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ESHO

Verona, Italy June 4 - 6, 2009



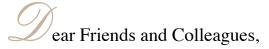
25th Annual Meeting of the EUROPEAN SOCIETY for HYPERTHERMIC ONCOLOGY

Together with

5th ESHO Educational Day (Wednesday, June 3rd)

18th European BSD Users Meeting (Thursday, June 4th)

Special Symposium: Up-date in Psycho-oncology, Quality of life in cancer patients, Distress and diagnosis communication (Thursday, June 4th)



it is with great pleasure that I invite you to ESHO's 25th Annual Meeting, here in Verona. We have come a long way since some of us founded the European Society for Hyperthermic Oncology.

In honor of this milestone, ESHO has planned an event to commemorate the beginning of our organization. The theme of this meeting is "25 years of cooperation in the treatment of oncology patients". Our principal aim will be "increasing collaboration" between European centers interested in the field of hyperthermia. This will aid in designing additional prospective studies to better define the role of hyperthermia.

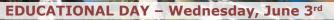
The venue of the meeting will be the Marani Center, located near the main city hospital (Ospedale Maggiore, Borgo Trento). Verona is a very beautiful city, rich in culture and the arts. There are many theatres, museums and historical buildings, such as the Arena, the Teatro Romano, Castelvecchio, and some very famous churches. Verona is one of Italy's oldest cities, and was ranked fourth in the number of tourists that visited this past year.

The scientific program of ESHO 2009 will cover the major topics and introduce recent developments in oncologic hyperthermia. We look forward to stimulating presentations and discussions exploring new areas in scientific cooperation. This meeting occurs at a very important anniversary of activity for ESHO, and I am very honored to be the president of this event. Once again, many thanks to the ESHO Assembly for giving me this opportunity.

I hope you enjoy your time in Verona.

Sergio Maluta

President of the ESHO 2009 Annual Meeting





You can access all current information pertaining to the congress at

www.esho.info/esho2009

June 3rd, 2009 - Room B

EDUCATIONAL DAY

- 14:00 14:45 Hyperthermia basic physics **G. van Rhoon** (Rotterdam)
- 15:00 15:45 The biological basis of anti–cancer effects of hyperthermia **M. Horsman** (Aarhus, Denmark)
- 16:00 Coffee Break
- 16:30 17:15 Hyperthermia basic equipment (applicators, thermometry) and new technological developments (nanoparticles)

 G. van Rhoon (Rotterdam)
- 17:30 18:15 Clinical applications of hyperthermia (gynaecological cancers, rectum and anal canal, prostate, liver, pancreas, thoracic wall, neck, brain)

 S. Maluta, S. Dall'Oglio (Verona)

June 4th, 2009 - Room 1

08:30 Opening S. Maluta (Verona)

08:40 Ethics and research S. Garattini (Milano)

09:00 The 25th anniversary of ESHO G. van Rhoon (Rotterdam)

09:10 The Erlangen proposal for cooperation in hyperthermia: Atzelsberg Circle **R. Sauer** (Erlangen)

CLINICAL SESSION: GASTRO-INTESTINAL CANCERS

Chair: A. Guglielmi (Verona), R. Sauer (Erlangen), R. Issels (Munich), C. Bassi (Verona)

09:30 Anal cancer: the role of hyperthermia **G.G. Grabenbauer** (Erlangen)

09:50 Rectal cancer recurrences: a new protocol for radio-hyperthermia treatment O. Ott (Erlangen)

10:10 Hyperthermia in oesophageal cancer M. Hulshof (Amsterdam)

10:30 Coffee Break

11:00 The role of surgery in pancreatic cancer P. Pederzoli (Verona)

11:20 The role of hyperthermia in pancreatic cancer R. Issels (Munich)

11:40 Discussion

June 4th, 2009 - Room 1

Selected Communications

Chair: S. Maluta (Verona), K. Tschoep (Munich)

12:00 Local SHF hyperthermia in multimodal approach to treatment of rectal cancer together with neoadjuvant therapy in a poli-radio-modification program Y. Barsukov (Moscow)

12:10 Development of a 27 MHz CC-LCF intraluminal applicator for combination with locoregional hyperthermia of the oesophagus and other locations J. Crezee (Amsterdam)

12:20 Results of thermo-radio-chemotherapy in combined treatment of squamous cell anal carcinoma Y. Barsukov (Moskow)

