

Monday

Plenary

Welcome addresses

Keynote welcome speaker (tba)

Session 1: Radiobiology in therapy and space science (*Chair: Marco Durante, Gillies McKenna*)

- Invited talk: S. Ting (MIT, USA) “Active shielding for interplanetary flights” (tbc)
- Selected Abstracts

Coffee

- Invited talk: P. O'Neill (University of Oxford, UK) “Molecular basis for the relative biological effectiveness of densely ionizing radiation”
- Selected Abstracts

Session 2: Radioisotopes in diagnostics and therapy (*Chair: Jean-François Chatal, Ulli Köster*)

- Opening talk: Patrick Bourguet (EANM President) - The importance of radioisotopes for nuclear medicine (tbc)
- Invited talk: Marion de Jong (Rotterdam) - Preclinical imaging and therapy
- Selected Abstracts

Coffee

- Invited talk: Michael Zalutsky (Durham) - Targeted alpha therapy
- Selected Abstracts

Tuesday

Plenary

Session 3: Prospects in detectors and medical imaging (*Chair: Alberto Del Guerra, Wolfgang Enhardt*)

- Invited talk: S. Ziegler (Munich) - The technology of solid state detectors in Nuclear Medicine
- Selected Abstracts

10:15 Coffee

- Invited talk: O. Ratib (Geneva) - Hybrid systems in Medical Imaging: from PET/CT to PET/MR
- Selected Abstracts

Session 4: Novel Technologies in Radiation Therapy (*Chair: Ugo Amaldi, Ken Peach*)

- Invited talk: M. Pullia (CNAO) - Gantries for carbon ion therapy
- Invited talk: M. Schippers (PSI) - Novel techniques in proton therapy
- Selected Abstracts

Coffee

- Invited talk: C. Bert (GSI) - Treating moving organs with particle beams
- Selected Abstracts

Public talk by S.M. Bentzen, USA

Wednesday

Plenary

ESTRO Lecture

Chair: J. Bourhis (F)

- P. Lambin (NL) “Knowledge Engineering in Radiation Oncology: the start of a paradigm shift?”

Plenary Lectures

- J.P. Gerard (FR) “Physics meets clinics”
- W. Enghardt (D) “In-room imaging”
- D. Packer (US) “Ion treatment of Atrial Fibrillation”
- R. Baum (D) “Targeted radionuclide therapy”
- E. Malinen (FIN) “Adapting biological feedback in radiotherapy”
- M. van Herk (NL) “Improving precision in imaging and treatment”

Session 1

Session 2

Session 3

Tumour targeting and normal tissue protection

- Multimodality imaging for tumour targeting in prostate cancer K. Haustermans, B
- TBA
- TBA

Image-guided prescription and planning of RT

- Bio-IGRT. D. Zips, D
- TBA
- TBA

Long-term perspectives in Hadrontherapy

- Particle therapy - leveraging clinical performance ?
D.R. Olsen, NOR
- Translational approaches in carbon Ion radiotherapy.
J. Debus, D
- TBA

New algorithms in treatment planning and delivery	Montecarlo in treatment planning	Status and perspectives in radiology
<ul style="list-style-type: none"> Failure mode and effect analysis-based quality assurance for dynamic MLC tracking systems: Patient safety in the era of real-time radiotherapy P. Keall TBA TBA 	<ul style="list-style-type: none"> TBA TBA TBA 	<ul style="list-style-type: none"> TBA TBA TBA

