

# World Journal of Nuclear Medicine

Volume 8, Number 4, October 2009



Abstracts of  
3rd International Conference on  
Radiopharmaceutical Therapy  
(ICRT-2009)  
Cartagena, Colombia  
3-7 November 2009

WORLD  
FEDERATION  
OF  
NUCLEAR  
MEDICINE  
AND  
BIOLOGY



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# World Journal of Nuclear Medicine

Volume 8, Number 4, October 2009

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Ana Maria Robles (1946-2009)

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## Cover Photograph:

A sculpture of a salt miner in front of the Underground Salt Cathedral at Zipaquira, near Bogota (Colombia)  
Photo Credit: Prof. A.K. Padhy



## PROGRAMME

### INTERNATIONAL CONFERENCE ON RADIOPHARMACEUTICAL THERAPY (ICRT-2009)

**CARTAGENA, COLOMBIA, 3-7 NOVEMBER 2009**

*THE POSTERS WILL BE ON DISPLAY ON ALL DAYS. THE PARTICIPANTS ARE REQUESTED TO FIX THEIR POSTERS ON 3RD NOVEMBER AND REMOVE THEM ON 7th NOVEMBER 2009*

#### Tuesday: 3 November 2009

Whole Day 0900-2100 2000-2100	Participants start arriving Registration Executive Council Meeting of WRPTC
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**2000-2300 Informal get-together and Dinner**

#### Wednesday: 4 November 2009

**0800-1600 Registration continues**

**0800-1015 Abstract No Scientific Session-1  
Opening & Thyroid I  
Chairpersons: Prof. JH Turner (Australia), Prof. A. Ellmann (South Africa)**

**0800-0815 Opening Remarks:**

Dr. Patricia Bernal Trujillo, Chairman, Organizing Committee  
Prof. Richard Baum, Chairman, Scientific Committee  
Prof. Ajit Kumar Padhy, Chairman, WRPTC

**0815-1015 Invited Lecture**

0815-0845	1	Creativity and motivation: A Necessity for Advancing Research and Healthier Life	Prof. AH Elgazzar (Kuwait)
0845-0925	2	I-131 Therapy of Thyroid Cancer	Prof. Stanley Goldsmith (USA)
0925-0955	3	"Equivalence randomised stratified control Trial in Remnant Ablation of DTC"	Prof. C.S. Bal (India)
0955-1015	4	Thyroid antibodies and Differentiated Thyroid Cancer	Prof. J. Mihailovic (Serbia)

#### **Proffered Presentations**

#### **Poster Presentations**

**(To be viewed and discussed during the coffee break at 1015-1100 hrs. TODAY (04/11/09))**

5	Clinical experience with recombinant human thyrotrophin in the radioiodine treatment of patients with differentiated thyroid cancer on L-thyroxine	Dr. Zvezdana Rajkovaca (Bosnia and Herzegovina)
6	Use of recombinant TSH (r-TSH) stimulation for treatment of bone metastasis & follow-up in differentiated thyroid carcinoma :	Dr. Partha S Choudhury, et al (India)

