



European Thyroid Association 38th Annual Meeting

Santiago de Compostela, SPAIN | 6-10 September 2014

Scientific Programme/ Sunday, 7th September

Compostela Room

07.00 – 08.00 ETA INDUSTRY-SPONSORED SATELLITE SYMPOSIUM 2

The Future is Now: Optimizing Treatment for Your RAI-R DTC Patients

Santiago Room

08.00-10.00 ORAL SESSION 1: TOPIC HIGHLIGHTS (OP1-OP6)

Chairpersons: Furio Pacini, Italy and Clara Alvarez, Spain

08.00-08.20

OP01 A ZEBRAFISH MODEL OF NETRIN1 DEFICIENCY REVEALS ABNORMAL THYROID MORPHOGENESIS LINKED TO DEFECTIVE CARDIOVASCULAR DEVELOPMENT

Robert Opitz¹, Achim Trubiroha¹, Isabelle Vandernoot¹, Marc-Philip Hitz², Rasha Abu-Khudir², Valérie Désilets², Johnny Deladoëy², Gregor Andelfinger², Sabine Costagliola¹

¹Iribhm, Université Libre de Bruxelles, Brussels, Belgium; ²Department of Pediatrics, Centre Hospitalier Universitaire Sainte Justine, Montréal, Québec, Canada

08.20-08.40

OP02 ANALYSES OF A PHASE 3, MULTICENTER, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL OF LENVATINIB (E7080) IN PATIENTS WITH 131-I-REFRACTORY DIFFERENTIATED THYROID CANCER (SELECT)

Steven I. Sherman¹, Makoto Tahara², Lori Wirth³, Bruce Robinson⁴, Marcia F. Brose⁵, Rossella Elisei⁶, Corina E. Dutcus⁷, Begoña de las Heras⁸, Junming Zhu⁷, Mouhammed Amir Habra¹, Kate Newbold⁹, Manisha H. Shah¹⁰, Ana O. Hoff¹¹, Andrew G Gianoukakis¹², Naomi Kiyota¹³, Matthew H. Taylor¹⁴, Sung-Bae Kim¹⁵, Monika K. Krzyzanowska¹⁶, Martin Schlumberger¹⁷

¹Department of Endocrine Neoplasia and Hormonal Disorders, Division of Internal Medicine, The University of Texas M. D. Anderson Cancer Center, Houston, TX, USA; ²Department of Head and Neck Medical Oncology National Cancer Center Hospital East, Kashiwa, Japan; ³Department of Medicine, Massachusetts General Hospital, Boston, MA, USA

⁴Kolling Institute of Medical Research, University of Sydney, New South Wales 2006, Australia; ⁵Department of Otorhinolaryngology: Head and Neck Surgery, Abramson Cancer Center of the University of Pennsylvania, Philadelphia, Pa, USA; ⁶Endocrine Unit, Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy

⁷Eisai Inc, Woodcliff Lake, Nj, USA; ⁸Eisai Ltd, Hatfield, England, UK; ⁹The Royal Marsden Hospital National Health Service Trust, London, England, UK; ¹⁰Department of Internal Medicine, The Ohio State University Comprehensive Cancer Center, Columbus, Oh, USA; ¹¹Instituto Do Cancer de Sao Paulo, Universidade de Sao Paulo, Sao Paulo, Brazil; ¹²Division of

Endocrinology and Metabolism, Harbor-Ucla Medical Center, Torrance, Ca, USA; ¹³Department of Medical Oncology and Hematology, Kobe University Hospital, Kobe, Japan; ¹⁴Knight Cancer Institute, Oregon Health and Science University, Portland, Or, USA; ¹⁵Department of Oncology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

¹⁶Division of Medical Oncology & Hematology, Princess Margaret Cancer Centre, Uhn 610 University Avenue, Toronto, Ontario, Canada; ¹⁷Department of Nuclear Medicine and Endocrine Oncology, Gustave Roussy and Université Paris-Sud, Villejuif, France

08.40-09.00

OP03 TARGETED MUTATIONS IN MCT10 EXPAND THE SUBSTRATE SPECTRUM TO INCLUDE T4

Jörg Johannes¹, Ulrich Schweizer¹, Doreen Braun¹, Kleinau Gunnar²

¹Rheinische Friedrich-Wilhelms-Universität Bonn ; Institut Für Biochemie und Molekularbiologie

