehran University of Medical Sciences, Department of Biomedical Physics and Engineering, School of Medicine, Tehran, Iran; 2. Agriculture, Medicine and Industrial Research School (AMIRS, NSTRI), Nuclear Medicine Research Group, Karaj, Iran	
P227	TARGETING OF CCK2 RECEPTOR EXPRESSING TUMOURS USING AN 111IN-LABELLED MINIGASTRIN DIMER	S327
	J. Sosabowski, T. Matzow, J. Foster and S. Mather ¹ Barts and the London School of Medicine, Centre for Molecular Oncology and Imaging, London, United Kingdom	

P228	RADIOSYNTHESIS AND IN VIVO EVALUATION OF [11C]-(R)-N-(1-CYCLOHEXYLETHYL)-N-METHYL-1H-PYRROLE-2-CARBOXAMIDE	S328
	S. De Bruyne ¹ , L. Wyffels ¹ , L. Moerman ¹ , G. La Regina ² , R. Silvestri ² and F. De Vos ¹ 1. Ghent University, Laboratory for Radiopharmacy, Ghent, Belgium; 2. Dipartimento di Chimica e Tecnologia del Farmaco, Sapienza University of Rome, Roma, Italy	
P229	[11C]AF150(S), AN AGONIST PET LIGAND FOR IN VIVO IMAGING OF THE M1 MUSCARINIC ACETYLCHOLINE RECEPTOR	S329
	H. J. Buiters ¹ , J. E. Leysen ¹ , A. Fisher ² , M. C. Huisman ¹ , D. L. Knol ³ , A. A. Lammertsma ¹ and A. D. Windhorst ¹ 1. VU University Medical Center, Department of Nuclear Medicine & PET Research, Amsterdam, Netherlands; 2. Israel Institute for Biological Research, Ness-Ziona, Israel; 3. VU University Medical Center, Department of Clinical Epidemiology and Biostatistics, Amsterdam, Netherlands	
P230	FLUORINE-18 LABELED SCH 442416 DERIVATIVE FOR IMAGING ADENOSINE A2A RECEPTORS	S330
	L. Lang ¹ , B. Shinkre ² , A. Ma ¹ , Y. Shi ¹ , O. Jacobson ¹ , Z. Gao ² , W. C. Trenkle ² , K. A. Jacobson ² and D. O. Kiesewetter ¹ 1. National Institutes of Health, National Institutes of Biomedical Imaging and Bioengineering, Bethesda, MD; 2. National Institutes of Health, National Institutes of Diabetes and Digestive and Kidney Diseases, Bethesda, MD	
P231	ORAL METHYLPHENIDATE SIGNIFICANTLY OCCUPIES NOREPINEPHRINE TRANSPORTERS AT CLINICALLY RELEVANT DOSES: A PET STUDY WITH (S,S)-[11C]MRB IN HEALTHY SUBJECTS	S331
	Y. S. Ding ¹ , J. Hannestad, J. Gallezot, W. Williams, R. Carson and C. Van Dyck Yale University School of Medicine, PET Center, New Haven, CT	
P232	COMPARISON OF BREAST TUMOR TARGETING WITH 99mTc RADIOLABELED PR81 AND ITS F(AB')₂ FRAGMENT	S332
	M. Salouti ¹ , H. Babaei ² , H. Foroutan ² , H. Rajabi ³ , A. Bitarafan ³ , M. Shafiei ² , M. Mazidi ² , F. Johari dahan ² and M. Rasaei ⁴ 1. Islamic Azad University, Zanjan Branch, School of Medical and Basic Sciences, Department of Biology, Zanjan, Iran; 2. Atomic Energy Organization of Iran, Nuclear Research Center, Department of Radioisotope, Tehran, Iran; 3. Tarbiat Modarres University, School of Medical Sciences, Department of Medical Physics, Tehran, Iran; 4. Tarbiat Modarres University, School of Medical Sciences, Department of Medical Biotechnology, Tehran, Iran	
P233	PHENYTOIN IS A WEAK MODULATOR OF P-GLYCOPROTEIN TRANSPORTERS: EVALUATION WITH 11C-DESMETHYLOPERAMIDE IN MICE	S333
	L. Moerman ¹ , L. Wyffels, S. De Bruyne and F. De Vos Ghent University, Laboratory of Radiopharmacy, Ghent, Belgium	
P234	NEW HYNIC-BOMBESIN ANALOGUE FOR TARGETING PROSTATE TUMOURS: TC-99M LABELLING AND PRECLINICAL EVALUATION	S334
	Z. Yu ¹ , H. J. K. Ananias ¹ , R. A. Dierckx ¹ , I. J. de Jong ¹ , X. Chen ² , F. Wand ³ and P. H. Elsinga ¹ 1. University Medical Center Groningen, University of Groningen, Department of Nuclear Medicine and Molecular Imaging and Department of Urology, Groningen, Netherlands; 2. Stanford University School of Medicine, Molecular Imaging Program at Stanford (MIPS), Department of Radiology and Bio-X Program, Stanford, CA; 3. Peking University, Medical Isotopes Research Center, Peking, China	
P235	PET IMAGING OF VEGF-A TUMOR ANGIOGENESIS WITH 86Y-CHX-A''-DTPA-BEVACIZUMAB	S335
	T. Nayak ¹ , K. Garmestani, K. Baidoo, D. Milenic and M. Brechbiel Radioimmune and Inorganic Chemistry, ROB/NCI/NIH, Bethesda, MD	
P236	PRECLINICAL EVALUATION OF A CARBON-11 LABELLED 2-OXOQUINOLINE FOR CANNABINOID TYPE 2 RECEPTOR PET IMAGING	S336
	N. Evens ¹ , K. Van Laere ² , K. Serdons ¹ , P. Janssen ³ , A. Verbruggen ¹ and G. Bormans ¹ 1. K.U.Leuven, Laboratory for Radiopharmacy, Leuven, Belgium; 2. K.U.Leuven, Division of Nuclear Medicine, Leuven, Belgium; 3. K.U.Leuven, Department of Neurophysiology, Leuven, Belgium	
P237	[¹¹C]GO6976 AS A POTENTIAL RADIOLIGAND FOR IMAGING PROTEIN KINASE C WITH PET	S337
	L. Cai ¹ , H. Ozaki, M. Fujita, J. S. Hong, M. Bukhari, R. B. Innis and V. W. Pike National Institute of Mental Health, National Institutes of Health, Molecular Imaging Branch, Bethesda, MD	
P238	SYNTHESIS AND BIOLOGICAL EVALUATION OF [11C]D617, A METABOLITE OF [11C]VERAPAMIL	S338
	J. Verbeek ¹ , A. D. Windhorst, J. Eriksson, A. A. Lammertsma and G. Luurtsema VU University Medical Center, Dept of Nuclear Medicine & PET Research, Amsterdam, Netherlands	
P239	DEVELOPMENT OF NOVEL FLUORINE-18 LABELED PET TRACERS FOR IMAGING THE METABOTROPIC GLUTAMATE RECEPTOR SUBTYPE 5 (MGLUR5)	S339
	C. A. Baumann ¹ , L. Mu, S. Johannsen, N. Wertli, M. Honer and S. M. Ametamey ETH Zurich, Radiopharmaceutical Institute, Zurich, Switzerland	
P240	SYNTHESIS AND EVALUATION OF N-METHYL-2-(2-AMINO-4-[18F]FLUOROPHENYLTHIO) BENZYLAMINE AS SERT IMAGING AGENT	S340
	Y. Huang, T. Chou, Y. Kuo, K. Ma, W. Huang and C. Shiue [*] Tri-Service General Hospital, Dept of Nuclear Medicine, Neihu, Taipei, Taiwan	

P241	DEVELOPMENT AND PRELIMINARY EVALUATION OF A ¹¹C LABELED SULFONAMIDE DERIVATIVES AS POTENTIAL PET TRACER FOR BLOOD POOL IMAGING V. Akurathi, S. Chitneni, B. Cleynhens, A. Verbruggen and G. Bormans* Katholieke Universiteit Leuven, Laboratory for Radiopharmacy, Leuven, Belgium	S341
P242	PREPARATION OF THE NOVEL FLUORINE-18-LABELED T140 ANALOG FOR PET IMAGING Y. Han ² , L. Zhang ¹ , W. Zhou ¹ , Z. Lee ³ , D. Yin ¹ and Y. Wang ¹ 1. Chinese Academy of Sciences, Research Centre of Radiopharmaceuticals, Shanghai Institute of Applied Physics, Shanghai, China; 2. Chinese Academy of Sciences, Graduate School, Beijing, China; 3. Case Western Reserve University, Department of Nuclear Medicine/Radiology, Cleveland, OH	S342
P243	THE PREPARATION AND IN VITRO EVALUATION OF CARBORANE SELECTIVE ESTROGEN RECEPTOR MODULATORS M. L. Beer ^{*1} , J. Lemon ⁴ , P. Causey ³ and J. F. Valliant ² 1. McMaster University, Department of Chemistry, Hamilton, ON, Canada; 2. McMaster University, McMaster Institute for Applied Radiation Sciences, Hamilton, ON, Canada; 3. McMaster University, McMaster Nuclear Reactor, Hamilton, ON, Canada; 4. Hamilton Health Sciences, Juravinski Cancer Center, Hamilton, ON, Canada	S343
P244	PRELIMINARY PET EVALUATION AND RADIOMETABOLISM OF A ¹⁸F-LABELED NR2B NMDA RECEPTOR ANTAGONIST F. Sobrio ¹ , R. Labas ¹ , G. Gilbert ² , M. Dhilly ¹ , A. Abbas ³ , D. Debruyne ² and L. Barre ¹ 1. UMR 6232 - CI-NAPS, CEA/DSV/I2BM/CINAPS/GDM-TEP, Centre Cyceron, CAEN, France; 2. UMR 6232 - CI-NAPS, GDM-TEP - Universite de Caen-Basse Normandie, Centre Cyceron, CAEN, France; 3. Centre Cyceron, INSERM, CAEN, France	S344
P245	EVALUATION OF DOPAMINE RECEPTOR AGONISTS, ¹⁸F-5-OH-FPPAT, ¹⁸F-5-OH-FHXPAT and ¹⁸F-7-OH-FHXPAT M. T. Tran, S. R. Shah, K. Kim, P. Trinidad, S. Pandey, A. Karmur, R. Patel, R. Kant and J. Mukherjee* University of California-Irvine, Preclinical Imaging Facility, Psychiatry and Human Behavior, Irvine, CA	S345
P246	COMPARISONS OF 2-[¹⁸F]-ADAM, 4-[¹⁸F]-ADAM AND [¹⁸F]AFM AS SERT IMAGING AGENTS IN RATS USING μPET Y. Huang, T. Chou, Y. Kuo, K. Ma, W. Huang and C. Shiue* Tri-Service General Hospital, Department of Nuclear Medicine, Neihu, Taipei, Taiwan	S346
P247	LABELLING AND IN-VIVO EVALUATION IN BABOONS OF A NOVEL [¹¹C]-CARBON LABELLED IMIDAZOPYRIDINE, FOR THE STUDY OF THE PERIPHERAL BENZODIAZEPINE RECEPTORS USING PET T. Bourdier ¹ , D. Henderson ² , P. Lam ² , C. Fookes ¹ , F. Mattner ¹ , I. Greguric ¹ , T. Pham ¹ , S. Eberl ² , L. Wen ² and A. Katsifis ¹ 1. ANSTO, Radiopharmaceutical Research Institute, Lucas Heights, Australia; 2. Royal Prince Alfred Hospital, Department of PET and Nuclear Medicine, Camperdown, NSW, Australia	S347
P248	SYNTHESIS AND BIOLOGICAL EVALUATION OF CYCLIC RGD-MONO- TO HEXADECIMERS FOR ENHANCED αvβ3 INTEGRIN IMAGING C. Waengler ¹ , O. Prante ² , S. Maschauer ² , M. Eisenhut ³ and B. Waengler ^{*4} 1. McGill University, Neurology & Neurosurgery, Lady Davis Institute, Jewish General Hospital, Montreal, QC, Canada; 2. Friedrich-Alexander University, Clinic of Nuclear Medicine, Laboratory of Molecular Imaging, Erlangen, Germany; 3. German Cancer Research Center, Department of Radiopharmaceutical Chemistry, Heidelberg, Germany; 4. LMU University of Munich, Department of Nuclear Medicine, Munich, Germany	S348
P249	SYNTHESIS AND EVALUATION OF A NEW RADIOLABELED BOMBESIN ANALOGUE FOR DIAGNOSIS OF BOMBESIN RECEPTOR EXPRESSING TUMORS N. Sadeghzadeh ¹ , M. Gandomkar ² , S. Ebrahimi ¹ , R. Najafi ² , M. Mazidi ² and S. Mirfallah ² 1. Tehran University of Medical Sciences, Department of Medicinal Chemistry, Tehran, TN, Iran; 2. Atomic Energy Organization of Iran, Nuclear Science & Technology Research Institute (NSTRI), Tehran, TN, Iran	S349
P250	SYNTHESIS OF A PROSPECTIVE ¹⁸F-LABELED TRACER FOR IMAGING P-GLYCOPROTEIN FUNCTION X. Bao [*] , S. Lu, F. G. Simeon, C. L. Morse and V. W. Pike National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD	S350
P251	RADIOFLUORINATION AND PHARMACOLOGICAL EVALUATION OF [¹⁸F] FLUOROPHENYLSULFONYL- AND [¹⁸F]FLUOROPHENYLSULFINYL-PIPERIDINES AS SEROTONIN 5-HT_{2A} RECEPTOR ANTAGONISTS U. Muehlhausen, W. Sihver, J. Ermert* and H. H. Coenen Forschungszentrum Juelich GmbH, Institut fuer Neurowissenschaften und Biophysik, INM-5: Nuklearchemie, Juelich, Germany	S351