13:30 Lunch

CLINICAL SESSION: GYNAECOLOGICAL CANCER

Chair: Z. Vujaskovic (Durham, USA), V. Travagliati (Verona)

- 14:30 Hyperthermia in the treatment of locally advanced cervical cancer M. Franckena (Rotterdam)
- 14:50 Clinical impact of adding hyperthermia in patients affected by locally advanced cervical cancer treated with chemo-radiotherapy: the experience of Verona multidisciplinary group M. Gabbani (Verona)
- 15:10 Vaginal cancer and hyperthermia J. van der Zee (Rotterdam)

Thursday, June 4^{th -} Room 1

June 4th, 2009 - Room 1

Selected Communication

- 15.30 Hyperthermia assisted HDR brachytherapy in cervical cancer treatment. First results of a phase III study P. Norbert (Warsaw)
- 15:40 Discussion
- 16:10 Coffee Break

BIOLOGICAL SESSION:

CHEMO-HYPERTHERMIA IN DISEASE PROGRESSION

Chair: M. Horsman (Aarhus, Denmark)

- 16:30 Hyperthermia in malignant progression M. Dewhirst (Durham)
- 16:50 Rationale for chemo-hyperthermia association: the sarcoma experience R. Issels (Munich)

Selected Communications

- 17:10 Species dependent doxorubicin release of thermosensitive liposomes in vitro R. Schmidt (Munich)
- 17:20 Dual phosphatidilglyceroglycerol-based thermosensitive liposomes for MR-quided chemo-thermotherapy T. Wang (Munich)

June 4th, 2009 - Room 1

SELECTED CONTRIBUTIONS FOR DEBATE

Chair: G. van Rhoon (Rotterdam), S. Dall'Oglio (Verona)

- 17:30 Hyperthermia treatment results in immunogenic tumour cells death forms - Consequences for multimodal cancer treatment U. Gaipl (Erlangen)
- 17:50 A simplified 3D approach for the evaluation of the SAR and temperature distribution in magnetic nanoparticles hyperthermia E. Sieni (Padova)
- 18:10 In silico model of tumour growth and treatment with Doxorubicin and heat E. Neufeld (Zurich)
- 18:30 International Journal of Hyperthermia Editorial Board Meeting (Room A)
- 19:30 Welcome Drink (Hall of the "Centro Marani")

Thursday, June 4^{th -} Room 1

June 4th, 2009 - Room 2

SPECIAL SYMPOSIUM: UPDATE IN PSYCHO-ONCOLOGY

- 09.00 Distress, quality of life and diagnosis communication Part 1
- 11:00 Coffee break
- 11.15 Distress, quality of life and diagnosis communication Part 2

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14:00 Lunch

June 4th, 2009 - Room 2

BSD USERS MEETING:

ADVANCES IN HEAT DELIVERY AND TREATMENT PLANNING

Chair: B. Rau (Berlin)

- 14:30 SigmaHyperPlan: rationale and clinical applications **S. Eisenhardt** (Berlin)
- 14:50 Current and future product development at BSD Medical Corp. **P.F. Turner** (Salt Lake City)
- 15:10 On-line improvements of MRI therapeutic patterns during clinical heat treatments with multi-antenna arrays **P. Wust** (Berlin)
- 15:30 Quality assurance in hyperthermia **G. van Rhoon** (Rotterdam)

Selected Communications

- 15:40 Prediction of hot spots during deep hyperthermia treatments by calculation models, a patient study **R. Canters** (Rotterdam)
- 15:50 Treating primary cervical cancer patients: Sigma-60 or Sigma-Eye applicator? **D. Fatehi** (Shahrekord, Iran)
- 16:00 Nonlinear, temperature based optimization for hyperthermia treatment planning using PDE constrained interior point optimization **E. Neufeld** (Zurich)
- 16:10 Comparison between different optimization strategies using SigmaHyperPlan

 S. Pasetto (Verona)
- 16:20 Coffee Break
- 18:30 **ESHO Board Meeting**

Thursday, June 4th - Room 2

June 5th, 2009 - Room 1

BIOLOGICAL SESSION: TUMOR HYPOXIA (ROUND TABLE)

Participants: M. Dewhirst (Durham, USA), S. Osinsky (Kiev), P. Vaupel (Mainz)

- 08:00 The role of functional imaging in the assessment of prognostically important physiological parameters in clinical hyperthermia

 M. Dewhirst (Durham, USA)
- 08:20 Tumor hypoxia, hyperthermia efficacy and malignant progression **S. Osinski** (Kiev)
- 08:40 Are HIFs and HIF-dependent downstream proteins specific/valid indicators for tumor hypoxia in the clinical setting?