²Charité - Universitätsmedizin Berlin ; Institut Für Experimentelle Pädiatrische Endokrinologie

09.00-09.20

OP04 THE TARGETED INACTIVATION OF MEN1 GENE EXACERBATES RET/PTC3-INDUCED THYROID NEOPLASTIC TRANSFORMATION

Samia Selmi-Ruby¹, Maria-Jésus Obregon², Juliette Dupayrat³, Françoise Borson-Chazot³, Chang Zhang³

¹Faculté de Médecine Rth-Laennec Crcl Umr 1052; ²Instituto de Investigacions Biomedicas; ³Crcl-Umr1052

09.20-09.40

OP05 NEXT GENERATION SEQUENCING (NGS) REVEALS A HIGHLY FREQUENT MULTIGENIC INVOLVEMENT IN THE PATHOGENESIS OF CONGENITAL HYPOTHYROIDISM

Luca Persani¹, Tiziana de Filippis², Giulia Gelmini², Federica Marelli², Maria Cristina Vigone³, Mirella Moro², Maria Carolina Salerno⁴, Giorgio Radetti⁵, Giovanna Weber⁶, Fabiana Guizzardi²

¹University of Milan and Irccs Istituto Auxologico Italiano; ²Irccs Istituto Auxologico Italiano; ³San Raffaele Hospital

⁴University of Naples; ⁵Hospital of Bolzano; ⁶San Raffaele Hospital and Vita-Salute University

09.40-10.00

OP06 SERUM MIRNAS AS A NON INVASIVE TOOL IN THE DIFFERENTIAL DIAGNOSIS OF THYROID NODULES IN A CAUCASIAN POPULATION

Tania Pilli¹, Silvia Cantara¹, Sebastiano Guidi², Cevenini Gabriele³, Giulia Busonero¹, Sandro Cardianale¹, Francesco Dotta¹, Furio Pacini¹

¹Department of Medicine, Surgery and Neuroscience, University of Siena, Siena, Italy; ²Fondazione Umberto DI Mario Onlus, Toscana Life Sciences, Siena, Italy; ³Department of Medical Biotechnologies, University of Siena, Siena, Italy

10.00-10.30 COFFEE BREAK

Santiago Room

10.30-12.00 SYMPOSIUM 1: THYROID AND THE HEART

Chairpersons: George J. Kahaly, Germany and Ignacio Bernabeu-Moron, Spain

10.30-11.00 Cardiovascular complications: toxic nodules vs autoimmune thyroid disease
Bernadette Biondi, Italy

11.00-11.30 Cardiovascular mortality and long-term outcomes in thyroid disease
Thomas Brix, Denmark

11.30-12.00 Thyroid hormone resistance and cardiovascular disease
Carla Moran, United Kingdom

Compostela Room

10.30-12.00 SYMPOSIUM 2: THYROID HORMONE AND ENERGY EXPENDITURE

Chairpersons: Eric Fliers, The Netherlands and Maria Jesus Obregon, Spain

- 10.30-11.00 Mitochondrial actions of thyroid hormone
Gerald Cabello, France
- 11.00-11.30 Central roles of thyroid hormone signaling in brown fat thermogenesis
Miguel Lopez, Spain
- 11.30-12.00 Thyroid hormone and thermoregulation
Jens Mittag, Sweden

Poster Area

12.00-13.00 LUNCH AND POSTER DISCUSSION PO1 (POSTERS P1-P121)