- P252 EVALUATION OF A Cu-64-LABELED SarAr CONJUGATED BOMBESIN ANALOG FOR DETECTION OF GASTRIN-RELEASING PEPTIDE RECEPTOR POSITIVE TUMORS S352**
 T. S. Kelly¹, R. Ferdani², K. Liang², R. Andrews¹, C. D. Sherman², S. Achilefu², C. J. Anderson² and B. E. Rogers¹
 1. Washington University School of Medicine, Department of Radiation Oncology, St. Louis, MO; 2. Washington University School of Medicine, Mallinckrodt Institute of Radiology, St. Louis, MO
- P253 SYNTHESIS OF [3H]FALLYPRIDE USING [3H]METHYL NOSYLATE S353**
 T. Hess¹, C. Meisterhans² and F. Roesch¹
 1. Johannes-Gutenberg-University, Institute of Nuclear Chemistry, Mainz, Germany; 2. RC Tritec AG, Teufen, Switzerland
- P254 IN VITRO EVALUATION OF [18F]AH110690 (GE-067) FOR BETA-AMYLOID PLAQUE IMAGING OF ALZHEIMER'S DISEASE S354**
 J. Rokka¹, I. Wilson², G. Farrar², O. Eskola¹, S. Forsback¹, H. Kalimo³, J. Rinne¹, M. Haaparanta¹ and O. Solin¹
 1. University of Turku, Turku PET Centre, Turku, Finland; 2. GE Healthcare, Medical Diagnostics, United Kingdom; 3. University and University Hospital of Helsinki, Department of Pathology, Helsinki, Finland
- P255 OPTIMIZATION OF THE BOMBESIN PEPTIDE SEQUENCE FOR IN VIVO PRECLINICAL IMAGING OF GRP RECEPTOR POSITIVE TUMORS S355**
 B. Bottenus¹, J. Garrison², B. Cook², T. Rold¹, G. Sieckman¹, S. Sublett², S. Figueroa¹, S. S. Jurisson² and T. Hoffman¹
 1. HS Truman VA Hospital, Columbia, MO; 2. University of Missouri, Columbia, MO
- P256 PIG BRAIN & PLASMA METABOLITES OF [11C]CIMBI-5, A NOVEL 5HT2A AGONIST PET LIGAND S356**
 N. M. Gillings¹, K. Nagren¹, A. Ettrup², S. Lehel³, B. Shuka², L. K. Rasmussen⁴, J. Madsen¹, M. Begtrup⁴ and G. M. Knudsen²
 1. Copenhagen University Hospital, Rigshospitalet, PET & Cyclotron Unit & Centre for Integrated Molecular Brain Imaging, Copenhagen, Denmark; 2. Copenhagen University Hospital, Rigshospitalet, Neurobiology Research Unit & Centre for Intergrated Molecular Brain Imaging, Copenhagen, Denmark; 3. Copenhagen University Hospital, Rigshospitalet, PET & Cyclotron Unit, Copenhagen, Denmark; 4. University of Copenhagen, Faculty of Pharmaceutical Sciences, Department of Medicinal Chemistry and Centre for Integrated Molecular Brain Imaging, Copenhagen, Denmark
- P257 BINDING RESEARCH ON A SERIES OF NON-RADIOFLAVONE DERIVATIVES AS IMAGING PROBES FOR β -AMYLOID PLAQUES (1~40) IN SOLUTION VIA FLUORESCENCE TITRATION S357**
 Y. Yang¹, L. Zhu, M. Han and H. Zhang
 Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Ministry of Education, Beijing, China
- P258 RADIOSYNTHESIS OF [18F] MK-0518 (ISENTRESS) FOR PET IMAGING STUDIES S358**
 W. Li¹, M. Belanger¹, M. Williams¹, S. Krause¹, M. Purcell¹, W. Thompson¹, T. Fisher², J. Wai², D. Hazuda³, D. Burns¹, J. Cook¹ and T. G. Hamill¹
 1. Merck Research Laboratories, Imaging Research, West Point, PA; 2. Merck Research Laboratories, Medicinal Chemistry, West Point, PA; 3. Merck Research Laboratories, Infectious Disease, West Point, PA
- P259 BIODISTRIBUTION AND METABOLIC STUDIES OF A RADIOIODINATED VESAMICOL ANOLOG AS A SIGMA RECEPTOR LIGAND FOR TUMOR IMAGING S359**
 K. Ogawa¹, N. Akhter² and K. Shiba¹
 1. Kanazawa University, Advanced Science Research Center, Kanazawa, Japan; 2. Kanazawa University, Graduate School of Medical Sciences, Kanazawa, Japan
- P260 SYNTHESIS AND FLUORINE-18 LABELING OF A SERIES OF BP897-ANALOGUES FOR D3 RECEPTORS IMAGING WITH PET S360**
 R. Hoareau, B. Kuhnast^{*}, A. Damont, R. Boisgard, M. Bottlaender, B. Tavitian and F. Dolle
 CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France
- P261 RADIOSYNTHESIS OF [11C]A000571499, A NOVEL SELECTIVE CB1 ANTAGONIST S361**
 F. Dolle¹, F. Hinnen¹, A. Bigot¹, M. Castel², C. Roy², J. Deverre¹ and M. Bottlaender¹
 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Sanofi Aventis, Vitry sur Seine, France
- P262 FLUORINE-18 LABELING OF S43473 FOR IMAGING NICOTINIC ACETYLCHOLINE RECEPTORS WITH PET S362**
 F. Dolle¹, F. Hinnen¹, Y. Charton², B. Kuhnast¹, W. Saba¹, M. Schollhorn-Peyronneau¹, H. Valette¹, S. Goldstein², J. Deverre¹, P. Lestage² and M. Bottlaender¹
 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Institut de Recherche Servier, Suresnes, France
- P263 CARBON-11 LABELING OF S38695 AND S39628, TWO NEW α 4 β 2-SELECTIVE LIGANDS FOR PET IMAGING OF NICOTINIC ACETYLCHOLINE RECEPTORS S363**
 F. Dolle¹, S. Demphel¹, Y. Charton², W. Saba¹, M. Schollhorn-Peyronneau¹, H. Valette¹, S. Goldstein², J. Deverre¹, P. Lestage² and M. Bottlaender¹
 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Institut de Recherche Servier, Suresnes, France

- P264 ZW-102 AND ZW-104, TWO NOVEL FLUORINE-18 LABELED RADIOLIGANDS FOR IMAGING NICOTINIC ACETYLCHOLINE RECEPTORS WITH PET** **S364**
 F. Dolle¹, A. Damont¹, H. Valette¹, F. Hinnen¹, B. Kuhnast¹, W. Saba¹, M. Schollhorn-Peyronneau¹, A. Kozikowski², M. Bottlaender¹ and M. Kassiou³
 1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. University of Illinois at Chicago, Department of Medicinal Chemistry and Pharmacognosy, Chicago, IL; 3. University of Sydney, Brain and Mind Research Institute, Sydney, Australia
- P265 SYNTHESIS AND EVALUATION OF METHOXY-SUBSTITUTED DESCHLOROMAZINDOLS AS POTENTIAL PET RADIOLIGANDS FOR IMAGING THE NOREPINEPHRINE TRANSPORTER** **S365**
 K. S. Lin^{*}, G. Huang and C. A. Mathis
 University of Pittsburgh, Department of Radiology, Pittsburgh, PA
- P266 UPTAKE INHIBITION OF 3-I-125-IODO-ALPHA-METHYL-L-TYROSINE INTO COLON CANCER DLD-1 CELL BY AMINO ACID LIKE DRUGS** **S366**
 M. Ogura¹, N. Shikano¹, S. Nakajima¹, N. Yamaguchi³, N. Kubota¹, Y. Iwamura⁴ and K. Kawai²
 1. Ibaraki Prefectural University of Health Sciences, Dept of Radiological Sciences, Ibaraki, Japan; 2. Kanazawa University, School of Health Sciences, Kanazawa, Japan; 3. Ibaraki Prefectural University of Health Sciences, Center for Medical Sciences, Ibaraki, Japan; 4. Ibaraki Prefectural University of Health Sciences, Center for Humanities and Sciences, Ibaraki, Japan
- P267 SERUM PROTEIN BINDING DISPLACEMENT: THEORETICAL ANALYSIS USING A HYPOTHETICAL RADIOPHARMACEUTICAL** **S367**
 N. Shikano¹, N. Makino¹, N. Takamura², R. Nishii³, N. Kuga⁴, M. Ogura¹, M. Kobayashi⁵ and K. Kawai⁵
 1. Ibaraki Prefectural University of Health Sciences, Dept of Radiological Sciences and Center for Humanities and Sciences, Ibaraki, Japan; 2. Kyusyu University of Health and Welfare, School of Pharmaceutical Sciences, Miyazaki, Japan; 3. Shiga Medical Center, Research Institute, Shiga, Japan; 4. University of Miyazaki, Dept of Radiology, Miyazaki, Japan; 5. Kanazawa University, Graduate School of Health Sciences, Kanazawa, Japan
- P268 PRECLINICAL AND INITIAL HUMAN PET STUDIES ON C-11 LABELED CHIBA-1001 FOR MAPPING ALPHA-7 NICOTINIC ACETYLCHOLINE RECEPTORS IN THE BRAIN** **S368**
 J. Toyohara¹, M. Sakata², J. Wu¹, M. Ishikawa³, K. Oda², K. Ishii², M. Iyo³, K. Hashimoto¹ and K. Ishiwata²
 1. Chiba University Center for Forensic Mental Health, Division of Clinical Neuroscience, Chiba, Japan; 2. Tokyo Metropolitan Institute of Gerontology, Positron Medical Center, Tokyo, Japan; 3. Chiba University Graduate School of Medicine, Department of Psychiatry, Chiba, Japan
- P269 TRANS-STIMULATION OF 3-I-125-IODO-ALPHA-METHYL-L-TYROSINE UPTAKE INTO CHINESE HAMSTER OVARY CELL BY AMINO ACID ESTERS** **S369**
 N. Shikano¹, M. Ogura¹, S. Nakajima¹, T. Kotani¹, N. Yamaguchi², N. Kubota¹, Y. Iwamura³ and K. Kawai⁴
 1. Ibaraki Prefectural University of Health Sciences, Dept of Radiological Sciences, Ibaraki, Japan; 2. Ibaraki Prefectural University of Health Sciences, Center for Medical Science, Ibaraki, Japan; 3. Ibaraki Prefectural University of Health Sciences, Center for Humanities and Sciences, Ibaraki, Japan; 4. Kanazawa University, School of Health Sciences, Kanazawa, Japan
- P270 SYNTHESIS AND EVALUATION OF C-11 LABELED DUAL MODULATOR FOR P-GP AND BCRP AS A PET PROBE** **S370**
 K. Kawamura^{*}, F. Konno, T. Yamasaki, J. Yui, A. Hatori, K. Yanamoto, T. Irie, T. Fukumura, K. Suzuki, I. Kanno and M. Zhang
 National Institute of Radiological Sciences, Molecular Imaging Center, Dept of Molecular Probes, Chiba-shi, Japan
- P271 PREPARATION AND IN VIVO EVALUATION OF 99mTc-FA-HSA** **S371**
 Y. Zhang, X. Wei, Y. Pang, W. Yang and J. Lu^{*}
 Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Ministry of Education, College of Chemistry, Beijing, China
- P272 SYNTHESIS OF F-18 LABELLED AMMONIUM SALTS AS INHIBITOR FOR hEAG1 CHANNELS** **S372**
 J. Park¹, H. J. Kim², S. Kim¹, M. G. Hur¹, S. Yang¹ and K. H. Yu²
 1. Korea Atomic Energy Research Institute, Radiation Research Division for Industry & Environment, Seoul, Korea; 2. Dongguk University, Department of Chemistry, Seoul, Korea
- P273 SYNTHESIS AND EVALUATION OF A NOVEL C-11 LABELED I2 IMIDAZOLINE BINDING SITE LIGAND AS A PET PROBE** **S373**
 K. Kawamura^{*}, F. Konno, M. Takei, I. Nakamura, J. Yui, T. Yamasaki, A. Hatori, K. Yanamoto, T. Irie, T. Fukumura, K. Suzuki, I. Kanno and M. Zhang
 National Institute of Radiological Sciences, Molecular Imaging Center, Dept of Molecular Probes, Chiba-shi, Japan
- P274 PRODUCTION OF HIGH SPECIFIC ACTIVITY NCA Lu-177g BY CYCLOTRON IRRADIATION** **S374**
 F. Groppi^{*}, M. L. Bonardi, S. Manenti, A. Gandini and L. Gini
 Universita' degli Studi di Milano and INFN Sez. di Milano, L.A.S.A. - Radiochemistry Laboratory, Segrate (MI), Italy
- P275 EVALUATION OF THE CONVERSION RATE OF 6-HALOGENOPURINE DERIVATIVES AS A PROBE FOR ASSESSING MRP1 FUNCTION** **S375**
 T. Okamura^{*}, T. Kikuchi, K. Fukushi and T. Irie
 National Institute of Radiological Sciences, Chiba, Japan