 P. Vaupel (Mainz)

TECHNOLOGY SESSION: NANOTHERAPY, MRI-THERMOMETRY, HIFU

Chair: J. Vrba (Prague), J. Crezee (Amsterdam)

- 09:00 Nanotherapy-induced hyperthermia in oesophageal and pancreatic cancer **B. Rau** (Berlin)
- 09:20 MRI for non invasive thermometry: the Duke's experience **Z. Vujaskovic** (Durham, USA)
- 09:40 Clinical acceptance of high intensity focused ultrasound (HIFU) where has it got to?

 G. ter Haar (London)

Selected Communications

- 10:00 3D real time MR-based thermal dosimetry for hyperthermia treatment of sarcomas at the extremities

 P. Maccarini (Durham, USA)
- 10:10 Thermotherapy using magnetic nanoparticles: status of clinical trials **A. Jordan** (Berlin)

June 5th, 2009 - Room 1

- 10:20 The physical requirement for induction heating cancer therapy using magnetic nanoparticles

 K. Yamada (Tsukuba, Japan)
- 11:00 Coffee Break

CLINICAL SESSION: PROSTATE CANCER

Chair: A. Porcaro, F. Zattoni (Verona)

- 11:30 Prostate cancer: the surgeon's point of view **F. Zattoni** (Verona)
- 11:50 Hyperthermia plus radiotherapy in prostate cancer: Atzelsberg group protocol **S. Maluta** (Verona)

Selected Communication

- 12.10 External radiation therapy in combination with local transrectal SHF hyperthermia in prostate cancer

 I. Lisitsyn (St. Petersburg)
- 12:30 Discussion
- 13:30 Lunch

June 5th, 2009 - Room 1

CLINICAL SESSION: SARCOMAS

Chair: U. Tedeschi (Verona), R. Issels (Munich)

- 14:30 A new protocol for hyperthermia combined with autologous transfer of HSP-activated NK-cells: the ATAK trial **R. Issels** (Munich)
- 14:50 Perfusional hyperthermia in limb sarcomas C.R. Rossi (Padova)
- 15:10 Regional hyperthermia in children with sarcomas **R. Wessalowski** (Düsseldorf)

Selected Communications

- 15:30 Comparison of radiological and pathohistological response to neoadjuvant chemotherapy combined with regional hyperthermia (RHT) in patients with soft tissue sarcomas (STS)

 S. Abdel-Rahman (Munich)
- 15:40 Radio-hyperthermo-chemotherapy for synovial sarcoma Y. Matsushita (Nagoya City, Japan)
- 15:50 Impact of perfusion-induced hyperthermia during hyperthermic isolated limb perfusion on tumor oxygenation and response **J. Jakob** (Heidelberg)

16:00 Coffee Break

June 5th, 2009 - Room 1

CLINICAL SESSION:

ABDOMINAL METASTASES AND PERITONEAL CARCINOMATOSIS

Chair: C. Cordiano (Verona)

16:30 Treatment of peritoneal carcinomatosis by cytoreductive surgery and intraperitoneal hyperthermic chemoperfusion (IHTC): preliminary results in 39 patients

G. de Manzoni (Verona)

Selected Communications

- 17:10 Palliative treatment of peritoneal carcinomatosis: the role of HIPEC in a single centre experience **L. Orgiano** (Cagliari)
- 17:20 The effect of hyperthermia as a modulator of intravenous or intraarterial polychemotherapy in the treatment of hepatic metastases of malignancies

 R. Aslanov (Kiev)

17:30 ESHO Assembly (Room 1)

20:00 Gala Dinner

Palazzo Verità – Poeta, vicolo San Silvestro 6, Verona Centre of Verona, near Castelvecchio

Friday, June 5th - Room 1

ORAL CONTRIBUTIONS, PHYSICS

Chair: F. Dughiero (Padova), C. Cavedon (Verona)