Poster Session 1: Graves' Orbitopathy

Chairperson: Alessandro Antonelli, Italy

Poster Session 2: Cardiovascular Effects

Chairperson: Warner Simonides, The Netherlands

Poster Session 3: Thyroid and Environment 1

Chairperson: Endre Nagy, Hungary

Poster Session 4: Thyroid in Reproduction and Development 1

Chairperson: Bijay Vaidya, United Kingdom

Poster Session 5: Thyroid Function and Development

Chairperson: Luca Persani, Italy

Poster Session 6: Hypothyroidism

Chairperson: Patrice Rodien, France

Poster Session 7: Thyroid Cancer Diagnostics 1

Chairperson: Roussanka Kovatcheva, Bulgaria

Poster Session 8: Thyroid Cancer Therapeutics 1

Chairperson: Sophie Leboulleux, France

Poster Session 9: Medullary Thyroid Cancer

Chairperson: Valeriano Leite, Portugal

Poster Session 10: Goiter and Nodules 1

Chairperson: Murat Erdogan, Turkey

Poster Session 11: Case Reports 1

Chairperson: Gabor Kovacs, Hungary

Poster Session 12: Imaging and Nuclear Medicine

Chairperson: Steen J. Bonnema, Denmark

Santiago Room

13.00-14.00 ETA INDUSTRY-SPONSORED SATELLITE SYMPOSIUM 3

Transformed Care for Advanced Medullary Thyroid Cancer:

Incorporating the Right Treatments for the Right Patient at the Right Time

14.00-14.45 MEET-THE-EXPERT 1-4

Room 14

14.00-14.45 MTE 1

Current State of Rituximab therapy in thyroid disease
Mario Salvi, Italy and Laszlo Hegedüs, Denmark

Compostela Room

14.00-14.45 MTE 2

Genetics and thyroid - from bench to bedside
Tomasz Bednarczuk, Poland

Santiago Room

14.00-14.45 MTE 3

Microcarcinoma: treatment and follow up
Laura Fugazzola, Italy

Room 25

14.00-14.45 MTE 4

Congenital hypothyroidism
Nadia Schoenmakers, United Kingdom

14.45-15.15 COFFEE BREAK

Santiago Room

15.15-15.30 ETA LISSITZKY PRIZE AWARD

Santiago Room

15.30-17.30 ORAL SESSION 2: YOUNG INVESTIGATORS SESSION/CLINICAL (OP07-OP14)

Chairpersons: Peter Laurberg, Denmark and Jacques Orgiazzi, France

15.30-15.45

OP07 TELOMERASE PROMOTER MUTATIONS, EXPRESSION AND LOCALIZATION IN DIFFERENTIATED THYROID CANCER

Marina Muzza¹, Carla Colombo¹, Stefania Rossi², Valentina Cirello¹, Michela Perrino¹, Simone De Leo¹, Elisa Pignatti³, Manuela Simoni³, Gaetano Bulfamante², Laura Fugazzola¹

¹Department of Clinical Sciences and Community Health, University of Milan; Endocrine Unit, Fondazione Irccs Ca' Granda, Milan; ²Department Health Sciences, University of Milan; Division of Pathology, San Paolo Hospital, Milan

³Unit and Chair of Endocrinology and Metabolism, Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia; Department of Medicine, Endocrinology, Metabolism and Geriatrics, Azienda Usl of Modena

15.45-16.00

OP08 DUAL GS-GQ VERSUS GQ SELECTIVE SIGNALLING DEFECTS IN CARBOXY-TERMINAL TSHR MUTANTS: IN VITRO AND CLINICAL CORRELATES

Marta Garcia¹, Jacqueline van Sande², Ainhoa Iglesias¹, Helène Bony-Trifunovic³, Maria Chueca⁴, Erica van den Akker⁵, Isolina Riaño⁶, Cristina Luzuriaga⁷, Patricia Crock⁸, Isabel González-Casado⁹, Jacques E. Dumont², José C. Moreno¹

¹Thyroid Molecular Laboratory. Institute for Medical and Molecular Genetics (Ingemm). La Paz University Hospital. Madrid. Spain; ²Institute of Interdisciplinary Research. University of Brussels. Brussels. Belgium; ³Pediatric Endocrinology and Diabetes. Nord Hospital. Amiens, France; ⁴Pediatric Endocrinology. Virgen del Camino Hospital. Pamplona. Spain.

⁵Pediatric Endocrinology. Sophia Children's Hospital. Erasmus Medical Center. Rotterdam. The Netherlands.

⁶Pediatric. Carmen and Severo Ochoa Hospital. Cangas del Narcea. Spain; ⁷Endocrinology. Marqués de Valdecilla University Hospital. Santander. Spain; ⁸Pediatric Diabetes and Endocrinology. John Hunter Children's Hospital. Newcastle. Australia.

