# 2nd Central European Symposium on Radiation Oncology Technological and Biological Sunrise for Radiation Oncology

May 8 - 9th, 2015, Poland, Kraków

# Programme

## 8th May 2015 (Friday)

8:00 - 8:30 Installation of posters, registration

8:30 - 8:35 Opening of the Symposium

M. Jeżabek (IFJ PAN, Poland)

J. Jakubowicz (Institute of Oncology, Kraków, Poland)

M. Reinfuss (Institute of Oncology, Kraków, Poland)

#### 8:35 - 10:35 Session 1 - New Concepts and Technologies

Repair of charged-particle induced DNA double-strand breaks in mammalian cells

D. Chen (UT Southwestern Medical Center, USA)

#### Translational research in particle therapy

M. Durante (GSI Helmholtz Centre for Heavy Ion Research, Darmstadt,

#### NCI Support for Particle Therapy

J. Capala (National Cancer Institute, USA)

#### Time factor in radiotherapy

B. Maciejewski (Institute of Oncology, Gliwice, Poland)

#### Can biomarkers modify clinical practice of radiation therapy?

K. Składowski (Institute of Oncology, Gliwice, Poland)

HPV-related oropharyngeal cancer - opportunity for less aggressive treatment?

A. Kawecki (Institute of Oncology, Warsaw, Poland)

10:35 - 11:00 Coffee break

# 11:00 - 13:00 Session 2 - Proton and Ion Therapy

Utilizing proton biological effect variations in intensity-modulated proton therapy

H. Paganetti (Harvard Medical School, USA)

Protons and light ions radiotherapy: breakthrough or Emperor's new clothes? J. L. Habrand (Centre François Baclesse, France)

Indications for proton therapy in Poland: Consensus Report of National Consultant for Radiation Oncology

R. Dziadziuszko (Medical University of Gdańsk, Poland)

Results of proton beam therapy in uveal melanoma

B. Romanowska-Dixon (University Hospital of Kraków, Poland)

More than "gold standard" of proton radiotherapy - fail or hope?

B. Sas-Korczyńska (Institute of Oncology, Kraków, Poland)

Proton therapy and research at the Bronowice Cyclotron Centre IFJ PAN P. Olko (IFJ PAN, Poland)

13:00 - 14:00 Lunch

# 14:00 - 16:15 Session 3 - Prognostic and Predictive Markers for Radiotherapy

Radiogenomics to predict risk of radiotherapy toxicity

C. West (Christie Hospital NHS Foundation Trust, UK)

The Continuing Development of Predictive Assays in Radiotherapy G. Wilson (Beaumont Hospital, USA)

The importance of the tumor microenvironment for radiotherapy J. Bussink (Radboud University, The Netherlands)

Exosomes – potential vehicle for communication between irradiated cells P. Widłak (Institute of Oncology, Gliwice, Poland)

Prognostic significance of clinical and biological tumour features in rectal cancer patients receiving short-course preoperative radiotherapy

A. Gasińska (Institute of Oncology, Kraków, Poland) Changes in expression of selected markers between primary breast cancer and its synchronous lymph node metastases

J. Niemiec (Institute of Oncology, Kraków, Poland)

16:15 - 16:45 Coffee break

## 16:45 - 18:15 Session 4 - New Concepts and Technologies

Radiomics: extracting more clinical and biological information from standard imaging

P. Lambin (Universiteit Maastricht, The Netherlands)

Late side effects after the second irradiation of children

R. Mayer (EBG MedAustron, Austria)

Protons or photons in radiation therapy for the prostate cancer J. Fijuth (Regional Cancer Center, Łódź, Poland)

Split-course accelerated, hyperfractionated irradiation (CHA-CHA) for advanced head and neck cancer patients -results of clinical trial

L. Miszczyk (Institute of Oncology, Gliwice, Poland)

20:00 - Conference dinner

#### 9th May 2015 (Saturday)

8:30 - 10:30 Session 5 - Medical Physics and Information Technology Future Plan of a Heavy Ion Radiation Therapy and Research Facility in Dallas, Texas

A. Pompos (UT Southwestern Medical Center, USA)

Advantages of scanning beam for proton radiotherapy

H. Nystrom (The Skandion Clinic, Sweden)

Undesired doses outside the treatment field in conventional and proton  $% \left\{ \left( 1\right) \right\} =\left\{ \left( 1\right) \right$ radiotherapy

L. Stolarczyk (IFJ PAN, Poland)

Towards the first patient. From acceptance tests to commissioning of a PBS dedicated gantry

T. Kajdrowicz (IFJ PAN, Poland)

A new optical positioning and tracking system for radiation therapy P. Kukołowicz (Institute of Oncology, Warsaw, Poland)

Challenges in the development of an ocular proton radiotherapy facility J. Swakoń (IFJ PAN, Poland)

10:30 - 11:00 Coffee break

#### 11:00 - 14:00 Session 6 - Radiotherapy in Combined Treatment Modalities Radiosurgery for functional disorder, state of art.

M. Marchetti (Istituto Neurologico Carlo Besta, Italy)

Is concurrent chemoradiotherapy the gold standard to-day for stage III

P. van Houtte (University of Brussels, Belgium)

miRNA as potential biomarkers of therapeutic response in head and neck

M. Story (UT Southwestern Medical Center, USA)

Neurocognitive Aspects on Craniospinal Irradiation with Protons in **Pediatric Patients** 

T. Björk-Eriksson (Sahlgrenska University Hospital, Sweden)

Two years of experiences with pencil beam scanning in Prague J. Kubeš (Proton Therapy Centre Prague)

Clinical and biological rationale for hyperfractionated preoperative radiotherapy in rectal cancer

R. Suwiński (Institute of Oncology, Gliwice, Poland)

Automatic glioblastoma detection for radiotherapy planning using Gaussian mixture model based segmentation of the MRI apparent diffusion coefficient maps

R. Tarnawski (Institute of Oncology, Gliwice, Poland)

Chordomas - old challenges, new opportunities

A. Napieralska (Institute of Oncology, Gliwice, Poland)

Combined local treatment in adults with intraocular tumours

A. Markiewicz (University Hospital of Kraków, Poland)

14:00 - 15:00 Lunch

15:00 - 16:00 Visit to the proton therapy centre