- 08:00 Structured ferrofluid with high total loses for application in RF-hyperthermia N. Kazantseva (Zlin, Czech Republic)
- 08:10 Numerical validation of the efficiency of double or dual-frequency radiofrequency ablation A. Candeo (Padova)
- 08:20 Fast FDTD computation using graphics card: the orientation of the Yee-cell **D. Correia** (Amsterdam)
- 08:30 TR-hyperthermia system prototype: first phantom experiment H. Dobsicek Trefna (Prague)
- 08:40 434 MHz planar applicators for local hyperthermia treatment O. Rychlik (Prague)
- 08:50 In vitro and in vivo evidences of effects of modulated RF-conducting heating **A. Szasz** (St. Istvan, Hungary)

SATELLITE SYMPOSIUM: TREATMENT OPTIONS (SURGERY, CHEMOTHERAPY, HYPERTHERMIA) IN RELAPSED **HIGH-GRADE GLIOMAS**

- Chair: J. Haveman (Amsterdam), S. Dall'Oglio (Verona)
- 09:00 Second surgery in relapsed high-grade gliomas S. Turazzi (Verona)
- 09:20 Temozolomide in relapsed high-grade gliomas A. Brandes (Bologna)
- 09:40 Hyperthermia induced radiosensitization in nervous tissue J. Haveman (Amsterdam)

June 5th 2009 - Room 2

Selected Communications

- 10:00 Liposomiated Doxorubicin (LD) and hyperthermia in glioblastoma relapsing after surgery, radiotherapy and two chemotherapy lines A. Gramaglia (Monza)
- 10:10 Increased survival in grade IV (glioblastomas) and grade III gliomas treated with Temozolomide plus conformal radiotherapy and capacitive hyperthermia A. Gramaglia (Monza)
- 10:20 **Keynote Lecture:** Use of heat shock proteins for therapeutic gain A. Asea (Temple, USA)
- 11:00 Coffee Break

SUPERFICIAL HYPERTHERMIA

Chair: L. Corti (Padova), P. Gabriele (Cagliari)

11:30 Superficial hyperthermia in pleural mesothelioma J. van der Zee (Rotterdam)

Selected Communications

- 12:00 One year experience and results with surface hyperthermia M. Ehmann (Heidelberg)
- 12:10 Hyperthermia and radiotherapy for superficial malignant melanoma (MM) metastases. An evaluation of effectiveness and toxicity
 - L. Miszczyk (Gliwice, Poland)
- 12:20 Radiohyperthermia of superficially located metastases from adenocarcinomas
 - **B. Jochymek** (Gliwice, Poland)
- 12:30 Superficial hyperthermia in multimodality treatment of advanced primary or recurrent breast cancer M. Basso (Padova)

Friday, June 5th - Room 2

June 5th, 2009 - Room 2

- 12:40 Local hyperthermia combined with external radiation in the treatment of recurrent breast cancer

 M. Rigler (Graz)
- 12:50 Superficial hyperthermia treatment specific computed tomography (CT–SCAN) for treatment planning

 M. Linthorst (Rotterdam)
- 13:00 Practical translation of specific CT–scan for superficial hyperthermia into treatment planning tool SEMCAD X **T. Drizdal** (Rotterdam)
- 13:30 Lunch

ANGIOGENESIS AND CANCER THERAPIES

Chair: M. Horsman (Aarhus, Denmark)

- 16:30 Angiogenesis and cancer therapies introduction **M. Horsman** (Aarhus, Denmark)
- 16:40 Teaching lecture: oxidative stress in angiogenesis and response to radiochemotherapy

 M. Dewhirst (Durham, USA)
- 17:10 The 25th anniversary of International Journal of Hyperthermia

 M. Dewhirst (Durham, USA)

Friday, June 5th - Room 2

June 6th, 2009 - Room 1

CLINICAL SESSION: MULTIMODALITY TREATMENT (BIOLOGIC AGENTS, INTENSITY-MODULATED RADIOTHERAPY, HYPERTHERMIA) IN LOCALLY ADVANCED HEAD AND NECK CARCINOMAS

Chair: A. Paccagnella (Venice), P. Levendag (Rotterdam)