- P276 SYNTHESIS, 18F-LABELING AND IN VIVO EVALUATION OF rac-4-FLUOROBENZOYL-AZASPIROVESAMICOL AS POTENTIAL LIGAND FOR THE VESICULAR ACETYLCHOLINE TRANSPORTER S376**
 B. Wenzel¹, S. Fischer¹, A. Hiller¹, D. Sorger², W. Deuther-Conrad¹, M. Scheunemann¹, A. Roghani³, O. Sabri², P. Brust¹ and J. Steinbach¹
 1. Institute of Interdisciplinary Isotope Research, Department of Radiopharmacy, Leipzig, Germany; 2. University of Leipzig, Department of Nuclear Medicine, Leipzig, Germany; 3. Texas Tech University Health Sciences Center, Department of Pharmacology and Neuroscience, Lubbock, TX
- P277 RADIOSYNTHESIS AND IN VITRO EVALUATION OF F-18-LABELED CYANOINDOLE-CYCLOHEXYLAMINE DERIVATIVES AS RADIOLIGANDS FOR THE SEROTONIN TRANSPORTER S377**
 U. Funke¹, S. Fischer¹, A. Hiller¹, T. Ruehl¹, E. Mishani², M. Scheunemann¹, W. Deuther-Conrad¹, P. Brust¹ and J. Steinbach¹
 1. Institute of Interdisciplinary Isotope Research, Department of Radiopharmacy, Leipzig, Germany; 2. Hadassah Hebrew University Hospital, Department of Medical Biophysics and Nuclear Medicine, Jerusalem, Israel
- P278 SYNTHESSES AND BIOLOGICAL EVALUATION OF NEW COMPOUNDS AS POTENTIAL IMAGING AGENTS FOR THE NMDA-RECEPTOR S378**
 T. Betzel¹, C. Edinger², G. Dannhardt² and F. Roesch¹
 1. Johannes Gutenberg-University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. Johannes Gutenberg-University of Mainz, Institute of Pharmacy, Mainz, Germany
- P279 [11C]NS-12857: A NOVEL PET LIGAND FOR ALPHA7-NICOTINERGIC RECEPTORS S379**
 S. Lehel¹, J. Madsen¹, A. Ettrup², J. D. Mikkelsen³, D. B. Timmermann³, D. Peters³ and G. M. Knudsen²
 1. Copenhagen University Hospital, Rigshospitalet, PET and Cyclotron Unit, Copenhagen, Denmark; 2. Copenhagen University Hospital, Rigshospitalet, Neurobiology Research Unit, Copenhagen, Denmark; 3. NeuroSearch A/S, Ballerup, Denmark
- P280 [F-18]-SUBSTITUTED SPIROPIPERIDINES TARGETING SIGMA-1 RECEPTORS: RADIOLABELLING AND BIOLOGICAL EVALUATION S380**
 S. Fischer¹, A. Hiller¹, E. Grosse Maestrup², W. Deuther-Conrad¹, D. Schepmann², J. Steinbach¹, B. Wuensch² and P. Brust¹
 1. Institute of Interdisciplinary Isotope Research, Dept of Radiopharmacy, Leipzig, Germany; 2. University of Muenster, Institute of Pharmaceutical and Medicinal Chemistry, Muenster, Germany
- P281 RADIOSYNTHESIS AND IN VITRO EVALUATION OF NOVEL HISTAMINE H3 TRACERS S381**
 S. Champion¹, D. Lewis¹, D. Dewar¹, G. Honey³, J. Gross⁴, A. Robichaud⁴, A. Welch⁵, D. Wyper² and S. Pimlott²
 1. University of Glasgow, Department of Clinical Neurosciences, Glasgow, United Kingdom; 2. University of Glasgow, Department of Clinical Physics, Glasgow, United Kingdom; 3. Wyeth Research, Translational Medicine Research Centre, Dundee, United Kingdom; 4. Wyeth Research, Chemical Sciences, Princeton, NJ; 5. University of Aberdeen, The John Mallard PET Centre, Aberdeen, United Kingdom
- P282 IMAGING OF THE EGF RECEPTOR IN A431 TUMOR BEARING MICE USING C-11 AG1478 S382**
 U. Ackermann¹, G. O'Keefe¹, A. Rigopoulos², D. Cao², S. Gong¹, H. Tochon-Danguy¹ and A. Scott²
 1. Austin Health, Centre for Nuclear Medicine and PET, Heidelberg, Australia; 2. Ludwig Institute for Cancer Research, Melbourne Centre for Clinical Sciences, Heidelberg, Australia
- P283 COMPETITIVE BINDING OF RADIOLABELED NEUROTENSIN AGONIST AND ANTAGONIST TO NEUROTENSIN RECEPTORS S383**
 D. Chiper¹, V. Lungu¹, M. Purice² and M. Radu¹
 1. Horia Hulbea National Institute for Physics and Nuclear Engineering, Bucharest Magurele, Romania; 2. C. I. Parhon National Institute of Endocrinology Bucharest, Bucharest, Romania
- P284 SYNTHESIS AND EVALUATION OF N-(3-[11C]METHOXYPHENYL)-4-CHLOROCINNAMIDE: A RADIOLIGAND FOR IN VIVO VISUALIZATION OF THE TRANSIENT RECEPTOR VANILLOID SUBFAMILY TYPE 1 RECEPTOR WITH PET S384**
 D. van Veghel¹, B. J. Cleyhens¹, K. Van Laere², A. Verbruggen¹ and G. Bormans¹
 1. Katholieke Universiteit Leuven, Laboratory for Radiopharmacy, Leuven, Belgium; 2. Katholieke Universiteit Leuven, Nuclear Medicine, Leuven, Belgium
- P285 METABOLISM OF DPA-714, A NEW PERIPHERAL BENZODIAZEPINE RECEPTOR PET LIGAND S385**
 M. Peyronneau¹, A. Damont, H. Valette, W. Saba, J. Delforge, S. Goutal, S. Bourgeois, F. Hinnen, F. Dolle and M. Bottlaender
 CEA, DSV, I2BM, SHFJ, Orsay, France
- P286 NOVEL DERIVATIVES CONTAINING N-METHYL-4-PHENYLSULFANYLPHTHALIMIDE CORE AS POTENTIAL IMAGING AGENTS FOR β -AMYLOID PLAQUES S386**
 X. Duan¹, J. Qiao², Y. Yang¹, J. Zhou² and B. Liu¹
 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Ministry of Education, College of Chemistry, Beijing, China; 2. University of Science & Technology of China, He Fei National Laboratory for Physical Sciences at Microscale and School of Life Sciences, Hefei, China

- P287 LABELING OF SP203 WITH CARBON-11 FOR EVALUATION AS AN MGLUR5 RADIOLIGAND IN MONKEY WITH PET S387**
F. G. Simeon*, J. Hong, J. Liow, R. Gladding, R. B. Innis and V. W. Pike
National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD
- P288 AUTOMATISATION AND FIRST EVALUATION OF [18F]FE@SUPPY:2, AN ALTERNATIVE PET-TRACER FOR THE ADENOSINE A3 RECEPTOR: A COMPARISON WITH [18F]FE@SUPPY S388**
M. Mitterhauser¹, D. Haeusler¹, L. Mien¹, J. Ungersbck¹, L. Nics¹, R. Lanzenberger², K. Kletter¹, H. Spreitzer³ and W. Wadsak¹
1. Dept of Nuclear Medicine, Medical University of Vienna, Vienna, Austria; 2. Dept of Psychiatry, Medical University of Vienna, Vienna, Austria; 3. Dept Drug Synthesis, University of Vienna, Vienna, Austria
- P289 IN VIVO EXAMINATION OF 99mTc(I) TRICARBONYL LABELED HYNIC-D-Phe1-OCTREOTIDE AS AN IMAGING AGENT FOR PANCREATIC TUMOR S389**
J. M. Lo¹, H. Y. Chang¹, T. W. Lee² and Y. E. Cheng¹
1. Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Hsinchu, Taiwan; 2. Institute of Nuclear Energy Research, Lungtan, Taiwan
- P290 DETERMINATION OF POSSIBLE P-GLYCOPROTEIN INTERACTION OF A NOVEL 5-HT2A LIGAND [18F]MH.MZ S390**
U. Schmitt¹, M. Herth^{*3}, D. Lee⁴, M. Piel², H. Buchholz³, F. Roesch², C. Hiemke¹ and F. Debus¹
1. University of Mainz, Department of Psychiatry and Psychotherapy, Mainz, Germany; 2. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 3. University of Mainz, Department of Nuclear Medicine, Mainz, Germany; 4. Brookhaven National Laboratory, Medicinal Department, Upton, NY
- P291 SYNTHESIS AND IN VITRO AFFINITIES OF VARIOUS MDL 100907 DERIVATIVES AS POTENTIAL 18F-RADIOLIGANDS FOR 5-HT2A RECEPTOR IMAGING WITH PET S391**
M. Herth^{*1}, V. Kramer¹, M. Piel², M. Palner², P. Riss¹, G. Knudsen² and F. Roesch¹
1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. University of Copenhagen, Center for Integrated Molecular Brain Imaging, Copenhagen, Denmark
- P292 RADIOLABELING AND EVALUATION OF MDL 100,907 DERIVATES AS POTENTIAL 18F-RADIOLIGANDS TO DETERMINE CHANGES IN ENDOGENOUS SEROTONIN S392**
V. Kramer¹, M. Herth¹, F. Debus², M. Palner³, G. Knudsen³, H. Lueddens² and F. Roesch¹
1. Johannes Gutenberg University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. Johannes Gutenberg University of Mainz, Department of Psychiatry, Mainz, Germany; 3. Rigshospitalet, Center for Integrated Molecular Brain Imaging, Copenhagen, Denmark
- P293 SYNTHESIS AND STRUCTURE ACTIVITY RELATIONSHIPS OF NEW 5-HT2A RECEPTOR ANTAGONISTS COMBINING THE STRUCTURE OF (R)-MH.MZ, ALTANSERINE AND SR 46349B S393**
V. Kramer¹, M. Herth¹, M. Palner², G. Knudsen² and F. Roesch¹
1. Johannes Gutenberg University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. Rigshospitalet, Center for Integrated Molecular Brain Imaging, Copenhagen, Denmark
- P294 IMAGING OF CHANGES IN P-GLYCOPROTEIN ACTIVITY IN VIVO WITH 68GA-SCHIFF BASE DERIVATIVES S394**
M. Fellner¹, W. Dillenburger², H. Buchholz³, M. Schreckenberger³, F. Renz⁴, F. Roesch¹ and O. Thews²
1. Johannes Gutenberg University, Nuclear Institute, Mainz, Germany; 2. University Medicine Mainz, Institute of Physiology and Pathophysiology, Mainz, Germany; 3. University Hospital, Nuclear Medicine Department, Mainz, Germany; 4. Leibniz University, Inorganic Chemistry Department, Hannover, Germany
- P295 EVALUATION OF [18F]FEPPA FOR IMAGING THE PERIPHERAL BENZODIAZEPINE RECEPTOR IN A BREAST CANCER XENOGRAFT MOUSE MODEL S395**
N. Vasdev¹, D. Green², D. C. Vines², P. N. McCormick³, K. McLarty³, S. Houle¹, A. A. Wilson¹ and R. M. Reilly³
1. Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada; 2. Princess Margaret Hospital, Radiation Physics, Toronto, ON, Canada; 3. University of Toronto, Toronto, ON, Canada
- P296 C-Met RECEPTOR INHIBITOR WITH CLICK POCKET FOR Tc-99m LABELING AS A SMALL PEPTIDE PROBE FOR SPECT STUDY S396**
D. Kim, E. Kim*, E. Park, S. Kalme, H. Jeong, S. Lim and M. Sohn
Chonbuk National University Medical School, Department of Nuclear Medicine, Research Institute of Clinical Medicine, Cyclotron Research Center, Jeonju, South Korea
- P297 SYNTHESIS, RADIOIODINATION AND IN VITRO AUTORADIOGRAPHIC EVALUATION OF A NOVEL HIGH-AFFINITY LIGAND FOR IMAGING BRAIN CANNABINOID SUBTYPE-1 (CB1) RECEPTORS S397**
S. R. Donohue^{*1}, Z. Jia³, S. Eriksson³, B. Gulyas³, V. W. Pike² and C. Halldin³
1. Johns Hopkins University, Dept of Radiology, Div of Nuclear Medicine, Baltimore, MD; 2. National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD; 3. Karolinska Institutet, Dept of Clinical Neuroscience, Psychiatry Section, Stockholm, Sweden
- P298 NOVEL IMAGING AGENTS FOR BETA-AMYLOID PLAQUES BASED ON THE N-BENZOYLINDOLE CORE S398**
Y. Yang*, X. Duan and B. Liu
Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Ministry of Education, College of Chemistry, Beijing, China