⁹Pediatric Endocrinology. La Paz University Hospital. Madrid. Spain.

16.00-16.15

OP09 IMAGE-GUIDED, TUMOR STROMA-TARGETED I-131 THERAPY OF HEPATOCELLULAR CARCINOMA (HCC) USING A HIF-1-SPECIFIC SODIUM IODIDE SYMPORTER GENE SYSTEM

Kerstin Knoop¹, Andrea M Mueller¹, Kathrin A Schmohl¹, Nathalie Schwenk¹, Janette Carlsen², Marcus Hacker², Burkhard Goeke¹, Ernst Wagner³, Peter J Nelson⁴, Christine Spitzweg¹

¹Department of Internal Medicine II, University Hospital of Munich, Germany; ²Department of Nuclear Medicine, University Hospital of Munich, Germany; ³Department of Pharmacy, Center of Drug Research, Pharmaceutical Biology-Biotechnology, Ludwig-Maximilians-University, Munich, Germany; ⁴Clinical Biochemistry Group, Medical Policlinic, University Hospital of Munich, Germany

16.15-16.30

OP10 THE COACTIVATOR TAZ MODULATES THE PHENOTYPIC EXPRESSION OF NKX2.1 MUTANTS IN THE BRAIN-THYROID-LUNG SYNDROME.

Amanda Herranz¹, Christian Martín Moya¹, Lucía Garzón², Carmen Luna³, Noemí Núñez⁴, Rogelio Simón⁴, Pilar Santisteban⁵, José Carlos Moreno¹

¹Thyroid Molecular Laboratory. Institute for Medical and Molecular Genetics (Ingemm), La Paz University Hospital, Madrid, Spain; ²Paediatric Endocrinology, 12 de Octubre University Hospital, Madrid, Spain; ³Paediatric Pneumology and Allergy, 12 de Octubre University Hospital, Madrid, Spain; ⁴Paediatric Neurology, 12 de Octubre University Hospital, Madrid, Spain.

⁵Physiopathology of Endocrine and Nervous System, Biomedical Research Institute (Iib), Spanish Council for Scientific Research (Csic), Madrid, Spain.

16.30-16.45

OP11 EFFICACY AND TOXICITY OF VANDETANIB FOR ADVANCED MEDULLARY THYROID CANCER TREATMENT, THE FRENCH EXPERIENCE

Cecile Chougnet¹, Martin Schlumberger², Borget Isabelle³, TUTHYREF Network⁴

¹Hopital Saint Louis

²Department of Nuclear Medicine and Endocrine Oncology, Gustave Roussy and Université Paris-Sud, Villejuif, France

³Gustave Roussy, Université Paris-Sud, Villejuif, France

⁴Tuthyref

16.45-17.00

OP12 METHYLATION PROFILING REVEALS MARKERS SPECIFIC TO DISTINCT RET MUTATIONS IN MEDULLARY THYROID CARCINOMA

Veronika Mancikova¹, Esmeralda Castelblanco², Agustín F. Fernández³, Lucía Inglada Pérez⁴, Aguirre De Cubas⁵, Salud Borrego⁶, Xavier Matias-Guiu⁷, Mario Encinas², Mario F. Fraga³, Mercedes Robledo⁴

¹Hereditary Endocrine Cancer Group, Spanish National Cancer Research Centre (Cnio); ²Hospital Universitari Arnau de Vilanova, Lleida; ³Instituto Universitario de Oncología del Principado de Asturias, Oviedo; ⁴Hereditary Endocrine Cancer

Group, Spanish National Cancer Research Centre (Cnio); ⁵Isciii Center for Biomedical Research on Rare Diseases (Ciberer)

⁵Hereditary Endocrine Cancer Group, Spanish National Cancer Research Centre (Cnio), Madrid, Spain; ⁶Hospital Virgen del Rocío, Sevilla; ⁷Department of Pathology, University Hospital Arnau de Vilanova, University of Lleida, Irbllleida

17.00-17.15

OP13 SPONTANEOUS ABORTION AND STILLBIRTH ARE COMMON IN BOTH HYPERTHYROIDISM AND HYPOTHYROIDISM: A DANISH POPULATION-BASED STUDY OF 1,028,045 PREGNANCIES