Thursday

Plenary: G.H. Fletcher Lecture Chair: K.K. Ang (USA) Translating biology into high-technology radiotherapy (M. Baumann, D)		
Session 1	Session 2	Session 3
From tumor biology to functional imaging Chair: B. Wouters (CAN), M. Ozsahin (CH)	Clinical radiation research Chair: R. Miralbell (CH), P. Lambin (NL)	Mitigation/repair of radiation damage: stem cells, modifiers, interventions Chair: S. Powell (USA), R. Mirimanoff (CH)
<ul style="list-style-type: none"> Tumor microenvironmental reactions influencing response to radiotherapy. C. Rüegg, CH Remodeling and homeostasis of the extracellular matrix: implications for fibrotic diseases and cancer. J.T. Erler, UK 	<ul style="list-style-type: none"> Cancer stem cell-related biomarkers with predictive potential for radiotherapy. M. Krause, D Learning from the past – normal tissue toxicity in retrospective studies. I. Vogelius, DK Dose-fractionation sensitivity of prostate cancer. R. Miralbell, CH Open prediction of expected gain from proton therapy in individual patients based on NTCP predictive modeling: final results of ALLEGRO project. J.A. Langendijk, NL 	<ul style="list-style-type: none"> The development of salivary gland stem cell therapy for radiation-induced hyposalivation. S.A. Pringle, NL Glioma cell migration in 3D is not impaired by ionizing irradiation. N. Cordes, D Decreasing the adverse effects of cancer therapy: guidance for clinical development of radiation injury mitigators. M. Hauer-Jensen, USA
Coffee Break		
EORTC session Chair: V. Gregoire (B)	Oral Poster presentations Chair: J. Bernier (CH)	Oral Poster presentations Chair: R. Komaki (USA)
<ul style="list-style-type: none"> Opening of the session. V. Gregoire, B Current and future clinical research in radiotherapy. V. Gregoire, B Recent developments in imaging and 	<ul style="list-style-type: none"> Abstract n. 271: S. Tomatis (I) - Predicting rectal bleeding with neural networks: late effects on patients treated for prostate cancer with 3DCRT Abstract n. 281: A. Hope (CAN) - Increased acute symptoms of radiation pneumonitis with concurrent 	<ul style="list-style-type: none"> Abstract n. 34: P.T. Tran (USA) - Hedgehog pathway inhibition and radiotherapy for non-small cell lung cancer Abstract n. 332: E. Ford (USA) – Localized radiation disrupts the migration of neural progenitor cells

translational research in radiotherapy.
D. Lacombe, B

- Quality Assurance in radiotherapy: the EORTC experience.
D. Weber, CH
- Does quality of radiotherapy predict outcomes of multicenter clinical trials? The EORTC ROG experience.
A. Fairchild, B

chemoradiotherapy vs. radiotherapy alone in a murine model of fractionated sub-total thoracic IGRT

- Abstract n.286: A. Konski (USA) – Dosimetric modeling of cardiac toxicity in patients with esophageal cancer receiving radiotherapy
- Abstract n. 135: A. Staab (D) - Hyperthermia radiosensitizes hypoxic HCT-116 human colorectal carcinoma cells in vitro
- Abstract n. 137: S. Graf (D) - Robustness against the interfractional internal target movement in ion beam radiotherapy prostate treatment planning
- Abstract n. 154: A.O. Fontana (CH) - Proton versus Photon Radiotherapy: Differential Demands on the Biological Level
- Abstract n. 189: D. Abler (CH) - Meta-modelling Markov Model Simulations for cost effectiveness analyses
- Abstract n. 98: S. Ahmed (UK) - A Radiation sensitivity and DNA damage responses in glioma stem cells
- Abstract n. 199: L. Brondum (DK) - Predictive and prognostic markers in serum/plasma in head and neck cancer patients
- Abstract n. 58 : T. Meijer (NL) – Differences in metabolism between adeno- and squamous cell non-small cell lung carcinomas according to GLUT1 and MCT4 expression
- Abstract n. 46: P. Borghetti (I) - Has the

- Abstract n. 93: H. Kunogi (JP) – Prediction of radiosensitivity using phosphorylation of histone H2AX
- Abstract n. 74: M. Kriegs (D) - Inhibition of epidermal growth factor receptor enhances radiation-induced permanent G1 arrest solely in tumor cells with intact p53/p21 cell cycle regulation
- Abstract n. 121: G. Niedermann (D) - Delayed Cell Death Associated With Mitotic Catastrophe in Gamma-Irradiated Stem-like Glioma Cells
- Abstract n. 77: N. Cordes (D) – Glioma cell migration in 3D is not impaired by ionizing radiation
- Abstract n. 63: C. Toulas (F) - In vivo radiosensitizer effect of the HDAC inhibitor S78454 on orthotopic human glioblastoma.
- Abstract n. 311: U. Raju (USA) - Tumor microenvironment and integrins as effective therapeutic targets to improve radiotherapy outcome
- Abstract n. 105 : D. Viertl (CH) - A TAT-RasGAP derived peptide efficiently sensitizes cancer cells to radiotherapy, an in vitro and in vivo study
- Abstract n. 378 : T. Rieckmann (D) (CH) - HNSCC cell lines positive for HPV and p16 possess an exceptionally high radiosensitivity

quality of vessels a value in the treatment of Glioblastoma Multiforme? A study on the role of GLUT1 in neoangiogenesis.