- work in progress.
- |    |                                                                                                                                                                                                                                                                                          |                                                            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| 7  | The level of carcinogenic risk after radioiodine ablation for low risk group papillary thyroid cancer                                                                                                                                                                                    | Dr. Tatiana Hadjieva, et al (Bulgaria)                     |
| 8  | Effect of low dose radioiodine therapy in differentiated thyroid carcinoma                                                                                                                                                                                                               | Dr. Farid Alam, et al. (Bangladesh)                        |
| 9  | Enhanced sensitivity of lesion detection by performing delayed I-131 whole body scanning beyond the standard 48 hr scan protocol in patients of metastatic differentiated thyroid cancer treated with rhTSH (Thyrogen) intervention                                                      | Dr. Kelvin Loke, et al (Singapore)                         |
| 10 | FRAX assessment of Osteoporotic fracture probability in patients of differentiated thyroid cancer on Thyroid hormone suppressive therapy                                                                                                                                                 | Dr. Butch Magsombol,<br>Dr. Kelvin Loke, et al (Singapore) |
| 11 | Scintigraphic profile of thyroid diseases in Yaounde                                                                                                                                                                                                                                     | Dr. Joseph Francis Nwatsock, et al (Cameroun)              |
| 12 | Thyroid cancer imaging: Are we missing nodules with high resolution collimator and limiting pinholes studies to anterior view only?                                                                                                                                                      | Prof. AH Elgazzar, et al (Kuwait)                          |
| 13 | The influence of treatment of Subclinical Hyperthyroidism with radioiodine on achievement of euthyroid state, thyroid volume and level of Sex Hormone Binding Globulin.                                                                                                                  | Dr. Grzegorz Kaminski, et al (Poland)                      |
| 14 | Radioiodine therapy in childhood thyroid cancer                                                                                                                                                                                                                                          | Dr. Abu-Taher Muhammad (Bangladesh)                        |
| 15 | The role of high resolution neck ultrasound in combination with thyroglobulin measurement in the wash-out fluid from the fine needle aspiration of neck lesions (FNAB-Tg) in patients with differentiated thyroid carcinoma and positive or negative Iodine-131 whole body scintigraphy. | Dr. S. Frangos, et al. (Cyprus)                            |
| 16 | Effect of Levothyroxine suppressive therapy on bone mineral density in patients with well-differentiated thyroid carcinoma                                                                                                                                                               | Dr. Faria Nasreen, et al (Bangladesh)                      |
| 17 | Thyroid cancer in Latvia: Review of statistical data and some management problems                                                                                                                                                                                                        | Dr. Antra Bergina, et al. (Latvia)                         |
| 18 | Is Measuring of 131I Thyroid Uptake Using Gamma Camera Reliable Enough?                                                                                                                                                                                                                  | Dr. Milovan Matovic, et al (Serbia)                        |
| 19 | Persistent and unusual combination of negative thyroglobulin levels and positive I-131 avid metastases in a patient with metastatic follicular carcinoma of thyroid                                                                                                                      | Dr. Butch Magsombol, et al (Singapore)                     |
| 20 | Clinical Significance of Serial Measurements of Serum Thyroglobulin & Thyroglobulin Antibodies In Differentiated Thyroid Cancer Patients                                                                                                                                                 | Dr. Shazia Fatima, et al. (Pakistan)                       |
| 21 | Radioiodine Treatment Complications in Mother and Child in Patients with Differentiated Thyroid Carcinoma                                                                                                                                                                                | Dr. Abbas Takavar, et al. (Iran)                           |
| 22 | Evaluation of the efficacy of low and high dose radioiodine therapy for ablation                                                                                                                                                                                                         | Dr. Abbas Takavar, et al. (Iran)                           |
| 23 | Predictive value of TSH levels after 131-I                                                                                                                                                                                                                                               | Dr. Pavel Bochev (Bulgaria)                                |

## PROGRAMME (ICRT-2009)

24	treatment of patients with Grave's disease Diagnostic Value of Serum Thyroglobulin in Differentiated Thyroid Carcinoma Patients to Monitor Persistence or Recurrence Disease	Dr. Aisyah Elliyanti (Indonesia)
25	Umbilical cord blood TSH values in neonates for screening of congenital hypothyroidism	Dr. Ansari M.I.H, et al. (Bangladesh)
<b>1015-1100</b>	<b>Networking, Posters &amp; Coffee Break</b> <b>Poster Coordinators: Dr. Mohd. Aleem Khan, Dr. Nigora Rasulova</b> <b>ALL POSTERS FROM SCIENTIFIC SESSION-1 &amp; 4 WILL BE VIEWED AND DISCUSSED</b>	
<b>1100-1300</b>	<b>Scientific Session-2</b> <b>Thyroid:II</b> Chairpersons: Dr. Omar Alonso (Uruguay), Dr. E. Barrenechea (Philippines)	
	<b>Invited Lectures</b>	
1100-1125	26 Radioiodine-negative, Somatostatin-Receptor PET-negative Thyroid Cancer: Current Status and Developments	Prof. Roy Moncayo (Austria)
1125-1150	27 Paediatric Thyroid Cancer	Prof. Isabel Roca (Spain)
1150-1215	28 "rhTSH stimulated radioiodine therapy of metastatic differentiated thyroid cancer, an off- label use: Initial experience"	Prof. C.S. Bal (India)
1215-1240	29 Radioiodine Therapy of Benign Thyroid Disorders	Prof. A. Klissarova (Bulgaria)
1240-1300	30 Targeted Radiotherapy and Radiobiology	Dr. Maria Neves (Portugal)
<b>1300-1400</b>	<b>Lunch</b>	
<b>1400-1550</b>	<b>Scientific Session-3</b> <b>Neuroendocrine Tumours-1</b> Chairpersons: , Dr. Savvs Frangos (Cyprus), Prof. G. Wiseman (USA)	
	<b>Invited Lectures</b>	
1400-1425	31 Chemical aspects of labelling octreotides	Dr. Mikolajczak Renata (Poland)
1425-1450	32 The Targeting of G-protein Coupled Receptors with Radiopeptides for Imaging and Internal Radionuclide Therapy.	Prof. H. R. Maecke (Switzerland)
1450-1520	33 An update on our experience with Peptide Receptor Radiotherapy (PRRT) in Neuroendocrine Tumours (NETs)	Prof. R. P. Baum (Germany)
1520-1550	34 Lanreotide-based Diagnosis and Treatment of Cancer Patients: Current Status, Indications, Future Directions".	Prof. Roy Moncayo (Austria)
<b>1550-1610</b>	<b>Coffee Break</b>	
<b>1610-1800</b>	<b>Scientific Session-4</b> <b>Neuroendocrine Tumours-2</b> Chairpersons: Prof. R. Moncayo (Austria), Dr. N. Watanabe (Japan)	
	<b>Invited Lectures</b>	
1610-1635	35 Concomitant chemotherapy, radioimmunotherapy of lymphoma and radiopeptide control of endocrine cancer.	Prof. J.H. Turner (Australia)
1635-1700	36 Bisphosphonates conjugated to macrocyclic ligands: <sup>68</sup> Ga-based PET/CT	Prof. Dr. Frank Roesch (Germany)

