



COST BM0607 Action
“Targeted Radionuclide Therapy”

Working Group meeting/MC meeting

March 26-27, 2010

Location:

Hotel Stadt Freiburg
79106 Freiburg, Germany

Local organizers:

Helmut Mäcke, Martin Behe

PROGRAMME

Friday, 26 March 2010

Plenary session

08:45 – 08:55 Helmut Mäcke/Martin Behe

Welcome

08:55 – 09:00 Marion de Jong/Helmut Mäcke

Opening remarks

Chair: Helmut Mäcke

09:00 – 09:45 **Radiolabelled amino acid derivatives for radiotherapy planning**

A. Grosu

Department of Radiation Oncology, University of Freiburg, Germany.



09:45 – 10:00 **Astatine-211 chemistry: investigation of hypervalent organoastatine as a new labeling method for alpha-radiotherapy with improved stability.**

F. Guérard¹, H. Rajerison¹, M. Bourgeois¹, A. Faivre-Chauvet¹, J. Barbet¹, G.J. Meyer² and J.F. Gestin¹

¹ *Centre de Recherche en Cancérologie de Nantes-Angers, Inserm, Université de Nantes, U892, France.*

² *Klinik für Nuklearmedizin, Medizinische Hochschule Hannover, Hannover, Germany.*

10:00-10:15 **Dose-effect models for renal toxicity after ⁹⁰Y, ¹¹¹In or ¹⁷⁷Lu**

Mark Konijnenberg¹, Marleen Melis¹, Marion de Jong¹ and Peter Bernhardt²

¹*Erasmus MC, Rotterdam, the Netherlands and* ²*Gothenburg University, Sweden*

10:15-10:30 **[^{99m}Tc]Demomedin 1: A new promising candidate for diagnostic imaging of GRPR⁺-tumors based on neuromedin C**

Maina T.¹, Ketani E.¹, Marsouvanidis P. J.¹, Charalambidis D.², Krenning E. P.², de Jong M.², Waser B.³, Reubi J.-C.³, Nock B. A.¹

¹*Molecular Radiopharmacy, I/R-RP, NCSR "Demokritos", Athens, GREECE;*

²*Department of Nuclear Medicine, Erasmus MC University Medical Center Rotterdam, Rotterdam, THE NETHERLANDS.;* ³*Institute of Pathology, University of Bern, Bern, SWITZERLAND*

10:35 – 11:05 Coffee break

Chair: Renata Mikolajczak

11:05 – 11:20 **⁴⁶Sc produced in a nuclear reactor and its applications**

D. Pawlak, J.L.Parus, R. Mikolajczak

Institute of Atomic Energy POLATOM Radioisotope Centre, 05-400 Swierk – Otwock, Poland

11:20-11:35 **New method for ⁴⁷Sc production in reactor Maria in Swierk**

Barbara Bartoś, Aleksander Bilewicz

Department of Radiochemistry, Institute of Nuclear Chemistry and Technology
Dorodna 16, 03-195 Warszawa

11:35 - -11:50 **Investigation of *in vitro* affinity of DOTA-TATE cold complexes with ^{nat}Sc and ^{nat}Ga in AR42J cells**

E. Koumarianou, D. Pawlak and R. Mikolajczak

IAE Radioisotope Centre POLATOM, 05-400 Swierk-Otwock, Poland

11:50-12:35 TBA

12:35 – 13:35 Lunch

Chair: Otto Boerman; Luigi Aloj

13:35-13:50 Internalisation of CCK-2 analogues

Marion de Jong et al

Rotterdam

13:50-14:05 In vitro stability data of ¹⁷⁷Lu-DOTA-MG derivatives – a comparison within COST BM0607

M.Ocak^{1,2}, E.von Guggenberg¹, C.Decristoforo¹

¹Univ.Klinik f.Nuklearmedizin Innsbruck, Austria; ²Department of Pharmaceutical Technology, Pharmacy Faculty, Istanbul University, Istanbul, Turkey

14:05-14:20 Comparative biodistribution of twelve gastrin/CCK2 receptor targeting peptides.

Otto C. Boerman, Peter Laverman, Lieke Joosten, Annemarie Eek, Susan Roosenburg, Wim J.G. Oyen.

Radboud University Nijmegen Medical Centre Nijmegen, Dept of Nuclear Medicine, Nijmegen, The Netherlands

14:20-14:35 Comparison of ¹¹¹In-labelled CCK2-receptor targeting peptides using NanoSPECT/CT imaging

Jane Sosabowski, Ciara Finucane, Julie Foster, David Ellison and Stephen Mather

Centre for Molecular Oncology and Imaging, Barts and the London School of Medicine and Dentistry, Queen Mary University of London

14:20-14:50 Discussion of the results of CCK-2

14:50 – 15:20 Coffee break

Chair: Steve Mather

14:50-15:35 **Tumor Invasion and Metastasis: EMT and Cancer Stem Cells**

Prof. T. Brabletz

Department of Visceral Surgery, University of Freiburg, 79106 Freiburg, Germany.