- Abstract n. 109: L. Koi (D) - Tumour microenvironment and intratumoural distribution of therapeutic antibodies
- Abstract n. 152: N. Cordes (D) – Cetuximab is an efficient carrier of radionuclides to target EGFR-expressing tumor cells
- Abstract n. 100: W. Kam (AUS) – The response of messenger RNA to ionizing radiation – mitochondrial genes are more susceptible
- Abstract n. 28: F. Meyer (CAN) – Genetic sequence variants in relation to acute and late toxicities in patients with head and neck cancer treated with radiation therapy

Lunch

Plenary: G. Adams Lecture

Translating chemical concepts into clinical treatments: Not a quick fix.

I. Stratford, UK

Targeting signaling pathways *Chair: D. Zips (D), E. Deutsch (F)*

- Modulation of Chk1 signalling during radiation therapy.
K. Harrington, UK
- Epigenetic regulation by HRR by microvascular dysfunction determines tumor cure by SDRT.
Z. Fuks, USA

Biological and physical optimization of treatment plans *Chair: S.M. Bentzen (USA), T. Collen (CH)*

- A systems biology approach to radiation therapy optimization.
A. Brahme, SW (*tbc*)
- Automation in beam modeling and quality control.
D.A. Jaffray, CAN
- Better IMRT: First clinical experience with

Normal tissues *Chair: J. Overgaard (DK), H-P. Rodemann (D)*

- Cardiovascular mediated damage after irradiation.
F.A. Stewart, NL
- Latest progresses on modulation of heart radiation side effects.
M.C. Vozenin, F
- Lung toxicity: where to go from here?

<ul style="list-style-type: none"> • Mechanisms of EGFR inhibitors. Peter Rodemann, D • Regulation of paracrine signaling by microtubule stabilizing agents and ionizing radiation M. Pruschy, CH 	<ul style="list-style-type: none"> • multi-criteria optimization. T. Bortfeld, USA • Dose correction strategy for the optimization of volumetric modulated arc therapy. G. Mageras, USA 	<ul style="list-style-type: none"> • S.L. Tucker, USA • Scarce resources for nuclear detonation: project overview and challenges. C.N. Coleman, USA
Coffee		
Proffered papers: Physics (I) Chair: S. Bulling (CH)	Proffered papers: Biology (I) Chair: J. Cox (USA)	Proffered papers: Clinics (I) Chair: J. Bernier (CH)
<ul style="list-style-type: none"> • Abstract n. 103: F. Fiedler (D) - Techniques for image based in-vivo dosimetry: from particle therapy PET to in-beam prompt gamma imaging • Abstract n. 19: S. Devic (CAN) - FDG-based Uptake Volume Histograms: Avenue towards Biological Target Volumes • Abstract n. 240: E. Rusten (NO) - Spatial correlations between images derived from dynamic FDG-PET • Abstract n. 22: C. Halle (NO) - Visualizing an aggressive hypoxia phenotype of cervical cancer using DCE-MR imaging • Abstract n. 55: T. Roland (USA) - Real time Image Guided Radiotherapy for Pancreatic Tumors - The Concept of Dual Modality Monitoring Using kV-CBCT and Robot Assisted Ultrasound Imaging • Abstract n. 65: J. Wong (USA) – Integrated on-board X-Ray and bioluminescence tomography to guide focal irradiation of soft tissue targets in small animals • Abstract n. 119: S. Broggi (I) – Quantitative parameters of parotid deformation during IMRT for ... 	<ul style="list-style-type: none"> • Abstract n. 316: K. Mizuno (JAP) - SRXRF analysis on the accumulation of DACHPt-loaded polymeric micelles in tumor before and after irradiation • Abstract n. 184: M. Lando (NO) - Loss of chromosome 3P leads to downregulation of RYBP, TMF1, and PSMD6 and poor outcome after chemoradiotherapy of cervical cancer 16:20 Abstract n. 80: T.E. Schmid (D) - Serum Hsp70 - a soluble, tumor-specific marker in xenograft tumor mouse models • Abstract n. 7: A. Sharma (USA) - Chemotherapeutic activity of s-nitrosoglutathione alone and in combination with cisplatin and radiation in head and neck cancer cells and mouse xenograft model • Abstract n. 43: M. Toulany (D) - Y-box binding protein-1 phosphorylation induced by ionizing radiation depends on EGFR kinase activity and K-RAS status • Abstract n. 53: P. Pedicini (I) - Combination of radiation and monoclonal antibody EGFR inhibitors in the Head and Neck tumors • Abstract n. 61: H. Stegeman (NL) - Effects of EGFR-inhibition and radiotherapy on 	<ul style="list-style-type: none"> • Abstract n. 186: V. Carillo (I) – Correlating surrogates for bladder dosimetry with the dose-volume histogram of bladder wall defined on T2W-MRI imaging • Abstract n. 264: M. Thor (DK) - M. Lando (NO) - Bladder dose accumulation in prostate IMRT based on a biomechanical deformable image registration algorithm • Abstract n. 242: A. Erlend (NO) - Imaging parameters derived from dynamic contrast enhanced MRI of cervical cancers predict chemoradiotherapy outcome • Abstract n. 280: Herrera F (CH) - Simultaneous Integrated Boost in Cervix Cancer: Too Much Uncertainty • Abstract n. 193: K. Snipstad (NO) – repression of membranous moesin leads to evasion of the immune response and chemoradioresistance in cervical cancer • Abstract n. 266: R. Madan (IND) – Comparison of conventional point A based treatment planning with 3D CT based treatment planning in carcinoma of the cervix • Abstract n. 267: T. Vuong (CAN) - Impact of timing of chemotherapy in the treatment of