Stine Linding Andersen¹, Jørn Olsen², Chun Sen Wu², Peter Laurberg¹

¹Aalborg University Hospital; ²Aarhus University, Denmark

17.15-17.30

OP14 INCREASED FAT MASS RESULTS IN HIGHER FREE T3 LEVELS IN CHILDREN

Pete N Taylor¹, Nicholas Timpson², Jonathan Tobias², Colin Dayan¹

¹Institute of Molecular & Experimental Medicine; School of Medicine; Cardiff University; ²University of Bristol, UK

Compostela Room

15.30-17.30 ORAL SESSION 3: MTC AND ANAPLASTIC CARCINOMA (OP15-OP22)

Chairpersons: Barbara Jarzab, Poland and Mercedes Robledo, Spain

15.30-15.45

OP15 ARE DIFFERENCES IN GENE EXPRESSION PROFILE BETWEEN TYPE OF RET MUTATION IN MEDULLARY THYROID CANCER PRESENT?

Malgorzata Oczko-Wojciechowska¹, Michal Swierniak², Malgorzata Kowalska¹, Tomasz Tyszkiewicz¹, Agnieszka Pawlaczek¹, Michal Jarzab³, Dagmara Rusinek⁴, Jadwiga Zebracka-Gala¹, Agnieszka Czarniecka⁵, Jolanta Krajewska⁶, Barbara Jarzab¹

¹Msc Memorial Cancer Center and Institute of Oncology, Gliwice Branch, Department of Nuclear Medicine and Endocrine Oncology; ²Msc Memorial Cancer Center and Institute of Oncology, Gliwice Branch, Department of Nuclear Medicine and Endocrine Oncology; Genomic Medicine; Department of Genenal Transplant and Liver Surgery; Medical University of Warsaw
³Msc Memorial Cancer Center and Institute of Oncology, Gliwice Branch, III Radiotherapy Clinic; ⁴Msc Memorial Cancer Center and Institute of Oncology, Gliwice Branch, Poland; Department of Nuclear Medicine and Endocrine Oncology
⁵Centre of Oncology M.Sklodowska-Curie Memorial Institute Gliwice Branch; ⁶M.Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Gliwice Branch

15.45-16.00

OP16 MILD HYPERCALCAITONINEMIA IN PATIENTS WITH BENIGN DISEASES OF THE THYROID AND CALCIUM HOMEOSTASIS

Juergen Kratzsch¹, Stefan Karger¹, Friedhelm Raue², Joachim Feldkamp³, Sandra Scheel³, Tanja Diana⁴, Nina Mattheis⁴, George J. Kahaly⁴

¹University Hospital, Leipzig; ²Praxis Prof. Raue & Colleagues, Heidelberg; ³Klinikum Bielefeld, Bielefeld; ⁴Johannes Gutenberg University Medical Center, Germany

16.00-16.15

OP17 DIVERGENT ROLES OF FORKHEAD FAMILY TRANSCRIPTION FACTOR PARALOGS IN MEDULLARY THYROID CARCINOMA

Mikael Nilsson¹, Shawn Liang², Camilla Ingesson², Therese Carlsson², Jakob Dahlberg³, Svante Jansson³, Akif Demir⁴, Henrik Fagman⁴

¹Sahlgrenska Cancer Center, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden; ²Sahlgrenska Cancer Center, University of Gothenburg; ³Department of Surgery, Sahlgrenska University Hospital; ⁴Department of Pathology, Sahlgrenska University Hospital

16.15-16.30

OP18 EXOME SEQUENCING REVEALS THAT SOS1 GENE MUTATIONS CAUSE A SYNDROME WITH PHENOTYPIC FEATURES OF MULTIPLE ENDOCRINE NEOPLASIA TYPE 2B BUT NO ENDOCRINOPATHY

Bijay Vaidya⁰, Martina Owens¹, Emma Kivuva², Ali Chakera³, Peter Turnpenny², Andrew Hattersley⁴, Anthony Quinn⁵, Richard Caswell⁶, Hana Lango Allen⁶, Sian Ellard⁷