15:40 – 15:55 **Optimizing Peptide Receptor Radionuclide Therapy of neuro-endocrine tumors**

S.E.Pool , G.A. Koning, B. Kam, W. Breeman, E. Krenning, T.L.M. ten Hagen, A.M.M. Eggermont, C.H.J. van Eijck, M. de Jong;

Department of Nuclear Medicine, Department of Surgical Oncology

15:55-16:10 **A NEW AND RAPID METHOD OF LABELING NOTA-OCTREOTIDE WITH F-18**

Peter Laverman¹, William J. McBride², Ingrid Dijkgraaf¹, Annemarie Eek¹, Lieke Joosten¹, Robert M. Sharkey³, David M. Goldenberg³, Wim J.G. Oyen¹, Otto C. Boerman¹

¹Radboud University Nijmegen Medical Centre, Department of Nuclear Medicine, Nijmegen, The Netherlands; ²Immunomedics, Inc., Morris Plains, NJ, USA; ³Garden State Cancer Center, Center of Molecular Medicine and Immunology, Belleville, NJ, USA.

16:10 – 16:55 **Is the radiolabel important for distribution profile of somatostatin analogues?**

Laznickova A.

Faculty of Pharmacy, Charles University, Hradec Kralove, Czech Republic

16:55-17:10 **Chelators for Radiocopper: Biological/Pharmacokinetic Differences of [Tyr³,Thr⁸]octreotide Conjugates**

Abiraj Keelara, ML Tamma, M. Fani, H. Maecke, JCI Reubi , R Schibli, P.J. Barnard, J. Dilworth

Universities Basel, Freiburg, Bern, Oxford and ETH Zuerich

19:30 Congress dinner

Saturday, 27 March 2010

Chair: Marion de Jong

8:30-9:15 Rational design of peptide hormone antagonists of amidated peptides

Jean Martinez

Medicinal Chemistry at the School of Pharmacy, University of Montpellier 1, France

9:15-9:30 [¹⁷⁷Lu]SAR-G3: Uptake in GRPR⁺-xenografts and in kidneys of mice

Marsouvanidis P. J.¹, Melis M.², de Blois E.², Breeman W. A. P.², Krenning E. P.², Maina T.¹, de Jong M.², Nock B. A.¹

¹*Molecular Radiopharmacy, I/R-RP, NCSR "Demokritos", Athens, GREECE;*

²*Department of Nuclear Medicine, Erasmus MC University Medical Center Rotterdam, Rotterdam, THE NETHERLANDS*

9:30-9:45 **Non-invasive imaging of alpha-v beta-3 function as a predictor of the anti-migratory and anti proliferative effects of dasatinib**

Rebecca A. Dumont, Isabel Hildebrandt, Helen Su, Roland Haubner, Gerald Reischl, Johannes Czernin, Paul S. Mischel, Wolfgang A. Weber

9:45-10:00 ¹⁷⁷Lu-BPAMD – from bone imaging to therapy with a macrocycle-bisphosphonate ligand

Marco Fellner¹, Richard P. Baum², Vojtech Kubicek³, Petr Hermann³, Frank Roesch¹

¹ *Institute of Nuclear Chemistry, Johannes Gutenberg University, Mainz, Germany.* ² *Department of Nuclear Medicine, Center for PET/CT, Zentralklinik, Bad Berka, Germany.* ³ *Department of Inorganic Chemistry, University of Prague, Prague, Czech Republic.*

10:00 – 10:30 Coffee break

Chair: Glenn Flux

10:30-10:45 **⁶⁸Ga labeling of DOTATATE and the comparison of ⁶⁸Ga-DOTA-TATE PET-CT and ^{99m}Tc-HYNIC-TOC SPECT/CT in patients with malignant neuroendocrine tumors – preliminary results**

D.Pawlak¹, N. Szaluś^{2,3}, W. Wojdowska¹, M. Dziuk^{2,3}, M. Koza³, G. Kamiński², Z. Podgajny^{2,3}, E. Dziuk², R.Mikolajczak¹

¹IAE Radioisotope Centre POLATOM, Otwock-Swierk, POLAND, ²Military Institute of Health Services, Warsaw, Poland, ³Mazovian PET-CT Center, Warsaw, Poland

10:45-11:00 Development of Quality Control Procedures for a microPET-CT system

Mathilde Gautier^{1,2}, Manuel Bardiès³, Glenn Flux⁴, Cecilia Hindorf¹

1 Imagerie Médicale, ONIRIS, Nantes, France ; 2 Physique Médicale, CLCC Nantes-Atlantique, St Herblain, France ; 3 INSERM, UMR892, Nantes, France ; 4 Joint dept. of Physics, Royal Marsden Hospital/Institute of Cancer Research, London, UK

11:00 – 11:30 General discussion

11:30 – 12:00 Lunch

12:00 – 14:00 MC meeting