- Abstract n. 110: F. Lakosi (B) - Comparison of respiration-related surgical clip and chest wall movement between prone and supine position in the adjuvant radiotherapy of breast cancer
 - Abstract n. 15 A. Vakili (IRAN) - Evaluation of radiolabeling monoclonal anti-EGFR antibody (Cetuximab) with Samarium-153, Yttrium-90 and copper-64 for radioimmunotherapy
 - Abstract n. 33: N. Tomic (CAN) - Linearization of the radiochromic film dosimetry system dose response
- hypoxia, proliferation and tumor growth delay in human tumor xenografts
- Abstract n. 287: E. Sulman (USA) - Combining Molecular and Clinical Factors to Predict Survival of Patients with Glioblastoma and Validation using RTOG 0525
 - Abstract n. 99: T. Dasgupta (USA) - BRAF V600E inhibitor PLX4720 enhances the effect of RT in vivo and in vitro in Pediatric High Grade Gliomas Expressing the BRAFV600E mutation
 - Abstract n. 125: J. Doyen (FR) - Prognostic value of chromosomal imbalances and the colon gene expression signatures in rectal cancer
- patients with operable rectal cancer: Preliminary results from a randomized phase II study
- Abstract n. 178: P. Martinive (B) - Tailoring the timing of surgery based on the neoadjuvant radiotherapy schedule for decreasing tumor dissemination at the time of surgical procedure.
 - Abstract n. 145: T. Rancati (I) - Rectal toxicity 6 years after high-dose radiation for prostate cancer: clinical and dosimetric predictors
 - Abstract n. 35: M. Nagarajan (IND) - Resource Sparing Short Course Radiation Vs Long Course Radiation to Palliate Esophageal Cancer after Brachytherapy: A Report of Randomized Trial IAEA E33027

Friday

Session 1	Session 2	Session 3
Proffered papers (winning posters)	Proffered papers	Proffered papers
<ul style="list-style-type: none"> Winning poster from <ul style="list-style-type: none"> Radiobiology in Therapy and Space Science Radioisotopes in Diagnostics and Therapy Prospects in Detectors and Medical Imaging Novel Technologies in Radiation Therapy ICTR 	TBA	TBA
Towards customized treatments: the head-and-neck cancer example Chair: M. Baumann (D), J.C. Horiot (CH)	Molecular biology and predictive markers Chair: K. Haustermans (B), D. Aebersold (CH)	Hadrontherapy Chair: D.R. Olsen (NOR), D. Weber (CH)
<ul style="list-style-type: none"> New insights in DNA repair targeting and radiotherapy in head and neck cancer. D. Raben Diffusion-weighted MRI for early tumour response assessment during treatment. V. Vandecaveye, B Hypoxic modification of radiotherapy: old challenges, new solutions? J. Overgaard, DK Chemoradiation versus induction chemotherapy in locally advanced head-and-neck carcinomas. J. Bourhis, F 	<ul style="list-style-type: none"> Candidate SNP vs genome-wide association scan of late radiotherapy toxicity: the RAPPER study. G. Barnett, UK Molecular biology of radiation effects in normal tissues. W. Dörr, D Molecular imaging as a biomarker. R. Jeraj, USA Tumor hypoxia assays – ready for clinical use? M. Nordsmark, DK 	<ul style="list-style-type: none"> The imperative to transition from passively scattered to scanned proton beam delivery. T.F. Delaney, USA Dose falloff in proton craniospinal irradiation: where and why? P.A.S. Johnstone, USA Innovative and efficient dose calculation strategies for intensity modulated and passively scattered proton therapy. R. Mohan, USA Toxicity and Patterns of Failure of Adaptive Proton Therapy. J.D. Cox, USA