- 08:30 EGFR-blockers (Cetuximab) in locally advanced head and neck squamous cell carcinomas A. Paccagnella (Venice)
- 08:50 Clinical opportunities of combining radiation and hyperthermia in head and neck P. Levendag (Rotterdam)
- 09:15 Hyperthermia in head and neck tumors: Rotterdam experience M. Paulides (Rotterdam)
- 09:50 **Keynote Lecture:** Network of Centres for Isolated Limb Perfusion (ILP) A.M.M. Eggermont (Rotterdam)

ESHO STUDENTS AWARD

Chair: G. van Rhoon (Rotterdam), S. Dall'Oglio (Verona)

- 10:10 The impact of the waveguide aperture size of the 3D 70 MHz AMC-8 loco-regional hyperthermia system on tumour coverage P. Kok (Amsterdam)
- 11:00 Coffee Break

June 6th, 2009 - Room 1

11.30 ESHO BSD AWARD

Chair: O. Dahl (Bergen), G. van Rhoon (Rotterdam)

- 12:30 ESHO 2010 J. van der Zee (Rotterdam)
- 12:50 Conclusions **R. Issels** (Munich)
- 13:10 Closing remarks S. Maluta (Verona)
- 13:30 CME questionnaire

Saturday, June 6th - Room 1

Saturday, June 6th

June 6th, 2009 - Room 2

ORAL CONTRIBUTIONS, BIOLOGY

Chair: M. Dewhirst (Durham, USA)

- 08.00 Particle size influences drug release properties of thermosensitive liposomes

 M. Hossann (Munich)
- 8.10 MR-characterization of mild hyperthermia induced Gadodiamide release from thermosensitive liposomes in solid tumours and muscle tissue

 M. Peller (Munich)
- 8.20 Using OXI4503 to enhance the combination of radiation and mild temperature hyperthermia

 M. Horsman (Aarhus, Denmark)
- 8.30 Thermosensitization and heat-induced apoptosis by Parthenolide, NF-κB inhibitor, in human lung cancer A549 cells **S. Hayashi** (Fukiu, Japan)
- 8.40 The ATAK trial: Autologous transfer of HSP70-activated NK cells in high-risk patients with soft tissue sarcomas responding to chemotherapy and regional hyperthermia

 V. Milani (Munich)

Please note that some sessions are not CME-valid for participants from Italy.

THE LEADER IN HYPERTHERMIA EQUIPMENT



HYPERTHERMIA



LOCAL CONTROL



ADJUVANT



CANCER



CLINICAL STUDIES



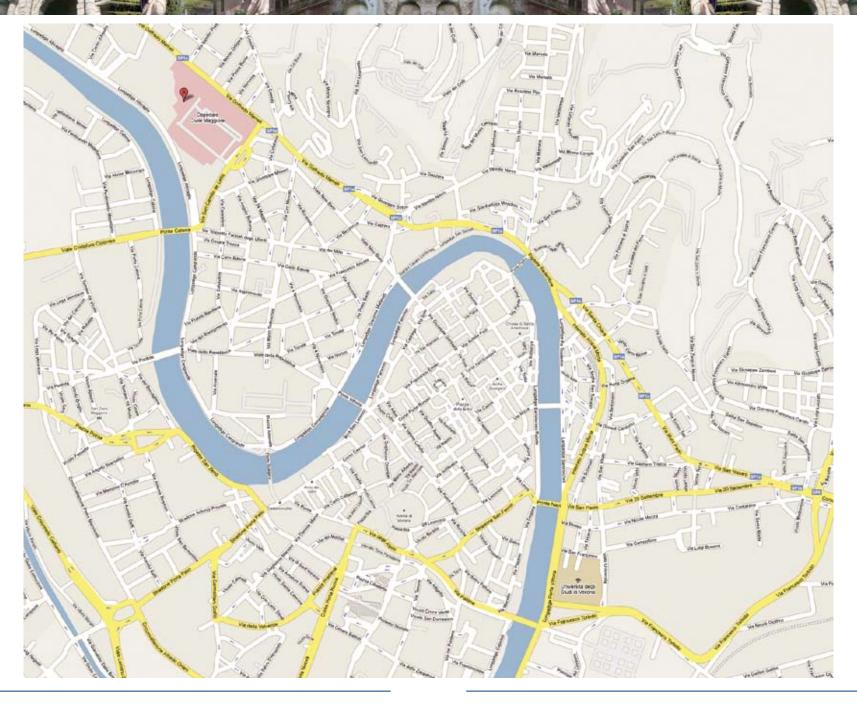
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