P299	PREPARATION AND EVALUATION OF 99MTC-LABELED ARGININEGLYCINEASPARTATE (RGD) DERIVATIVES FOR INTEGRIN TARGETING	S399
	D. Lee*, Y. Hong, K. Choi, P. Felipe, S. Lee and S. Choi Korea Atomic Energy Research Institute, Radioisotope Research Division, Daejeon, South Korea	
P300	METABOLISM OF THE A1 ADENOSINE RECEPTOR PET LIGAND [18F]CPFPX IN HUMANS	S400
	M. Holschbach, D. Bier, W. Wutz, H. H. Coenen* and R. A. Olsson Forschungszentrum Juelich GmbH, Institut für Medizin und Neurowissenschaften, Juelich, Germany	
P301	RADIOSYNTHESIS, IN VIVO, AND EX VIVO EVALUATION OF [18F]-1-DEOXY-1-FLUORO-SCYLLO-INOSITOL AS A NEW APPROACH FOR IMAGING AMYLOID PLAQUES	S401
	N. Vasdev ¹ , J. Chio ² , E. M. van Oosten ² , M. Nitz ² , J. McLaurin ² , S. Houle ¹ and A. A. Wilson ¹ 1. Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada; 2. University of Toronto, St. George Campus, Toronto, ON, Canada	
Molecular targets: Tumor biology metabolism posters		
P302	EVALUATION OF THE ALPHA 1I T-TYPE CALCIUM CHANNEL PET TRACER [18F]TTA-A4 IN AN ANESTHETIZED OR CONSCIOUS MONKEY	S402
	S. Sanabria-Bohorquez ¹ , W. Li ¹ , W. Eng ¹ , C. Ryan ¹ , K. Riffel ¹ , Z. Zeng ¹ , V. Uebele ³ , T. Reger ² , J. Barrow ² , D. Williams Jr ¹ , R. J. Voll ⁴ , L. Howell ⁵ , J. Votaw ⁴ , M. M. Goodman ⁴ and T. G. Hamill ¹ 1. Merck Research Laboratories, Imaging Research, West Point, PA; 2. Merck Research Laboratories, Medicinal Chemistry, West Point, PA; 3. Merck Research Laboratories, Depression and Circadian Disorders, West Point, PA; 4. Emory University School of Medicine, Department of Radiology, Atlanta, GA; 5. Emory University School of Medicine, Yerkes Primate Center, Atlanta, GA	
P303	PREPARATION AND EVALUATION OF [61Cu]-THIOPHENE-2-ALDEHYDE THIOSEMICARBAZONE FOR PET STUDIES	S403
	A. R. Jalilian ¹ , M. Nikzad ² , H. Zandi ¹ , F. Nemati ² , P. Rowshanfarzad ¹ , M. Abedini ² and M. Akhlaghi ¹ 1. Nuclear Medicine Research Group, Agricultural, Medical and Industrial Research School (AMIRS), Karaj, Iran; 2. Inorganic Chemistry Department, Faculty of Sciences, Tehran University, Tehran, Iran	
P304	RADIOSYNTHESIS AND PRECLINICAL EVALUATION OF [61Cu]-9,10-PHENANTHRENEQUINONE THIOSEMICARBAZONE IN FIBROSARCOMA-BEARING ANIMALS FOR PET IMAGING	S404
	A. R. Jalilian ¹ , A. Emami ² , M. Akhlaghi ¹ and K. Shafai ¹ 1. Nuclear Medicine Research Group, Agricultural, Medical and Industrial Research School (AMIRS), Karaj, Iran; 2. Faculty of Pharmacy, Islamic Azad University, Tehran, Iran	
P305	CHELTATE CONJUGATION AND Cu-64 LABELING OF hu14.18K322A, AN ANTIBODY TARGETING NEUROBLASTOMA	S405
	A. L. Vavere ¹ , J. L. Dearling ² , A. B. Packard ² , F. Navid ³ , B. L. Shulkin ¹ , R. C. Barfield ⁴ and S. E. Snyder ¹ 1. St. Jude Children's Research Hospital, Department of Radiological Sciences, Memphis, TN; 2. Children's Hospital Boston, Division of Nuclear Medicine, Department of Radiology & Harvard Medical School, Boston, MA; 3. St. Jude Children's Research Hospital, Department of Oncology, Memphis, TN; 4. Duke University Medical Center, Division of Hematology-Oncology, Department of Pediatrics, Durham, NC	
P306	IMAGING OF THE CELL CYCLE: SYNTHESIS AND RADIOPHARMACOLOGICAL EVALUATION OF 124I-LABELED CDK4 INHIBITORS	S406
	L. Koehler ¹ , F. Graf ¹ , R. Bergmann ¹ , J. Steinbach ¹ , J. Pietzsch ¹ and F. Wuest ² 1. Forschungszentrum Dresden-Rossendorf, Institute of Radiopharmacy, Dresden, Germany; 2. University of Alberta, Cross Cancer Institute, Edmonton, Canada	
P307	EFFECTS OF CYCLOSPORIN A ON BRAIN UPTAKE AND METABOLISM OF [18F]FBAU 3',5'-DIBENZOATE	S407
	C. Kao ¹ , H. Xie ¹ and Y. Wei ² 1. Buddhist Tzu Chi General Hospital, Dept Nuclear Medicine, Hualien, Taiwan; 2. Tzu Chi College of Technology, Dept Radiological Technology, Hualien, Taiwan	
P308	SYNTHESIS OF A NEW PET RADIOTRACER TARGETING CARBONIC ANHYDRASE IX	S408
	S. D. Apte ¹ , F. T. Chin ² and E. E. Graves ¹ 1. Stanford University School of Medicine, Department of Radiation Oncology, Stanford, CA; 2. Stanford University School of Medicine, Department of Radiology, Stanford, CA	
P309	SYNTHESIS, LABELING AND EVALUATION OF A NEW NEUROPEPTIDE Y ANALOGUE AS A BREAST TUMORS DIAGNOSTIC AGENT	S409
	M. Gandomkar*, R. Najafi, M. Mazidi, M. Goudarzi and S. Mirfallah Atomic Energy Organization of Iran, Nuclear Science Research School, Nuclear Science & Technology Research Institute (NSTRI), Tehran, Iran	
P310	REGIOSPECIFICITY IMPLICATIONS OF α- AND γ-[18F]FE-FOLATE FOR THE PET IMAGING OF FOLATE RECEPTOR POSITIVE TUMOURS	S410
	P. Y. Lam ¹ , T. L. Ross ¹ , M. Honer ¹ , V. Groehn ² , P. Schubiger ¹ and S. M. Ametamey ¹ 1. ETH Zurich, Center for Radiopharmaceutical Science, Zurich, Switzerland; 2. Merck Eprova AG, Schaffhausen, Switzerland	

P311	RELEVANCE OF NONINVASIVE IMAGING OF DEAD AND DYING CELLS IN ADVERSE CARDIOVASCULAR AND ONCOLOGICAL SITUATIONS	S411
	R. Pandurang ¹ and M. Dyslewszki Covidien, Hazelwood, MO	
P312	STEREOSPECIFIC SYNTHESIS AND IN VITRO EVALUATION OF (S)/(R)-[123I]IVAIB FOR TUMOR IMAGING WITH SPECT	S412
	W. Yu ¹ , L. Williams ¹ , V. M. Camp ¹ , E. Malveau ¹ , Z. Zhang ² , J. Olson ² and M. M. Goodman ¹ 1. Emory University, Radiology, Atlanta, GA; 2. Emory University, Neurosurgery, Atlanta, GA	
P313	GA-68 LABELLED RGD PEPTIDES FOR MONITORING ANGIOGENESIS	S413
	P. Knetsch ¹ , M. Petrik ¹ , C. Rangger ¹ , M. Fani ² , A. Helbok ¹ , E. von Guggenberg ¹ , C. Decristoforo ¹ and R. Haubner ¹ 1. Medical University Innsbruck, Department of Nuclear Medicine, Innsbruck, Austria; 2. University Hospital Basel, Divisions of Radiological Chemistry, Basel, Switzerland	
P314	PHOSPHORYLATION AND UPTAKE OF 3-DEOXY-3-[18F]FLUOROTHYMININE IN COLON CANCER CELL LYSATES	S414
	N. Guo ¹ , J. Xie ¹ , H. C. Manning ¹ , N. G. Deane ¹ , M. S. Ansari ¹ , R. J. Coffey ³ , J. Gore ¹ , R. R. Price ¹ , R. M. Baldwin ¹ and J. O. McIntyre ² 1. Vanderbilt University School of Medicine, Department of Radiology & Radiological Sciences, Vanderbilt University Institute of Imaging Science (VUIIS), Nashville, TN; 2. Vanderbilt University School of Medicine, Department of Cancer Biology, Nashville, TN; 3. Vanderbilt University School of Medicine, Department of Medicine, Nashville, TN	
P315	SYNTHESIS OF F-18 LABELED CLOTRIMAZOLE DERIVATIVES FOR TUMOR IMAGING	S415
	S. Jung ¹ , J. Park ² , S. Kim ² , M. Hur ² , S. Yang ² and K. Yu ¹ 1. Dongguk University, Dept of Chemistry, Seoul, Korea; 2. Korea Atomic Energy Research Institute, Radiation Research Division for Industry & Environment, Jeongseup, Korea	
P316	RELATIONSHIP BETWEEN CISPLATIN, COPPER-64 RADIOPHARMACEUTICALS AND p53 IN THE TRAFFICKING OF 64Cu TO THE NUCLEI OF TUMOR CELLS	S416
	Y. Guo [*] , A. Zhelenznyak and C. J. Anderson Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO	
P317	SYNTHESIS AND IN VITRO EVALUATION OF 2-[C-11]METHOXYESTRADIOL BISSULFAMATE	S417
	C. M. Kang [*] , Y. S. Choe, I. Lee, J. Y. Choi, Y. Choi, K. H. Lee and B. T. Kim Samsung Medical Center, Sungkyunkwan University School of Medicine, Dept of Nuclear Medicine, Seoul, South Korea	