1700-1720	37	imaging tracers vs. 177Lu-based therapy. Treatment of neuroendocrine tumors with radiolabeled peptide: The Chilean Experience	Prof. Horacio Amaral (Chile)
<b>Proffered Papers (Oral Presentations)</b>			
<b>1720-1800 Oral Presentations</b>			
	38	Survival benefits and efficacy of Peptide Receptor Radionuclide Therapy (PRRT) using Y-90/Lu-177 DOTA-TATE in Pancreatic Neuroendocrine Tumors (pNET)	Prof. R. P. Baum, et al. (Germany)
	39	Comparison between clinical results of PRRT with 90Y-DOTA TATE and 90Y/177Lu- DOTATATE	Dr. Jolanta Kunikowska, et al (Poland)
	40	Ensayos preclínicos del 177lu-dota-minigastrina para su potencial uso en prrt ( <i>Preclinical trial of Lu-177-dota-minigastrin for potential use in prrt</i> )	López Bularte A.C, Puerta Yepes N, Nevares N, Zapata M, Rojo A.M, Crudo J (Argentina).
	41	Tratamiento de tumores neuroendocrinos (tne) con péptidos análogos de la somatostatina marcados con radionucleidos ( <i>Treatment of neuroendocrine tumors (TNE) with peptides of somatostatine labelled with radionuclides</i> )	Horacio Amaral, Rossana Pruzzo, Cecilia Gil, Irene Coudeu, Hugo Lavados, Francisca Redondo, Bárbara Morales (Chile)

**Poster Presentation****(To be viewed and discussed during the coffee break at 1015-11 am on 04/11/09)**

	42	Effectiveness of treatment of gastroenteropancreatic non-functioning neuroendocrine tumours consisted of Sandostatin LAR® after 90Y - and/or 177Lu - DOTA-TATE therapy.	Dr. Norbert Szalus, et al. (Poland)
	43	Peptide receptor radionuclide therapy in neuroendocrine tumors: preliminary results in 18 cases treated with 90Y-DOTATOC	Dr. Lutfun Nisa, et al (Bangladesh)
	44	Preparation of [18F] containing neurotensine-derived peptides	Dr. Horvath Geza, et al (Denmark)
	45	I-131 MIBG Imaging in the Diagnosis of Pheochromocytoma: 'Philippine Setting'	Dr. Erik Cruz, et al. (Philippines)

**1800-1900****WRPTC Members' Assembly**

All participants of ICRT-2009 and ALASBIMN Congress are defacto members of WRPTC and are welcome to attend this Assembly and contribute to the proceedings

**1900-2000****FREE TIME****2000-2300****Oenophilous Dinner****Cartagena Club****Thursday: 5 November 2009****Scientific Session-5 (Plenary with ALASBIMN Congress)****ALASBIMN Opening & Combined Plenary with ALASBIMN****Chairpersons: , Prof. I. Mena (Chile), Prof. S. Goldsmith (USA)**

0800-0815		ALASBIMN Opening	Dr. Patricia Bernal (Colombia)
0815-0850	46	Contribution of nuclear medicine in early breast cancer: from ROLL (Radioguided Occult Lesion Localization) to IART® (Intra-operative	Prof. Giovanni Paganelli (Italy)

## PROGRAMME (ICRT-2009)

0850-0930 47 Avidination for Radionuclide Therapy  
PET/CT in Lung Cancer and Oncology Guidelines Prof. R. Baum (Germany)  
- Has it Become a Must?