Coffee		
Repair mechanisms <i>Chair: M. Hauer-Jensen (USA), A. Allal (CH)</i>	Functional imaging	Radiosensitivity modulation <i>Chair: M. Verheij (NL), M. Pruschy (CH)</i>
<ul style="list-style-type: none"> DNA repair targeting and radiotherapy. A focus on the therapeutic ratio. R.G. Bristow, USA Enhancing radiotherapy through a greater understanding of homologous recombination. S.N. Powell, USA Effect of epidermal growth factor receptor on double-strand break repair. E. Dikomey, D Targeting hypoxic cells through the DNA damage response. E. Hammond, UK 	<ul style="list-style-type: none"> Molecular imaging in planning head-and-neck cancer treatments. V. Grégoire, B The role of adaptive and functional imaging modalities. D. Brizel, USA 	<ul style="list-style-type: none"> Influence of circulating normal cells on tumor radiosensitivity. J.M. Brown, USA Targeting DNA repair as a sensitization strategy in radiotherapy. C. Vens, NL (<i>tbc</i>) Impact of epithelial-to-mesenchymal transition on tumor response to radiation and targeted agents. R. Meyn, USA Overcoming resistance of glioblastoma to conventional cytotoxic therapies by the addition of PARP inhibitors. A.J. Chalmers, UK
Lunch		
Tumor hypoxia and tumor metabolism <i>Chair: C. Vrieling (CH)</i>	Finding the target, restoring the vision. <i>Chair: J.M. Brown (USA), A. Chalmers (UK)</i>	Improving precision in treatment planning and delivery <i>Chair: M. van Herk (NL)</i>
<ul style="list-style-type: none"> Novel mechanisms of gene regulation by hypoxia. B. Wouters, CAN Hypoxia in lung cancer models: implications for targeted therapeutics. A.J. Giaccia, USA (<i>tbc</i>) Novel biological agents that inhibit angiogenesis by a CD44-dependent mechanism. T. Robson, IRL 	<ul style="list-style-type: none"> Angiogenic inhibitors and radiotherapy. E. Cohen-Jonathan Moyal, F Apoptosis-modulating strategies to enhance radiation efficacy. M. Verheij, NL Hypoxia inhibits disulfide bond formation and protein folding in the endoplasmic reticulum. M. Koritzinsky, CAN 	<ul style="list-style-type: none"> Improving the precision of dose delivery in the clinic. J.J.Sonke, NL Biology-guided adaptive radiation therapy: present and future. C. Grau, DK Stereotactic Radiation Therapy for Hepatocellular Carcinoma. L. Dawson, CA Dose painting using volumetric modulated