Novel radiochemistry: Organic positron emitters posters

P318	[11C]CARBON MONOXIDE IN 11C-LABELLING OF AZABICYCLIC ARYL AMIDES, THE AGONISTS FOR $\alpha 7$ NICOTINIC ACETYLCHOLINE RECEPTORS	S418
	O. Rahman ^{*1} and B. Langstrom ² 1. GE Healthcare, Uppsala Applied Science Laboratory, Uppsala, Sweden; 2. Uppsala University, Department of Biochemistry and Organic Chemistry, Uppsala, Sweden	
P319	[CARBONYL-¹¹C]BENZYL ACETATE: SYNTHESIS FROM [¹¹C]CARBON MONOXIDE AND PET EVALUATION OF BRAIN UPTAKE IN MONKEY	S419
	S. Lu [*] , J. Hong, T. Itoh, M. Fujita, R. B. Innis and V. W. Pike National Institutes of Health, NIMH, Molecular Imaging Branch, Bethesda, MD	
P320	SYNTHESIS OF [11C]ETHANOLAMINE VIA NITROALDOL REACTION	S420
	K. Kato [*] , M. Zhang, K. Minegishi and K. Suzuki National Institute of Radiological Sciences, Dept of Molecular Probes, Chiba, Japan	
P321	DIRECT FIXATION OF [11C]-CO₂ BY AMINES: FORMATION OF [11C]-CARBAMATES	S421
	A. A. Wilson [*] , A. Garcia, S. Houle and N. Vasdev Centre for Addiction and Mental Health, PET Centre, Toronto, ON, Canada	
P322	SYNTHESIS OF [11C]BACLOFEN VIA MICHAEL ADDITION OF NITRO[11C]METHANE	S422
	K. Kato [*] , M. Zhang and K. Suzuki National Institute of Radiological Sciences, Dept Molecular Probes, Chiba, Japan	
P323	LABELLING OF RTI-32 WITH C-11 IN THREE DIFFERENT POSITIONS: A STUDY OF THE INFLUENCE OF LABELLING POSITION ON BRAIN DISTRIBUTION AND METABOLITE PATTERN MEASURED IN MONKEY BY PET	S423
	S. Helin ¹ , K. Nagren ² , A. J. Airaksinen ³ , C. Steiger ⁴ , J. P. Bergstrom ⁴ , A. Takano ⁴ , V. W. Pike ⁵ and C. Halldin ⁴ 1. Turku PET Centre, Univ. of Turku, Turku, Finland; 2. Rigshospitalet, Univ. of Copenhagen, Dept of Clinical Physiology & Nuclear Medicine, Copenhagen, Denmark; 3. University of Helsinki, Dept of Chemistry, Radiochemistry Laboratory, Helsinki, Finland; 4. Karolinska Institutet, Dept of Clinical Neurosciences, Psychiatry Section, Stockholm, Sweden; 5. NIMH, Molecular Imaging Branch, Bethesda, MD	
P324	RADIOSYNTHESIS OF AROMATIC KETONES FROM [11C]CO₂ BY PALLADIUM-CATALYZED SUZUKI-MIYAJIMA COUPLING	S424
	M. Sarparanta [*] , J. Jalomaki, S. Makkonen-Craig, K. Helariutta and A. J. Airaksinen University of Helsinki, Laboratory of Radiochemistry, Helsinki, Finland	

- P325 SYNTHESIS OF HIGH-AFFINITY SB 207710 ANALOGS AS POTENTIAL BRAIN 5-HT₄ RECEPTOR RADIOLIGANDS FOR PET IMAGING S425**
R. Xu¹, J. S. Hong and V. W. Pike
National Institute of Mental Health, National Institutes of Health, Molecular Imaging Branch, Bethesda, MD
- P326 RADIOSYNTHESIS OF [11C]METHYLI-LOSARTAN, A POTENTIAL IMAGING AGENT FOR ANGIOTENSIN AT₁ RECEPTORS S426**
T. Hadizad¹, S. Mason, J. Collins, S. Kirkpatrick, R. S. Beanlands and J. N. DaSilva
University of Ottawa Heart Institute, National Cardiac PET Centre, Ottawa, ON, Canada
- P327 SYNTHESIS OF [11C]RHODAMINE-123 AS A POTENTIAL TRACER FOR IMAGING P-GLYCOPROTEIN FUNCTION S427**
X. Bao¹, C. L. Morse, S. Lu, F. G. Simeon and V. W. Pike
National Institutes of Health, National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD
- P328 AN EFFICIENT SYNTHESIS OF [11C]FALLYPRIDE, A DOPAMINE D₂/D₃ TRACER S428**
D. Murali¹, N. T. Vandehey¹, J. Mukherjee², R. J. Davidson¹, R. J. Nickles³ and B. T. Christian¹
1. University of Wisconsin, Waisman Laboratory for Brain Imaging and Behavior, Madison, WI; 2. University of California, Department of Psychiatry and Human Behavior, Irvine, CA; 3. University of Wisconsin, Department of Medical Physics, Madison, WI
- P329 SYNTHESIS AND BIODISTRIBUTION OF [C-11]-SN-38 FOR TREATMENT EVALUATION BY PET S429**
S. M. Apana¹ and M. S. Berridge²
1. 3D Imaging LLC, Maumelle, AR; 2. University of Arkansas for Medical Sciences, Dept. of Radiology, Little Rock, AR
- P330 SYNTHESIS OF [C-11]-DOXORUBICIN S430**
J. M. Link¹, L. Anderson² and J. Collins³
1. University of Washington, Dept. of Radiology, Div of Nuclear Medicine, Seattle, WA; 2. FDA, Laboratory of Clinical Pharmacology, Silver Spring, MD; 3. NIH, Developmental Therapeutics Program NCI/NIH, Rockville, MD
- P331 EFFICIENT METHOD TO SYNTHESIZE 13N-NITROSAMINES S431**
V. Gomez-Vallejo¹, K. Kato², M. Hanyu², K. Minegishi², J. I. Borrell³ and J. Llop¹
1. CIC biomaGUNE, Radiochemistry Department, Molecular Imaging Unit, San Sebastian, Spain; 2. National Institute of Radiological Sciences, Department of Molecular Probes, Molecular Imaging Center, Chiba, Japan; 3. Institut Quimic de Sarria, Universitat Ramon Llull, Grup d'Enginyeria Molecular, Barcelona, Spain
- P332 PALLADIUM-NHC MEDIATED CARBONYLATION FOR THE PRODUCTION OF [11C]-AMIDES IN PET RADIOLABELLING S432**
L. Jennings¹, N. Long¹, A. Gee², P. Miller¹ and S. Kealey²
1. Imperial College London, Department of Chemistry, London, United Kingdom; 2. GSK, Clinical Imaging Centre, Hammersmith Hospital, London, United Kingdom
- P333 CARBON-11 LABELING OF SSR180711, A NOVEL α 7-SELECTIVE LIGAND FOR PET IMAGING OF NICOTINIC ACETYLCHOLINE RECEPTORS S433**
Y. Bramouille¹, P. George², H. Valette¹, M. Bottlaender¹ and F. Dolle¹
1. CEA, I2BM Service Hospitalier Frederic Joliot, Orsay, France; 2. Sanofi Aventis, SAR&D, Bagneux, France
- P334 SYNTHESIS OF [11C]TRIS VIA FLUORIDE ASSISTED RAPID NITROALDOL REACTION S434**
K. Kato¹, M. Zhang, R. Nakao, M. Takei, K. Minegishi and K. Suzuki
National Institute of Radiological Sciences, Dept Molecular Probes, Chiba, Japan
- P335 HIGHLY EFFICIENT SYNTHESIS OF [11C]CELECOXIB BY PALLADIUM(0)-MEDIATED RAPID C-[11C]METHYLATION USING AN ORGANOBORON PRECURSOR AND PET IMAGING OF COX-2 EXPRESSION IN RAT BRAINS S435**
M. Takashima-Hirano¹, Y. Cui², T. Takashima², E. Hayashinaka², Y. Wada², Y. Watanabe², H. Doi³ and M. Suzuki¹
1. RIKEN Center for Molecular Imaging Science (CMIS), Molecular Probe & Drug Design Laboratory, Kobe, Japan; 2. RIKEN Center for Molecular Imaging Science (CMIS), Molecular Probe and Dynamics Laboratory, Kobe, Japan; 3. RIKEN Center for Molecular Imaging Science (CMIS), Drug Synthesis & Molecular Probing Unit, Kobe, Japan
- P336 AN EFFICIENT METHOD FOR THE INCORPORATION OF A POSITRON-EMITTING 11C RADIONUCLIDE INTO VARIOUS HETEROAROMATIC FRAMEWORKS BY Pd(0)-MEDIATED RAPID COUPLING OF METHYL IODIDE WITH HETERO-ARYLSTANNANES S436**
M. Suzuki¹, K. Sumi², H. Koyama², Siqin², T. Hosoya², M. Takashima-Hirano¹ and H. Doi¹
1. RIKEN, Center of Molecular Imaging Science, Kobe, Japan; 2. Gifu University, Graduate School of Medicine, Gifu, Japan
- P337 A REVERSIBLE EVAPORATOR/CONDENSER AND ITS USE IN PRODUCTION OF [11C]METHYL IODIDE S437**
B. Alvord¹, T. Graves, N. C. Murphy and P. Roy
Siemens Healthcare, Molecular Imaging, Knoxville, TN
- P338 DETERMINATION OF LABELED METABOLITES OF [11C]METHYL-CANDESARTAN IN RAT PLASMA AND KIDNEY USING A COLUMN-SWITCH METHOD S438**
S. Kirkpatrick, T. Hadizad¹, M. Lortie, R. A. deKemp, R. S. Beanlands and J. N. DaSilva
University of Ottawa Heart Institute, National Cardiac PET Centre, Ottawa, ON, Canada