0930-1030 **Networking, Posters & Coffee Break**  
Poster Session Coordinator: Dr. Shazia Fatima (Pakistan), Dr. Antra Berzeina (Latvia)

**ALL POSTERS FROM SCIENTIFIC SESSIONS-5, 6,7and 8 WILL BE VIEWED AND DISCUSSED**

1030-1300 **Scientific Session-6**  
**Radiosynovectomy & Bone Pain Palliation**  
Chairpersons: Dr. S. Srivastava (USA), Prof. AH Elgazzar (Kuwait)

**Invited Lectures**

1030-1055 48 Radionuclide therapy of bleeding joints in Haemophilia: A review Dr. E. Barrenechea (Philippines)

1055-1120 49 Radiosynoviorthesis (RSO): influencing factors and therapy monitoring Dr. K. Liepe (Germany)

1120-1145 50 Treating bone metastases use of radionuclides in combination with other therapies Dr. J. Buscombe (UK)

1145-1210 51 Results of autoradiographic uptake of Re-188-HEDP Dr. K. Liepe (Germany)

1210-1235 52 Metabolic Radionuclide Therapy of Metastatic Bone Pain Using 89 SrCl (Metastron) - Review and Perspectives Prof. A. Klissarova (Bulgaria)

**Proffered Presentations****Oral Presentation**

1235-1300 53 Metabolic Radionuclide Therapy in Painful Bone Metastases with 89SrCl : Better Patients' Selection for Therapy Dr. Zhivka Dancheva (Bulgaria)

54 Knowing people, caring for persons, not just treating pain: 15 years delivering radionuclides to palliate bone pain. Morales R, Cano R, Mendoza G (Peru)

55 Radiosinoviolis (rsnv) con Re188-coloide en sinovitis villonodular (svn ) recidivante de rodilla. Experiencia clinico terapeutica (*Radiosynoviolisis (rsnv) with Re 188 colloid in synovitis villonodular (snv) recidivant of knee. Experience clinical and therapeutical*) Alvaro Calderon, Augusto Llamas Olier, Humberto Varela, Amelia de los Reyes, Maria Cristina Martinez, Emperatriz Angarita, Nidia Delgado, Rada, César Villamil. Camilo Soto Javier Alejandro Estévez(Colombia)

56 Estudio biocinético y dosimétrico de un kit de producción local de 177lu-edtmp para su uso como agente paliativo del dolor. (*Biokinetic study and dosimetry evaluation of Lu-177 EDTMP for use in the palliative treatment of bone pain*) Nancy Puerta Yepes, Juan Horacio Pérez, Noemí Nérida Nevares, Alfredo Miguel Zapata, Ana Clarisa López Bularte, Ana María Rojo, Sebastián Gossio, José Luis Crudo (Argentina)

**Poster Presentations**

**(To be viewed and discussed during the coffee break at 9.30-10.30 am on 5/11/09)**

57 153Sm-oxabiphore radionuclide therapy combined with external beam radiation therapy (8Gy) in breast cancer patients with bone metastases Prof. Valeriy Krylov, et al. (Russia)

58 Therapeutic Response of Radiosynovectomy with 32P Colloid in Haemophilic Synovitis of Dr. Pei-yong LI (China, PR)

59	Adolescents Development of a New <sup>131</sup> I-Labelled Bisphosphonic Acid for Palliative Therapy of Metastatic Bone-Pain.	Dr. Alejandro Perera (Cuba)
60	Radionuclide Therapy in Patients with Painful Bone Metastases due to prostate Carcinoma. Efficacy of Strontium-89 Chloride	Dr. R. Mititelu (Romania)
61	Is radiosynoviorthesis of medium and small joints in patients with rheumatoid arthritis effective?	Dr. Otakar Kraft, et al. (Czech Republic)
62	Effect of combined Samarium-153 and adjuvant analgesic therapy for pain palliation in patients with skeletal metastases	Dr. S. Barai (India)
63	The duration of pain free period after Sm-153 EDTPM palliative treatment of skeletal bone MTS in patient moderate severity of bone pain in comparison to group of patient with severe to intolerable pain.	Dr. N. Rasulova (Uzbekistan)
64	Possibility of using Tc <sup>99m</sup> (V) DMSA in assessment to treatment response of patients with gastro intestinal stromal tumor.	Dr. Vladimir Lyubshin, et al. (Uzbekistan)
65	Bone pain from osteoblastic metastases	Dr. Fahid Ibrar, Dr. Baber Juniad (Pakistan)