arc optimization and delivery.
S. Korreman

Proffered papers: Physics (II) Chair: S.M. Bentzen (USA)	Proffered papers: Biology (II) Chair: M. Nordmark (DK)	Proffered papers: Clinics (II) Chair: J.C. Horiot (CH)
<ul style="list-style-type: none"> • Abstract n. 314: Brock K. (USA) - Generation of a Multi-Modality Anatomical Atlas of Preclinical Animal Models • Abstract n. 126: B. Reniers (NL) - In-vivo dosimetry for gynaecological brachytherapy using a novel detector system • Abstract n. 225: M. Casiraghi (CH) - A simulation and experimental based comparison of plan robustness for VMAT and IMPT treatments. • Abstract n. 333: I. Madani (B) – Volume changes by exploiting continuous adaptive radiotherapy for head and neck cancer • Abstract n. 36: M. Fix (CH) – Towards proton treatment planning using macro Monte Carlo • Abstract n. 322: T. Lomax (CH) - Intensity Modulated 'Grid' Proton Therapy. Trying to exploit 'spatial fractionation' with protons. • Abstract n. 41: D. Nichiporov (USA) – Potential applications of a gas electron multiplier-based detector to small field dosimetry and imaging in proton therapy • Abstract n. 25: B. Jones (UK) - Physical Dose Distribution and Relative Biological Effect (RBE) Issues in Proton Beam Therapy of Medulloblastoma • Abstract n. 173: A. Rucinski (D) - Target Volume Optimization for Prostate Cancer Treatment in Carbon Ion Radiation Therapy 	<ul style="list-style-type: none"> • Abstract n. 70: M. Horsman (DK) – Constitutive and induced hypoxia in tumours and their role in the interaction between vascular disrupting agents and radiation • Abstract n. 76: A. Broggini-Tenzer (CH) - Dynamic Changes of the Tumor Micromilieu under Treatment • Abstract n. 198: A. Deviers (F) – Lactate detection with magnetic resonance spectroscopic imaging (MRSI) in glioblastoma multiforme before radiotherapy (RT): Characterization of hypoxia distribution and its impact on tumor response to • Abstract n. 233: C. Bayer (D) - The influence of the heat shock protein 90 (Hsp90) inhibitor, NVP-AUY922, and hypoxia on the expression of and HIF-1? and HIF-2? in two head and neck cancer cell lines • Abstract n. 128: K. Toustrup (DK) – Hypoxic modification of radiotherapy with nimorazole in Head and neck squamous cell carcinomas: importance of combined hypoxia and HPV classification when distinguishing responders from non-responders • Abstract n. 44: M. Nijkamp (NL) – Involvement of the epidermal growth factor receptor in laryngeal cancer patients treated with hypoxia modification as an additive to accelerated radiotherapy 	<ul style="list-style-type: none"> • Abstract n. 140: A. Fairchild (B) - Does Quality of Radiotherapy Predict Outcomes of Multicentre Cooperative Group Trials? A Literature Review • Abstract n. 49: R. Komaki (USA) - Phase II study erlotinib/RT and CHT/RT followed by consolidation of CHT for patients with stage III Non-small cell lung cancer (NSCLC): analysis of patients specimens for biomarkers • Abstract n. 81: D. Guest (UK) - Mathematical Modelling of a Radiobiologically Optimised Fractionation Schedule for a Heterogeneously Differentiated Cell Model of Glioblastoma • Abstract n. 209: A. Laprie (F) - MR Spectroscopy imaging (MRSI) for glioblastoma dose painting with intensity modulated radiation therapy comprising simultaneous integrated boost on specific targets • Abstract n. 90: J. Zeng (USA) – Combining anti-PD-1 immunotherapy with stereotactic radiosurgery in a mouse orthotopic glioblastoma model • Abstract n. 263: U.V. Elstrom (DK) - A direct comparison of cone-beam CT versus CT based radiotherapy planning in head and neck cancer • Abstract n. 147: K. Roe (NO) - DCEMRI in assessment of tumor neovascularization after androgen-deprivation in experimental

in the Presence of Interfractional Motion

- Abstract n. 195: H.B. Ragnum (NO) - Androgen deprivation therapy prior to irradiation of prostate cancer: Expression of hypoxia-induced proteins and changes in diffusion weighted MRI parameters
- Abstract n. 14: S. Rademakers (NL) – Predictive value of CAIX expression and staining pattern in patients with laryngeal cancer treated in the phase III randomized ARCON trial
- Abstract n. 18: S. Masunaga (JP) – Impact of employing 10B- carriers and manipulating intratumor hypoxia on local tumor response and lung metastatic potential in boron neutron capture therapy
- Abstract n. 326: F. Paris (F) – Specific protection of gastro-intestinal side effect, but not aggressive tumors by injection of exogenous sphingosine 1 phosphate

prostate cancer: correlation to quantitative immunohistochemistry

- Abstract n. 291: J. Hammer (A) - Breast Cancer: Persisting risks in pre-menopausal women after breast conserving surgery, radiotherapy, +/- systemic therapies
- Abstract n. 290: M. Carrara (I) - Predicting late faecal incontinence after high-dose radiotherapy for prostate cancer: application of artificial neural network classification on a longitudinal definition

European School of Oncology

Plenary Session

Chair: A. Costa (I)

- Hypofractionation in breast cancer irradiation.
S.M. Bentzen, USA
- Intra-operative radiotherapy of early breast cancer.
R. Orecchia, I

E. van der Schueren Award (MD Anderson Cancer Center, Houston)

Chair: A. Costa (I)

- Biomarkers in Head and Neck Carcinoma.
K.K. Ang, USA

Closing session (M. Dosanjh and J. Bernier)