Novel radiochemistry: Radiometals and others posters

P339	IMPROVED GAS PHASE PRODUCTION OF [11C]CH3I BY I2-CONCENTRATION-CONTROL	S439
	A. Johayem [*] , C. Schweinsberg, T. Cservenyak, P. Schubiger and G. Westera Center for Radiopharmaceutical Science of ETH, PSI and USZ, University Hospital of Zurich, Zurich, Switzerland	
P340	NEW KIT-LIKE 68GA-LABELING STRATEGY FOR PROTEINS	S440
	C. Waengler ¹ , B. Waengler ² , M. Hacker ² , G. Boening ² and R. Schirrmacher ¹ 1. McGill University, Neurology & Neurosurgery, Lady Davis Institute, Jewish General Hospital, Montreal, QC, Canada; 2. LMU University of Munich, Department of Nuclear Medicine, Munich, Germany	
P341	EVALUATING BIFUNCTIONAL CHELATES FOR THE DEVELOPMENT OF GA-68 BASED RADIOPHARMACEUTICALS	S441
	C. Ferreira ¹ , M. Woods ¹ , E. Lamsa ¹ , C. Bensimon ¹ , P. Jurek ² and G. Kiefer ² 1. MDS Nordion, Vancouver, BC, Canada; 2. Macrocyclics, Dallas, TX	
P342	FUNCTIONALIZED CYSTEINE DERIVATIVES FOR LABELING TC(CO)3	S442
	P. D. Benny [*] , H. He and J. Morely Washington State University, Department of Chemistry, Pullman, WA	
P343	MICROWAVE ASSISTED CHELATION OF SN-117M WITH A SULFHYDRYL-REACTIVE DOTA DERIVATIVE FOR LABELING OF ANNEXIN	S443
	D. Wilbur ¹ , M. Chyan ¹ , D. Hamlin ¹ , J. Tait ² , C. Smith ² , C. F. Meares ³ and Z. Miao ³ 1. University of Washington, Department of Radiation Oncology, Seattle, WA; 2. University of Washington, Department of Laboratory Medicine, Seattle, WA; 3. University of California, Davis, Department of Chemistry, Davis, CA	
P344	SYNTHESIS AND EVALUATION OF 99mTc (CO)3-GALALCTO-RGD	S444
	S. Lee ¹ , S. Kim ¹ , S. Oh ¹ , J. Ryu ¹ , S. Choi ² and D. Moon ¹ 1. Asan Medical Center, Dept. of Nuclear Medicine, Seoul, Korea; 2. Korea Atomic Energy Research Institute, Radioisotope Production and Application, Hanaro Center, Taejeon, Korea	
P345	MACROCYCLIC COMPLEXES OF 44/47Sc AS PRECURSORS FOR RADIOPHARMACY	S445
	A. Majkowska [*] and A. Bilewicz Institute of Nuclear Chemistry and Technology, Dept. of Radiochemistry, Warsaw, Poland	
P346	HEPATIC ASIALOGLYCOPROTEIN RECEPTOR IMAGING USING 99mTc-DMP-NGA	S446
	W. Yang, T. Mou, X. Zhang [*] and X. Wang Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Ministry of Education, College of Chemistry, Beijing, China	
P347	DESIGN, CHEMICAL SYNTHESIS AND BIOLOGICAL EVALUATION OF THREE SMALL AMPHIPHILIC RHEMIUM AND 99mTECHNETIUM TRICARBONYL COMPLEXES AS POTENTIAL IMAGING AGENTS	S447
	E. Boros ¹ , U. Hafeli ² , M. Adam ³ and C. Orvig ¹ 1. University of British Columbia, Dept. of Chemistry, Vancouver, BC, Canada; 2. University of British Columbia, Faculty of Pharm. Sciences, Vancouver, BC, Canada; 3. TRIUMF, Vancouver, BC, Canada	
P348	SYNTHESIS OF NOVEL 15 AND 16 C- FATTY ACID DERIVATIVES LABELED WITH [99mTcN(PNP)]2+ FOR MYOCARDIAL IMAGING	S448
	A. Mathur ² , M. B. Mallia ¹ , S. Banerjee ¹ , H. Sarma ³ and M. Venkatesh ¹ 1. Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India; 2. Board of Radiation and Isotope Technology, Navi Mumbai, India; 3. Bhabha Atomic Research Centre, Radiation Biology and Health Sciences Division, Mumbai, India	
P349	SYNTHESIS AND EVALUATION OF RHENIUM-CYCLIZED TYR-3-OCTREOTATE DERIVATIVES	S449
	H. M. Bigott-Hennkens ¹ , S. F. Dannoon ² , L. Ma ³ , M. R. Lewis ¹ and S. S. Jurisson ² 1. University of Missouri-Columbia, Department of Veterinary Medicine and Surgery, Columbia, MO; 2. University of Missouri-Columbia, Department of Chemistry, Columbia, MO; 3. University of Missouri-Columbia, Department of Radiology, Columbia, MO	
P350	PREPARATION, QUALITY CONTROL AND STABILITY OF 99mTc-TEPA	S450
	Y. Xu, M. Yang [*] , D. Pan and L. Wang Jiangsu Institute of Nuclear Medicine, The Key Laboratory of Nuclear Medicine, Ministry of Public Health, WuXi, China	
P351	A NOVEL KIT OF NMB-ABP WITH HIGH AFFINITY FOR BONE	S451
	J. Liu ¹ , X. Zhang ¹ , Y. Zhang ² , W. Zhang ² , S. Zhang ¹ , J. Lu ¹ , Z. Tang ¹ , J. Zhang ¹ and X. Wang ¹ 1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China; 2. Peking University Third Hospital, Department of Nuclear Medicine, Beijing, China	
P352	NEW COORDINATION CHEMISTRY FOR THE DEVELOPMENT OF NEW TECHNETIUM-99M IMAGING AGENTS AND THEIR RHENIUM ANALOGUES	S452
	A. J. North ¹ , U. Ackermann ² , J. White ¹ and P. Donnelly ¹ 1. University of Melbourne, School of Chemistry and Bio21 Research Institute, Parkville, Melbourne, Australia; 2. Centre for PET, Austin Hospital, Heidelberg, Melbourne, Australia	

P353	SYNTHESIS, CHARACTERIZATION AND BIOLOGICAL EVALUATION OF 99mTc-LABELED NO-DONOR BISPHOSPHONATE FOR BONE SCINTIGRAPHY	S453
	J. Liu*, X. Zhang, S. Zhang, J. Lu, J. Zhang, Z. Tang and X. Wang Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China	
P354	COMPARATIVE IN VITRO EVALUATION OF DOTA-BOMBESIN ANALOG LABELLED WITH YTTRIUM-90, LUTETIUM-177, GALLIUM-68 and SCANDIUM-44	S454
	E. Koumariou ¹ , R. Mikolajczak ¹ , F. Roesch ² , N. S. Loktionova ² , D. Pawlak ¹ , C. Zikos ³ , P. Bouziotis ³ and S. Archimandritis ³ 1. Institute of Atomic Energy, Radioisotope Centre POLATOM, Swierk-Otwock, Poland; 2. Institute of Nuclear Chemistry, University of Mainz, Mainz, Germany; 3. Institute R-RP, NCSR Demokritos, Athens, Greece	
P355	IMPROVED LABELING OF DTPA-CONJUGATED PEPTIDES WITH INDIUM-111 IN MES BUFFER	S455
	M. Brom*, P. Laverman, L. Joosten, M. Gotthardt and O. Boerman Radboud University Nijmegen Medical Centre, Department of Nuclear Medicine, Nijmegen, Netherlands	
P356	NEW AND INNOVATIVE BIFUNCTIONAL CHELATES FOR IMAGING AND THERAPY	S456
	C. Bensimon ¹ , P. Fernando ¹ , C. Ferreira ¹ , R. Wells ² , M. Kordos ² , T. Ruddy ² , P. Jurek ³ and G. Kiefer ³ 1. MDS Nordion, Kanata, ON, Canada; 2. University of Ottawa Heart Institute, Ottawa, ON, Canada; 3. Macrocyclics, Dallas, TX	
P357	IN VITRO AND IN VIVO EVALUATION OF [64Cu-NO2A-(X)-BBN(7-14)NH2] RADIOPHARMACEUTICALS FOR POTENTIAL PET IMAGING OF HUMAN PROSTATE CANCER	S457
	S. Lane ¹ , P. Nanda ² , A. Prasanphanich ² , G. Sieckman ² , T. Rold ² , M. Lixin ³ , S. Figueroa ² , S. Sublett ² , T. Hoffman ² and C. Smith ² 1. University of Missouri-Columbia, Dept of Chemistry, Columbia, MO; 2. Harry S. Truman Memorial Veterans' Hospital, Research Division, Columbia, MO; 3. University of Missouri-Columbia, Dept of Radiology, Div of School of Medicine, Columbia, MO	
P358	A STRUCTURAL AND KINETIC INVESTIGATION OF SELECTED RHENIUM(II) TRICARBONYL COMPLEXES	S458
	H. G. Visser ¹ , A. Roodt ¹ , M. Schutte ¹ and G. Kemp ² 1. University of the Free State, Department of Chemistry, Bloemfontein, South Africa; 2. Petlabs Pharmaceuticals, Pretoria, South Africa	
P359	A NEW STRATEGY FOR THE PREPARATION AND PURIFICATION OF TC-BASED RADIOPHARMACEUTICALS	S459
	J. Hicks ¹ , P. Causey ² and J. F. Valliant ³ 1. McMaster University, Department of Chemistry, Hamilton, ON, Canada; 2. McMaster University, McMaster Nuclear Reactor, Hamilton, ON, Canada; 3. McMaster University, McMaster Institute for Applied Radiation Sciences, Hamilton, ON, Canada	
P360	NODAPA-OH AND NODAPA-NCS: MONO- AND MULTIMERIC SIX-COORDINATE Ga-CHELATORS	S460
	P. J. Riss*, C. Kroll, V. Nagel and F. Roesch Johannes Gutenberg University, Institute of Nuclear Chemistry, Mainz, Germany	
P361	BIO-ORTHOGONAL FUNCTIONALITIES FOR TUMOR PRE-TARGETING WITH STAUDINGER LIGATION: SYNTHESIS, RADIOLABELING AND BIOLOGICAL EVALUATION	S461
	R. C. Vulderson ¹ , R. Rossin ¹ , H. M. Janssen ² , R. M. Versteegen ² , I. Verel ¹ , C. M. van Kammen ³ , D. J. Vugts ⁴ , A. Vervoort ⁴ , G. A. van Dongen ⁴ , H. Grull ¹ and M. S. Robillard ¹ 1. Philips Research, Eindhoven, Netherlands; 2. SyMO-Chem BV, Eindhoven, Netherlands; 3. Maastricht University, Maastricht, Netherlands; 4. VU University Medical Center, Dept. Nuclear Medicine and PET Research, Amsterdam, Netherlands	
P362	REGIOSELECTIVE SYNTHESIS OF TRANS-DISUBSTITUTED CYCLAM: A VERSATILE ROUTE TO CYCLAM DERIVATIVES	S462
	D. N. Pandya ¹ , R. Islam ¹ , B. Patel ¹ , S. Lee ² , J. Lee ² and J. Yoo ¹ 1. Kyungpook National University School of Medicine, Department of Molecular Medicine, Daegu, Korea; 2. Kyungpook National University School of Medicine, Department of Nuclear Medicine, Daegu, Korea	
P363	SYNTHESIS OF Ga-68 LABELED AMINO ACID DERIVATIVES AND TEST FOR TUMOR IMAGING	S463
	D. Shetty*, J. Jeong, C. Ju, Y. Kim, Y. Lee, J. Choi, D. Lee, J. Chung and M. Lee Seoul National University College of Medicine, Nuclear Medicine, Seoul, Korea	
P364	NEW APPROACHES FOR REDUCTION OF PERTECHNETATE AND PERRHENATE	S464
	L. Francesconi*, B. Burton-Pye, D. McGregor and I. Mbomekalle Hunter College of the City University of New York, Chemistry Department, New York, NY	
P365	SYNTHESIS OF NOTA- AND DOTA-NITROIMIDAZOLE DERIVATIVES FOR Ga-68 LABELING AND TEST AS A NEW MARKER FOR IMAGING TUMOR HYPOXIA	S465
	L. Hoigebazar*, J. Jeong, Y. Lee, D. Lee, J. Chung and M. Lee Seoul National University College of Medicine, Nuclear Medicine, Seoul, Korea	