¹Department of Molecular Genetics, Royal Devon & Exeter Hospital, Exeter, UK; ²Department of Clinical Genetics, Royal Devon & Exeter Hospital, Exeter, UK; ³Department of Endocrinology, Royal Devon and Exeter Hospital, Exeter, UK

⁴Department of Endocrinology, Royal Devon and Exeter Hospital, Exeter, UK; Institute of Biomedical and Clinical Science, University of Exeter Medical School, Exeter, UK; ⁵Department of Ophthalmology, Royal Devon and Exeter Hospital, Exeter, UK

⁶Institute of Biomedical and Clinical Science, University of Exeter Medical School, Exeter, UK; ⁷Department of Molecular Genetics, Royal Devon & Exeter Hospital, Exeter, UK; Institute of Biomedical and Clinical Science, University of Exeter Medical School, Exeter, UK

16.30-16.45

OP19 EFFICACY AND SAFETY OF VANDETANIB IN AGGRESSIVE AND SYMPTOMATIC MEDULLARY THYROID CANCER (MTC) – POST-HOC ANALYSIS FROM THE ZETA TRIAL (NCT00410761)

Michael Kreissl¹, Ole Hauch², Alan Webster², Martin Schlumberger³

¹Department of Nuclear Medicine, Central Hospital of Augsburg, Augsburg, Germany; ²Astrazeneca, Macclesfield, UK

³Institut Gustave Roussy, Villejuif, France

16.45-17.00

OP20 CLINICAL IMPACT OF RET GENETIC SCREENING OF IN THE MANAGEMENT OF MEDULLARY THYROID CARCINOMA (MTC) PATIENTS: 20 YEARS OF EXPERIENCE

Francesca Casella¹, Alessia Tacito¹, Raffaele Ciampi¹, Eleonora Molinaro¹, Laura Agate¹, Valeria Bottici¹, Antonio Matrone¹, Agnese Biagini¹, Rossella Elisei¹, Cristina Romei¹

¹Section of Endocrinology, Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy

17.00-17.15

OP21 REFERENCE RANGE OF SERUM CALCITONIN IN CHILDREN

Maria Grazia Castagna¹, Laura Fugazzola², Fabio Maino¹, Danila Covelli³, Fausta Sestini¹, Chiara Ferraris Fusarini⁴, Carlo Scapellato⁵, Francesco Macchini⁶, Gabriele Cevenini⁷, Furio Pacini¹

¹Section of Endocrinology, University of Siena, Siena, Italy; ²Department of Clinical Sciences and Community Health, University of Milan, Milan, Italy; Endocrine Unit, Fondazione Policlinico Irccs, Milan, Italy; ³Section of Endocrinology and Diabetology, University of Milan, Italy; ⁴Laboratory of Clinical Pathology, University of Milan, Italy; ⁵Laboratory of Clinical Pathology, University of Siena, Siena, Italy; ⁶Section of Pediatrics, University of Milan, Italy; ⁷Section of Surgery Bioengineering, University of Siena, Siena, Italy

17.15-17.30

OP22 MOLECULAR PROFILING OF SPORADIC MEDULLARY THYROID CARCINOMA PATIENTS BY NEXT GENERATION SEQUENCING

Vera Tiedje¹, Saskia Ting², Thomas Herold³, Kurt Werner Schmid², Dagmar Führer-Sakel⁴

¹Department of Endocrinology and Metabolism; University of Duisburg-Essen; ²Institute of Pathology; University Hospital Essen; ³Institute of Pathology; University Hospital Essen; German Cancer Consortium (Dtkk) Heidelberg; ⁴Department of Endocrinology and Metabolism; University Hospital Essen, Germany

17.30-17.45 **Break**

Santiago Room

17.45-18.30 ALDO PINCHERA LECTURE PRIZE

Chairpersons: Furio Pacini, Italy and Colin Dayan, United Kingdom

Thyroid and Pregnancy - Progress and Problems

John Lazarus, United Kingdom

Santiago Room

19.00-20.30 ETA INDUSTRY-SPONSORED SATELLITE SYMPOSIUM 4

**Targeted therapy in progressive medullary thyroid cancer:
A new treatment alternative**