1300-1400

Lunch

1400-1600

Scientific Session-7

Liver Cancer &amp; Miscellaneous

Chairpersons: Prof. Azu Owunwanne (Kuwait), Dr. Knut Liepe (Germany)

## Invited Lectures

1400-1430	66	Statistics don't lie – do people?	Prof. J. Stare (Slovenia)
1430-1450	67	Recent advances in radioconjugate targeting	Prof. D.K. Hazra (India)
1450-1520	68	Targeted Liver Tumor Therapy with Radioembolization	Prof. G. Wiseman (USA)
1520-1550	69	A perspective on WRPTC: We may not change the world, but we can make a small difference	Prof. A.K. Padhy (Singapore)

## Oral Presentations

1550-1600	70	Evaluación de la eficacia terapéutica de un complejo mixto <sup>188</sup> Re(v)-oxo como potencial agente para terapia de melanoma ( <i>Evaluation of the therapeutic efficacy of Re-188(V) - oxo like potential agent for melanoma therapy</i> )	S. Fernández, J. Giglio, M. Terán, M. Incerti, C. Agorio, A. Chabalgoity, A. Rey (Uruguay)
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1600-1615

Coffee Break

1615-1745

Scientific Session-8

Radioimmunotherapy

Chairpersons: Prof. Horacio Amaral (Chile), Prof. Kalevi Kairemo (Finland)

## Invited Lectures

1615-1645	71	Radioimmunotherapy of Lymphoma	Prof. Stanley Goldsmith (USA)
1645-1715	72	Radioimmunosciintigraphy and Radioimmunotherapy: Summary of 20 years of	Prof. I. Garty (Israel)



## PROGRAMME (ICRT-2009)

1715-1745 73 experience and the state of the art".  
Radioimmunotherapy of Prostate Carcinoma Prof. Stanley Goldsmith (USA)

**Proffered Presentations****Poster Presentations****(To be viewed and discussed during the coffee break at 0930-1030 am on 05/11/09)**

- |    |                                                                                                                                                           |                                                 |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 74 | Development of <sup>177</sup> Lu- Dendrimer-Anti-CD20 : preliminary studies                                                                               | Dr. Marcos Tassano, et al. (Uruguay)            |
| 75 | Development of <sup>153</sup> Sm-DTPA-Rituximab for radioimmunotherapy                                                                                    | Dr. Amir R Jalilian, et al (Iran)               |
| 76 | <sup>177</sup> -Lu-Anti-CD20 monoclonal antibody: A potential radiopharmaceutical for treatment of non-Hodgkin's lymphoma                                 | Dr. Paola Audicio, et al (Uruguay)              |
| 77 | Sterically stabilized <sup>177</sup> Lu de DTPA-Liposomes and <sup>177</sup> Lu DTPA-Liposomes: development of labeling procedure and biologic evaluation | Dr. Mirel Cabrera, et al. (Uruguay)             |
| 78 | <sup>177</sup> Lu –Bevacizumab: a novel therapeutic radiopharmaceutical                                                                                   | Dr. Ximena Camacho, et al (Uruguay)             |
| 79 | In vivo characterization of a Lu-177 Bombesin-based radiopharmaceutical for GRP Positive tumours - Diagnosis & Treatment                                  | Dr. Priscilla Brunelli Pujatti, et al. (Brazil) |
| 80 | <sup>177</sup> Lu-DOTA-TATE and Sandostatin LAR as a promising therapy of Esthesioneuroblastoma-case report                                               | Dr. Zbigniew Podgajny, et al (Poland)           |
| 81 | <sup>177</sup> Lu - Dendrimer PAMAM G4: Evaluation in a murine melanoma model                                                                             | Dr. Marcos Tassano, et al. (Uruguay)            |

**1915-2300****Reception and Dinner****Formal ceremony at TEATRO ADOLFO MEJIA (19.15-20.30)****Cocktail - Dinner at PLAZA DE LA MERCED (21.00-23.00)****Friday: 6 November 2009****0900-1700****Sight-seeing tour with Lunch (Details are being worked out)****1930****Dinner at Hilton****Saturday: 7 November 2009****0830-1100****Scientific Session - 9****Molecular Imaging in Therapy**