P366	A NOVEL APPROACH FOR THE SYNTHESIS OF RHENIUM AND TECHNETIUM-99m TRICARBONYL COMPLEXES WITH A (SS)(P) COORDINATIVE SET	S466
	A. Carrer ¹ , J. Suades ² , E. Parera Piella ² , E. Zangoni ³ , A. Alvarez Larena ⁴ , M. Giron ¹ and U. Mazzi ³ 1. University of Padova, Department of Pharmacology and Anaesthesiology, Padova, Italy; 2. Universitat Autònoma de Barcelona, Department of Chemistry, Bellaterra, Spain; 3. University of Padova, Department of Pharmaceutical Sciences, Padova, Italy; 4. Universitat Autònoma de Barcelona, X-ray Diffraction Service, Bellaterra, Spain	
P367	68GA-LABELLING OF DOTA COUPLED BIOTIN ANALOGUES AND THEIR CHARACTERIZATION	S467
	E. Blom, I. Velikyan* and B. Langstrom Uppsala University, Department of Biochemistry and Organic Chemistry, Uppsala, Sweden	
P368	FIRST APPLICATION OF THE IART APPROACH WITH A NEW RE-188 LABELED BIOTIN DERIVATIVE	S468
	A. Duatti ¹ , M. Pasquali ¹ , C. Trapella ² , R. Guerrini ² , A. Boschi ¹ , L. Uccelli ¹ and E. Janevik-Ivanowska ³ 1. University of Ferrara, Lab of Nuclear Medicine, Dept of Radiological Sciences, Ferrara, Italy; 2. University of Ferrara, Dept Pharmaceutical Sciences, Ferrara, Italy; 3. University of Skopje, Inst of Pathophysiology and Nuclear Medicine, Skopje, Macedonia	
P369	A CONVENIENT SYNTHETIC STRATEGY FOR PRODUCTION OF CLICKABLE DOTA AND TETA-DERIVED BIFUNCTIONAL CHELATES	S469
	A. Lebedev* and J. S. Lewis Memorial Sloan-Kettering Cancer Center, Department of Radiology, New York, NY	
P370	PRINCIPLES GOVERNING THE STABILITY OF TECHNETIUM AND RHENIUM TRIPEPTIDES	S470
	L. Francesconi ¹ , M. Cantorias ¹ , M. Benard ² and M. Rohmer ² 1. Hunter College of the City University of New York, Chemistry Department, New York, NY; 2. Laboratoire de Chimie Quantique-UMR 7177, CNRS and Universit Louis Pasteur, Strasbourg, France	
P371	EFFECT OF DOTA POSITION ON MELANOMA TARGETING AND PHARMACOKINETIC PROPERTIES OF LACTAM BRIDGE-CYCLIZED ALPHA-MELANOCYTE STIMULATING HORMONE PEPTIDE	S471
	H. Guo* and Y. Miao University of New Mexico, College of Pharmacy, Albuquerque, NM	
P372	EVALUATION OF 67GA-LABELED LACTAM BRIDGE-CYCLIZED ALPHA-MELANOCYTE STIMULATING HORMONE PEPTIDES FOR MELANOMA IMAGING	S472
	H. Guo*, N. Shenoy and Y. Miao University of New Mexico, College of Pharmacy, Albuquerque, NM	
P373	IMPACT OF CHARGE AND PENDANT CARBOXYL GROUPS OF ^{99m}Tc(CO)₃ THIOETHER-CARBOXYLATE COMPLEXES ON RENAL TUBULAR TRANSPORT	S473
	M. Lipowska ¹ , L. G. Marzilli ² and A. T. Taylor ¹ 1. Emory University, Radiology, Atlanta, GA; 2. Louisiana State University, Chemistry, Baton Rouge, LA	
P374	A RADIOGALLIUM-LABELED BIFUNCTIONAL CHELATE FOR HYPOXIC TUMOR IMAGING	S474
	T. Mukai*, J. Suwada, F. Yamamoto and M. Maeda Kyushu University, Graduate School of Pharmaceutical Sciences, Fukuoka, Japan	
P375	SUGAR SUBSTITUTED BIPYRIDINE COMPLEXES OF 99M-TECHNETIUM	S475
	D. Mueller ¹ , I. Klette ¹ , M. Gottschaldt ² and R. Baum ¹ 1. Zentralklinik Bad Berka GmbH, Department of Nuclear Medicine, Bad Berka, Germany; 2. Friedrich Schiller University of Jena, Institute for Organic and Macromolecular Chemistry, Jena, Germany	
P376	99M-TECHNETIUM COMPLEXES OF SUGAR CONTAINING TRIPODAL TRIAMINES AS POTENTIAL RADIO IMAGING AGENTS	S476
	D. Mueller ¹ , I. Klette ¹ , M. Gottschaldt ² and R. Baum ¹ 1. Zentralklinik Bad Berka GmbH, Department of Nuclear Medicine, Bad Berka, Germany; 2. Friedrich Schiller University of Jena, Institute for Organic and Macromolecular Chemistry, Jena, Germany	
P377	RADIOLABELING OF FRAGILE MACROLIGANDS WITH GA-68	S477
	D. Mueller ¹ , I. Klette ¹ , M. Gottschaldt ² and R. Baum ¹ 1. Zentralklinik Bad Berka GmbH, Department of Nuclear Medicine, Bad Berka, Germany; 2. Friedrich Schiller University of Jena, Institute for Organic and Macromolecular Chemistry, Jena, Germany	
P378	HBED-CC-TFP2: A VERSATILE 68GA-LABELING AGENT FOR DIMERIZATION OF PEPTIDES	S478
	M. Eder ¹ , M. Schaefer ¹ , U. Haberkorn ² , W. Mier ² and M. Eisenhut ¹ 1. German Cancer Research Center, Division of Radiopharmaceutical Chemistry, Heidelberg, Germany; 2. University of Heidelberg, Department of Nuclear Medicine, Heidelberg, Germany	
P379	NOVEL TECHNETIUM-99m COMPLEXES WITH BISPHOSPHONATES AS POTENTIAL BONE SCINTIGRAPHY AGENTS	S479
	J. Liu, X. Zhang, S. Zhang, J. Lu, J. Zhang, Z. Tang and X. Wang* Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China	

- P380 STEREOSPECIFIC ONE POT DEUTERATION OF BETA-FURANOSYL AZOMYCIN NUCLEOSIDES: A MODEL REACTION FOR SYNTHESIS OF 3H-BETA-5-FAZA AND OTHER AZOMYCIN NUCLEOSIDE ANALOGUES** **S480**
P. Kumar¹, S. Emami² and L. Wiebe¹
1. University of Alberta, Department of Oncology, Cross Cancer Institute, Edmonton, AB, Canada; 2. Mazandaran University of Medical Sciences, Department of Medicinal Chemistry, Faculty of Pharmacy, Sari, Iran
- P381 SYNTHESIS AND BIOLOGICAL EVALUATION OF TECHNETIUM-99M LABELLED DDNP DERIVATIVES AS POTENTIAL BETA-AMYLOID IMAGING AGENTS** **S481**
M. Cui*, Z. Li and B. Liu
Key Laboratory of Radiopharmaceuticals (Beijing Normal University), Ministry of Education, College of Chemistry, Beijing, China
- P382 IN VITRO STABILITY STUDIES OF TYR-3-OCTREOTATE ANALOGUES CYCLIZED VIA TC-99m COORDINATION** **S482**
S. F. Dannoon¹, H. M. Bigott-Hennkens², S. M. Noll¹, M. R. Lewis³ and S. S. Jurisson¹
1. University of Missouri, Department of Chemistry, Columbia, MO; 2. University of Missouri, Department of Veterinary Medicine and Surgery, Columbia, MO; 3. Harry S Truman Hospital, Research Service, Columbia, MO
- P383 SYNTHESIS AND BIOLOGICAL EVALUATION OF NOVEL CATIONIC Tc (I)TRICARBONYL COMPLEXES AS POTENTIAL RADIOTRACERS** **S483**
R. Ding¹, Y. He¹, G. Li¹, J. Xu¹, H. Liu¹, S. Zhang¹, X. Wang¹, M. Feng¹, C. Qi¹ and C. Peng²
1. Beijing Normal University, Key Laboratory of Radiopharmaceuticals, Beijing, China; 2. Xuan Wu Hospital, Center of PET, Beijing, China
- P384 RADIOLABELLING OF NEUROTENSIN AGONIST AND ANTAGONIST WITH 177Lu** **S484**
V. Lungu* and D. Chipper
Horia Hulbei National Institute for Physics and Nuclear Engineering, Bucharest Magurele, Romania
- P385 NEW COPPER-64 COMPLEXES FOR IMAGING HYPOXIA** **S485**
M. B. Theobald¹, S. R. Bayly¹, J. R. Dilworth¹, R. C. King², M. W. Jones¹ and S. I. Pascu³
1. University of Oxford, Department of Chemistry, Oxford, United Kingdom; 2. University of Oxford, Gray Institute for Radiation Oncology and Biology, Oxford, United Kingdom; 3. University of Bath, Department of Chemistry, Bath, United Kingdom
- P386 STUDIES ON 99mTc-LABELED BISPHOSPHONATES AS POTENTIAL BONE IMAGING AGENTS** **S486**
S. Luo*
Jiangsu Institute of Nuclear Medicine, Key Laboratory of Nuclear Medicine, Ministry of Health, Wuxi, China
- P387 SUBSTITUENT EFFECT ON THE STRUCTURES AND PROPERTIES OF 99mTc-BISPHOSPHONATE COMPLEXES** **S487**
L. Qiu*, J. Lin and S. Luo
Jiangsu Institute of Nuclear Medicine, Key Laboratory of Nuclear Medicine, Ministry of Health, Wuxi, China
- P388 PREPARATION AND BIOLOGICAL EVALUATION OF 99mTc-ZL AND 99mTc-TADP AS BONE IMAGING AGENTS** **S488**
J. Lin*, L. Qiu and S. Luo
Jiangsu Institute of Nuclear Medicine, Key Laboratory of Nuclear Medicine, Ministry of Health, Wuxi, China
- P389 THE PREPARATION AND BIOEVALUATION OF 99mTc LABELED HYNIC-NGA AS POTENTIAL HEPATIC ASGP RECEPTOR IMAGING AGENTS** **S489**
W. Yang, Y. Pang, T. Mou and X. Zhang*
Beijing Normal University, Key Laboratory of Radiopharmaceuticals of Ministry of Education, College of Chemistry, Beijing, China
- P390 LABELING AND STABILITY STUDIES OF 44SC-DOTATOC** **S490**
N. S. Loktionova¹, M. Pruszyński², A. Majkowska², P. Riss¹ and F. Roesch¹
1. University of Mainz, Institute of Nuclear Chemistry, Mainz, Germany; 2. Institute of Nuclear Chemistry and Technology, Warszawa, Poland
- P391 SYNTHESIS OF NEW [Y-90]-DOTA BASED MALEIMIDES FOR THE PRELABELING OF THIOL-BEARING L-OLIGONUCLEOTIDES AND PEPTIDES** **S491**
H. Pietzsch¹, J. Schlesinger¹, C. Fischer¹, I. Koezle¹, S. Vonhoff², S. Klussmann², R. Bergmann¹ and J. Steinbach¹
1. Forschungszentrum Dresden-Rossendorf, Dresden, Germany; 2. *NOXXON Pharma AG, Berlin, Germany
- P392 SYSTEMATIC GALLIUM-68 LABELING STUDIES EXEMPLIFIED FOR A NOVEL DO2A-TYROSINE DERIVATIVE** **S492**
C. Burchardt*, P. Riss and F. Roesch
Johannes-Gutenberg-University, Institute of Nuclear Chemistry, Mainz, Germany
- P393 NEW OCTREOTIDE DERIVATIVES FOR 99m-Tc-TRICARBONYL LABELING TO TARGET SOMATOSTATIN SST2 RECEPTOR** **S493**
W. Chen¹, S. Chiu², Y. Cheng¹, T. Lee², C. Kao³ and J. Lo¹
1. National Tsing Hua University, Department of Biomedical Engineering and Environment Sciences, Hsinchu, Taiwan; 2. Institute of Nuclear Energy Research, Longtan, Taiwan; 3. Buddhist Tzu Chi General Hospital, Department of Nuclear Medicine, Hualien, Taiwan

P394	SYNTHESIS AND ⁶⁸Ga-RADIOLABELLING OF N3S3, N3O3 AND NO3-TYPE BIFUNCTIONAL CHELATORS P. J. Riss* and F. Roesch Johannes Gutenberg University, Institute of Nuclear Chemistry, Mainz, Germany	S494
Novel technologies: Nanotechnology, microreactors and microfluidics posters		
P395	SYNTHESIS AND ⁶⁸Ga-RADIOLABELLING OF 2-DESOXYGLUCOSE CONJUGATED MACROCYCLIC CHELATORS P. J. Riss*, C. Kroll and F. Roesch Johannes Gutenberg University, Institute of Nuclear Chemistry, Mainz, Germany	S495
P396	SYNTHESIS OF [¹⁸F]XENON DIFLUORIDE FROM [¹⁸F]FLUORIDE ION IN A COILED SILICA GLASS MICRO-REACTOR S. Lu ¹ , Y. S. Lee ² and V. W. Pike ¹ 1. National Institutes of Health, NIMH, Molecular Imaging Branch, Bethesda, MD; 2. National Institutes of Health, CIT, Center for Molecular Modeling, Bethesda, MD	S496
P397	LABELLING OF CARBON-11 TRACERS USING A MICROFLUIDIC SYNTHESISER L. Brichard* and F. I. Aighbirho University of Cambridge, Wolfson Brain Imaging Centre, Department of Clinical Neurosciences, Addenbrookes Hospital, Cambridge, United Kingdom	S497
P398	RAPID [¹¹C]METHYLATION REACTIONS USING MICROFLUIDIC TECHNOLOGY S. Kealey ¹ , C. Plisson ² , L. Martarello ² , N. Long ¹ and A. Gee ² 1. Imperial College, Department of Chemistry, London, United Kingdom; 2. GlaxoSmithKline, Clinical Imaging Centre, London, United Kingdom	S498
P399	MICROFLUIDIC APPROACH TO THE SYNTHESIS OF [F-18]-FIAU USING AN ADVION NANOTEK-LF SYSTEM H. Anderson ¹ , N. Pillarsetty ² and J. S. Lewis ² 1. Advion BioSystems, Inc., Ithaca, NY; 2. Memorial Sloan-Kettering Cancer Center, Department of Radiology, New York, NY	S499
P400	NANO CRYSTALLINE ZIRCONIA: A NEW SORBENT FOR THE PREPARATION OF ⁹⁹Mo-^{99m}Tc GENERATORS R. Chakravarty*, R. R. Shukla ² , R. Ram ¹ , A. K. Tyagi ² , A. Dash ¹ and M. Venkatesh ¹ 1. Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India; 2. Bhabha Atomic Research Centre, Chemistry Division, Mumbai, India	S500
P401	ENGINEERING HOLLOW SILICA SHELLS FOR DRUG DELIVERY E. Mume* ¹ , D. E. Lynch ² and S. V. Smith ³ 1. Center for Anti-matter Matter Studies, Australian National University, Australia; 2. Exilica Ltd, United Kingdom; 3. Center for Anti-matter Matter Studies, Australian Nuclear Science and Technology Organisation (ANSTO), Australia	S501
P402	USE OF NANO ZIRCONIA FOR POST ELUTION CONCENTRATION OF ¹⁸⁸Re OBTAINED FROM INDIGENOUSLY DEVELOPED TITANIUM TUNGSTATE BASED ¹⁸⁸W/¹⁸⁸Re GEL GENERATOR R. Chakravarty*, A. Dash, R. Ram, Y. Pamale and M. Venkatesh Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India	S502
P403	OPTIMIZATION OF [¹¹C]RACLOPRIDE PRODUCTION ON A MICROFLUIDIC CHIP S. Haroun* ¹ , S. Jivan ² , T. Ruth ¹ and P. Li ¹ 1. Simon Fraser University, Department of Chemistry, Burnaby, BC, Canada; 2. TRIUMF, Vancouver, BC, Canada	S503
P404	DETECTION OF RADIOACTIVITY TRANSPORT IN SYNTHESIS SYSTEMS P. Mikecz*, T. Miklovicz, L. Galuska and L. Tron University of Debrecen Medical and Health Science Center, Institute of Nuclear Medicine, Debrecen, Hungary	S504
P405	ELECTROCHEMICAL CONCENTRATION OF AQUEOUS [¹⁸F]FLUORIDE INTO AN APROTIC SOLVENT IN A DISPOSABLE MICROFLUIDIC CELL H. Saiki ¹ , R. Iwata ² , R. Wong Toh Hang ² , S. Furumoto ² , Y. Ishikawa ² , H. Nakanishi ¹ and E. Ozeki ¹ 1. Shimadzu Corporation, Technology Research Laboratory, Kyoto, Japan; 2. Tohoku University, Cyclotron and Radioisotope Center, Sendai, Japan	S505
P406	2-[¹⁸F]-2-DEOXY-D-GLUCOSE [¹⁸F]-FDG LABELING OF PEPTIDE USING MICRO-FLUIDIC REACTOR V. R. Bouvet* and F. Wuest Cross Cancer Institut, Oncologic Imaging, Edmonton, AB, Canada	S506
P407	^{99m}Tc(CO)₃-LABELED MULTIFUNCTIONAL MICELLE AS A POTENTIAL RADIOTRACER AND DRUG CARRIER TARGETING TO CANCERS W. H. Hsu ¹ , S. Y. Lin ² , J. Lo ¹ and G. H. Hsiue ² 1. National Tsing Hua University, Department of Biomedical Engineering and Environmental Sciences, Hsinchu, Taiwan; 2. National Tsing Hua University, Department of Chemical Engineering, Hsinchu, Taiwan	S507
P408	REACTOR SCALE EFFECTS ON F-18 RADIOLABELING J. Santiago ¹ , A. Elizarov ² , R. Miraghaie ² , C. Ball ² and J. Zhang ² 1. Siemens Healthcare USA, Molecular Imaging, Knoxville, TN; 2. Siemens Healthcare USA, Molecular Imaging Biomarker Research, Culver City, CA	S508

Radionuclide therapy posters

- P409 A COMPACT MICROWAVE SYSTEM FOR RAPID, SEMI-AUTOMATED RADIOSYNTHESIS S509**
S. Olma¹, J. Lambert², E. Barnhardt², K. Liu¹, C. Shen¹ and R. van Dam¹
1. UCLA, Crump Institute for Molecular Imaging, Los Angeles, CA; 2. CEM Corporation, Matthews, NC
- P410 LABELING OF MAB PR81 WITH ¹⁷⁷Lu TO PRODUCE A BIOLOGIC RADIOPHARMACEUTICAL FOR RADIOIMMUNOTHERAPY OF BREAST CANCER S510**
M. Salouti¹, H. Rajabi², M. Babaei³ and M. Rasaei⁴
1. Islamic Azad University- Zanzan Branch, Department of Biology, School of Sciences, Tehran, Iran; 2. Tarbiat Modarres University, Department of Medical Physics, School of Medical Sciences, Tehran, Iran; 3. Atomic Energy Organization, Department of Radioisotopes, Nuclear Research Center, Tehran, Iran; 4. Tarbiat Modarres University, Department of Biotechnology, School of Medical Sciences, Tehran, Iran
- P411 SYNTHESIS OF NIMOTUZUMAB-DOTA RADIOCONJUGATES LABELLED WITH LUTETIUM-177 AND THEIR BIOLOGICAL BEHAVIOUR S511**
M. Beran¹, D. Beckford¹, M. Forsterova¹, A. Laznickova³, M. Laznicek³, F. Melichar¹, R. Leyva Montana² and P. Barta³
1. Nuclear Physics Institute, Public Research Institution, Radiopharmaceutical Department, Rez near Prague, Czech Republic; 2. Isotopes Center, Department of Radiopharmacy, Havana; 3. Charles University Prague, Pharmaceutical Faculty, Hradec Kralove, Czech Republic
- P412 SYNTHESIS AND BIOLOGICAL EVALUATION OF RHENIUM-188-LABELED RGD-PEPTIDES S512**
L. Tang¹, J. Yu¹, Y. Ma¹, W. Zhou¹, D. Yin¹ and U. O. Hafeli²
1. Shanghai Institute of Applied Physics, Chinese Academy of Sciences, Radiopharmaceutical Center, Shanghai, China; 2. The University of British Columbia, Faculty of Pharmaceutical Sciences, Vancouver, Canada
- P413 PREPARATION AND BIODISTRIBUTION OF NEW ³²P-CP-PLLA MICROPARTICLE S513**
M. Yang¹, Y. P. Xu, D. H. Pan, L. Z. Wang and S. N. Luo
Jiangsu Institute of Nuclear Medicine, Dept of Research, Wuxi, China
- P414 ¹⁷⁷Lu-DOTA-CYCLOGASTRIN: STABILITY ASSESSMENT AND EVALUATION IN VITRO S514**
M. Ocak¹, C. Decristoforo¹, C. Rangger¹, A. Helbok¹, W. Sallegger² and E. von Guggenberg¹
1. Clinical Department of Nuclear Medicine, Innsbruck Medical University, Innsbruck, Austria; 2. piCHEM Research and Development, Graz, Austria
- P415 PREPARATION AND BIODISTRIBUTION OF ¹⁵³Sm-BLEOMYCIN COMPLEX FOR TUMOR THERAPY S515**
A. Bahrami-Samani¹, M. Ghannadi-Maragheh², A. Jalilian³, H. Yousefnia³, J. Garousi³ and F. Bolourinovin³
1. Nuclear Engineering and Physics Department, Amirkabir University of Technology, Tehran, Iran; 2. Nuclear Science and Technology Research Institute, Tehran, Iran; 3. Agricultural, Medical and Industrial Research School (AMIRS-NSTRI), Karaj, Iran
- P416 PREPARATION AND PRELIMINARY BIOEVALUATION OF ¹⁶⁶Ho-OXINE-LIPIODOL: A POTENTIAL AGENT FOR THERAPY OF LIVER CANCER S516**
T. Das¹, S. Chakraborty¹, H. Dev Sarma², M. Venkatesh¹ and S. Banerjee¹
1. Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India; 2. Bhabha Atomic Research Centre, Radiation Biology and Health Sciences Division, Mumbai, India
- P417 IN VITRO STUDIES TO ASSESS MODE OF CELL DEATH BY IODINE-131 THERAPEUTIC RADIOPHARMACEUTICAL USED IN NUCLEAR MEDICINE S517**
C. Kumar¹, S. Subramaniam, G. Samuel and M. Venkatesh
Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India
- P418 PREPARATION AND PRELIMINARY BIOEVALUATION STUDIES OF ⁹⁰Y-OXINE IN LIPIODOL FOR LIVER CANCER THERAPY S518**
S. Subramaniam¹, U. Pandey¹, H. D. Sarma², G. Samuel¹ and M. Venkatesh¹
1. Bhabha Atomic Research Centre, Radiopharmaceuticals Division, Mumbai, India; 2. Bhabha Atomic Research Centre, Radiation Biology and Health Sciences Division, Mumbai, India
- P419 PRODUCTION AND DEPLOYMENT OF THERAPEUTIC RADIONUCLIDES: FEASIBILITY IN INDIAN SCENARIO S519**
M. Venkatesh¹
Bhabha Atomic Research Centre, RPHD, Mumbai, India
- P420 IODINE-131 SALIVA SECRETION IN ABLATION TREATMENT FOR THYROID CANCER PATIENTS S520**
A. C. Nascimento¹, A. M. Rebelo², R. R. Corbo², L. E. Brandao¹ and J. D. Mendes²
1. Nuclear Engineering Institute, National Commission on Nuclear Energy, Division of Radiopharmaceuticals, Rio de Janeiro, Brazil; 2. Clementino Fraga Filho Hospital, Federal University of Rio de Janeiro, Nuclear Medicine Service, Rio de Janeiro, Brazil
- P421 EVALUATION OF GUM ARABIC STABILIZED GOLD-198 NANOPARTICLES IN PROSTATE CANCER BEARING MICE S521**
P. Kan¹, H. P. Engelbrecht¹, L. D. Watkinson², T. L. Carmack², J. R. Lever³, C. J. Smith³, R. Kannan³, K. V. Kattesh³, S. S. Jurisson⁴ and C. S. Cutler¹
1. University of Missouri, Research Reactor Center, Columbia, MO; 2. Harry S. Truman Memorial Veterans Hospital, Columbia, MO; 3. University of Missouri, Department of Radiology, Columbia, MO; 4. University of Missouri, Chemistry Department, Columbia, MO

P422	PRECLINICAL COMPARATIVE STUDY OF ¹⁷⁷LU-LABELED BOMBESIN ANALOGUES FOR HUMAN PROSTATE TUMOR DIAGNOSIS AND TREATMENT	S522
	P. B. Pujatti ¹ , J. Santos ¹ , R. Couto ¹ , L. Melero ¹ , M. Suzuki ² , J. Mengatti ¹ and E. Araujo ¹ 1. Nuclear and Energy Research Institute (IPEN/CNEN), Radiopharmacy Directory, Sao Paulo, Brazil; 2. Nuclear and Energy Research Institute (IPEN/CNEN), Center of Biotechnology, Sao Paulo, Brazil	
P423	TARGETING TUMOR ANGIOGENESIS USING ⁹⁰Y-DOTA-MALEIMIDE-CYCLIC (RGDfC)	S523
	Y. Hong [*] , S. Lee, K. Choi and S. Choi Korea Atomic Energy Research Institute, Radioisotope Research Division, Daejeon, South Korea	