Chairpersons: Dr. Isabel Roca (Spain), Prof. D.K. Hazra (India)

**Invited Lectures**

- |           |    |                                                                                                                                     |                              |
|-----------|----|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 0815-0845 | 82 | Road Map to Molecular Imaging: Historic and Basic Considerations                                                                    | Prof. AH Elgazzar (Kuwait)   |
| 0845-0915 | 83 | PET/CT and Radiotherapy Planning                                                                                                    | Dr. Subramaniam Rathan (USA) |
| 0915-0945 | 84 | The Importance of Quantitative Molecular Imaging: From MORE (Molecular Response) to PERCIST (PET Response Criteria in Solid Tumors) | Prof. R. Baum (Germany)      |
| 0945-1010 | 85 | Use of PET/CT imaging with <sup>68</sup> Ga DOTATATE in the evaluation of patients with neuroendocrine tumors                       | Dr. Horacio Amaral (Chile)   |
| 1010-1035 | 86 | The limitations of CT to monitor radionuclide therapy in Neuro-endocrine tumours                                                    | Dr. John Buscombe (UK)       |

- 1035-1100 87 In the current world of PET/CT for therapeutic monitoring, who needs Tc-99m and the other non-positron emitting radiopharmaceuticals? Prof. Azu Owunwanne (Kuwait)

### Proffered Papers

#### Poster Presentations:

(To be viewed and discussed during the coffee break at 1100-1145 am on 07/11/09)

- 88 Effects of external beam irradiation on Radioimmunotargetting Dr. Padmamalika Khanna-Hazra, et al (India)
- 89 Rapid guide for drug interaction with radiopharmaceutical Ralph Santos-Oliveira, et al (Brazil)
- 90 Targeted imaging with  $^{64}\text{Cu}$  trastuzumab PET in non small cell lung cancer Dr. Bishnuhari Paudyal, et al. (Japan)
- 91 Evaluation of risk of increased cerebral blood flow by intravenous adenosine-tri-phosphate: A PET study with  $^{15}\text{O}$ -labeled water. Dr. Raihan Hussain (Bangladesh)
- 92 Phase I Clinical Trial and Pharmacokinetics of the anti-CEA single chains fragment (scFv) $_2$  M3 Dr. Gilmara Pimentel, et al (Cuba)
- 93 Experience of Radiopharmaceutical Therapy in a Developing Country Dr. Hasan Mizanul, et al (Bangladesh)

1100-1145

### Networking, Posters & Coffee Break

Poster Session Coordinator: Dr. R Mititelu (Romania), Dr. Ana Ugrinska (Macedonia)

ALL POSTERS FROM SCIENTIFIC SESSIONS-9 and 10 WILL BE VIEWED AND DISCUSSED

1145-1300

### Scientific Session - 10

#### Miscellaneous

Chairpersons: Dr. J. Buscombe (UK), Prof. H. R. Maecke (Switzerland)

#### Invited Lectures

- 1145-1210 94 Molecular Radiotherapy for Human Neuroblastoma Cells with Auger Electrons of In-111-labeled N-myc Antisense Oligonucleotides in Combination with Chemotherapy Dr. N. Watanabe (Japan)
- 1210-1235 95 Molecular Imaging and Therapy of Cancer using Radiolabeled Nanoparticles Dr. Keon Wook Kang (S. Korea)
- 1235-1300 96 PBPK modeling for dosimetry of nonclinical and clinical radioimmunotherapy Prof. Kalevi Kairemo (Finland)

#### Posters

(To be viewed and discussed during the coffee break at 1100-1145 am on 07/11/09)

- 97 Architecture & Music in the Light of Healing of Cancer Patients Dr. Gertraud Jestl-Horngache (Austria)
- 98 Primary Tumor Size, Can It Predict the Histopathologic Outcome of an Identified Sentinel Node? Dr. Susan Gironella-Camomot, et al (Philippines)
- 99 Evaluation of sentinel lymph nodes in patients with cutaneous malignant melanoma Dr. M. Lacic (Croatia)
- 100 *SPECT imaging in the diagnosis of pulmonary embolism, comparison with planar V/Q scan and CTPA* Dr. Fatima Shazia, et al (Pakistan)

## PROGRAMME (ICRT-2009)

101	Evaluation of Performance of Rest Gated Myocardial Perfusion Imaging in Emergency Room Patients with Suspected Acute Coronary Syndrome presenting with Acute Chest Pain and Non-diagnostic ECG - Preliminary results from the PREMIER trial	Dr. Arzoo Fatima (Pakistan)
102	Myocardial infarction, scar or ischemia at rest?	Maruf Pirnazarov (Uzbekistan)
103	Carcinoma of Unknown Primary: Initial Experience with 18F FDG PET-CT	Madhur Kumar Srivastava (India)
104	Prediction of response to neoadjuvant chemotherapy in locally advanced breast cancer with scintimammography and its correlation with p-glycoprotein levels	Dr. Muhammad Aleem Khan (Pakistan)
<b>1300-1400</b>	<b>Lunch</b>	
<b>1400-1600</b>	<b>Scientific Session - 11 Closing Session Chairpersons: Prof. Richard P. Baum (Germany), Dr. Patricia Bernal (Colombia)</b>	
	<b>Invited Lectures</b>	
1400-1425	105 Alpha therapies present practice and future prospects	Dr. John Buscombe (UK)
1425-1450	106 Our Experience Comparing Bi-213 with Lu-177 in a prostate cancer model.	Prof. H. R. Maecke (Switzerland)
<b>1450-1600</b>	<b>Inauguration of WARMTH</b> Introduction to ICRT-2010 (Bali): Address by the Organizing Chairman Introduction to ICRT-2012 (Finland) Address by the Organizing Chairman Closing Remarks	Dr. Hussein Kartamihardja (Indonesia) Prof. K. Kairemo (Finland)
	Highlights and closing remarks	Dr. Patricia Bernal, Chairperson - Organizing Committee (ICRT-2009) A.K. Padhy (Singapore)
<b>1600-1630</b>	<b>Coffee Break</b>	
<b>1630-2000</b>	<b>FREE TIME</b> A few interesting Scientific Sessions of ALASBIMN will still be continuing in other Lecture Halls. Those who are interested may attend and participate in them also (Please refer to the ALASBIMN Programme).	
<b>2000</b>	<b>Closing Ceremony of ICRT-ALASBIMN Congress -onwards Dinner Latin Music &amp; Dance and Celebrations</b>	

**DRESS CODE FOR CLOSING CEREMONY : ALL WHITE**

## ABSTRACTS

021

**Radioiodine treatment complications in mother and child in patients with differentiated thyroid carcinoma**

Takavar Abbas, Saber Sasan, Ansari Mojtaba, Fard-Esfahani Armaghan

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**Objectives:** Radioiodine (I-131) is widely used in the treatment of differentiated thyroid carcinoma (DTC). As radiation is a known mutagen, we decided to evaluate the outcome of pregnancy in DTC female patients and genetic risks and health status of their children. **Methods:** We retrospectively studied the medical records of DTC patients in our centre from 1999 to 2002. 1100 women were hospitalized for treatment with high dose radioiodine therapy (at least 100mCi) during the above period, from which 653 were in reproductive years. 100 of these women had at least one pregnancy after radioiodine therapy. Data on 126 pregnancies after treatment were obtained by interviewing these 100 women, who had totally 101 pregnancies before I-131 therapy. We asked about pregnancy outcomes such as abortion and stillbirth, and the health status of their children. We also reviewed radioiodine last dose and cumulative dose. **Results:** The incidence of abortion increased from 16.83% (17 out of 101 pregnancies before I-131 therapy) to 26.19% (33 out of 126 pregnancies after I-131 therapy). 13 of 33 abortions were spontaneous and 20 abortions were induced (69.7% all abortions after I-131 therapy). There was no significant difference between the mean last dose and also the cumulative dose in patients with and without history of abortions. Mean interval between the last dose of I-131 therapy and abortion and the last dose and live child birth had a significant difference (16.20i, ±10.97 versus 32.10i, ±18.22 month, p<0.001). All children had normal birth weight. 3 anomalies (Down's syndrome, heart anomaly and macrocephaly) in 3 children were present. 3 episodes of intrauterine death were recorded, but this was not statistically significant. **Conclusion:** Shorter interval between I-131-therapy and pregnancy increases the risk of abortions. It appears that radioiodine therapy has no obvious adverse effect on fertility or genetic risks in the offsprings.

022

**Evaluation of the efficacy of low and high dose radioiodine therapy for ablation**

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(Abstract not available)

023

**Predictive value of TSH levels after 131-I treatment of patients with Graves' disease**

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Radioiodine treatment of patients with Graves' disease is marked with various degree of uncertainty, regarding dose regimen and decision for second dose application. The aim of the study is to evaluate the predictive value of TSH measurement up to six months after treatment regarding 1 year endpoint outcome and define the time for a second dose application whenever needed. Subject of study were 46 patients (9 men, 37 women) with Graves' disease, treated with fixed doses 131-I – 5 and 7.5 mCi. All patients were on antithyroid medication before and after the therapy except for a one week withdrawal pre- and post radioiodine therapy. TSH and FT3, FT4 levels were measured before the procedure, at 3, 6, 12 month after administration. ATD therapy was not discontinued before the 3rd month after therapy. A second dose was not administered during the first year after the initial treatment in any of the patients for various reasons. The results from the follow up show that only 20% of the patients with high TSH at 3rd month remain hypothyroid at 1 year, while half of the patients with high TSH at 6th month remain hypothyroid. Among the patients with low TSH levels at 3rd month control 63% tend to remain hyperthyroid at 1 year with similar percentage for 6th month control. Euthyroid at 3rd and 6th month patients remain euthyroid after 1 year in 57% and 72% respectively. The results show that early hypothyroidism is predominantly transient and is of no predictive value for the outcome. Early hyperthyroidism at 3rd month control is likely to persist at 1 year and needs an early administration of second dose 131-I.

024

**Diagnostic Value of Serum Thyroglobulin in Differentiated Thyroid Carcinoma Patients to Monitor Persistence or Recurrence Disease**

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Serum thyroglobulin (Tg) is widely accepted as a tumor marker to evaluate the effectiveness of treatment for differentiated thyroid cancer (DTC) and to monitor for persistence or recurrence. However, Tg level can be misleading in the certain instances in which levels are low but have recurrence. The aim of this study to evaluate the diagnostic value of serum thyroglobulin in DTC patients to monitor persistence or recurrence disease

A retrospective study of 62 patients, 56 females and 6 males who had proper follow-ups after received I-131 ablation. Range of age was 19 to 73 years old. During the follow-ups,

serum Tg, anti-thyroglobulin antibody (TgAb), chest X-ray and bone scintigraphy were examined. Serum thyroglobulin  $\geq 2$  ng/mL was used as positive for persistence or recurrence disease during thyroid hormone withdrawal.

Positive Tg and negative TgAb were found in 6 of 62 (9.67%) patients who showed abnormal uptake on bone scintigraphy. Negative Tg in 56 of 62 (90.03%) patients, 49 of 56 (87.5%) patients had both Tg and TgAb negative and bone scintigraphy also showed normal uptake. 6 of 56 (10.7%) patients had negative both Tg and TgAb but having abnormal bone scintigraphy which showed uptake at ribs in two patients, at lumbal spine in two patients, at sternum in one patient and the rest at both right-sacroiliac joint and parietal bones. One of 56 (1.7%) patient who had negative Tg, positive TgAb, normal bone scintigraphy and I-131 whole body scan showed an abnormal uptake at left and right area of the neck. Sensitivity and specificity for serum thyroglobulin were 46.15% and 100% respectively.

Serum thyroglobulin cannot be considered as a single indicator to monitor of thyroid cancer, furthermore TgAb examination should be included. Additional imaging tests such bone scintigraphy, I-131 whole body scan may improve diagnostic value to identify persistence or recurrence disease.

## 025

### **Umbilical cord blood TSH values in neonates for screening of congenital hypothyroidism**

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**Objectives:** The aim of this study was to determine the thyroid stimulating hormone (TSH) levels from cord blood in neonates and to establish the practice for possible application of congenital hypothyroidism screening in Bangladesh. **Methods:** TSH was measured from cord blood of 2858 newborns from maternal wards of 28 hospitals of the Dhaka city and 5 hospitals of other districts where Nuclear Medicine Centers were located. The Neonatal TSH IRMA kit supplied by HTA Co; LTD, Beijing, China was used for screening test of congenital hypothyroidism. **Results:** From the total of 1495 male and 1363 female neonates 92.64% male neonates and 93.18% female neonates had non- detectable or TSH values less than 10 mIU/L. 7.29% males and 6.60% females had TSH values between 10-20 mIU/L. Only one male and three female neonates had raised TSH values greater than 20mIU/L. **Conclusions:** Cord blood on filter paper was practical and easy to collect. It was applicable for blood spot assay of congenital hypothyroidism. It could be put in practice for large-scale newborn screening programme in Bangladesh.