

Wednesday June 10, 2015

- 13:00-13:15 **Opening session**
Cai Grau, Aarhus: Welcome to BiGART2015 and Aarhus. Practical information.
- 13:15-14:25 **Session 1: Radiobiology of human tumors: guidance for therapy**
Chairs: Michael Horsman and Marianne Nordsmark
- Keynote lecture*
- 13:15-13:35 **Jan Bussink, Nijmegen:** The tumor microenvironment in head and neck cancer: radiotherapy and EGFR
- Proffered papers*
- 13:35-13:45 **Christina Sæten Fjeldbo, Oslo:** Construction of a prognostic hypoxia gene classifier in cervical cancer that is reflected in dynamic contrast-enhanced (DCE) MR images
- 13:45-13:55 **Brita Singers Sørensen, Aarhus:** Relative biological effectiveness for tumor control and acute skin damage in a mouse model
- 13:55-14:05 **Ghazaleh Ghobadi, Amsterdam:** Histopathology-derived modeling of prostate cancer tumor control probability: implications for the dose to the tumor and the gland
- 14:05-14:15 **Thomas Wittenborn, Aarhus:** Targeting the microenvironment and vasculature of tumours to improve response to radiation administered using a dose and schedule equivalent to that for a stereotactic treatment: the effect of hypoxic modifiers
- 14:15-14:25 **Gregers Rasmussen, Copenhagen:** Association between immunohistochemical and imaging biomarkers in head and neck squamous cell carcinomas
- 14:25-14:55 **Coffee break and poster viewing**
- 14:55-17:00 **Session 2: Late normal tissue effects**
Chairs: Joe Deasy and Jan Alsner
- Keynote lectures*
- 14:55-15:15 **Klaus R. Trott, München:** Radiation-induced secondary cancers
- 15:15-15:30 **Nicolaj Andreassen, Aarhus:** Recent activities and future plans of the International Radiogenomics Consortium (RGC)
- 15:30-15:40 **Michael Baumann, Dresden:** European radiotherapy treatment plan database
- 15:40-15:50 Discussion

	<i>Proffered papers</i>
15:50-16:00	Azza Khalil, Aarhus: New dose constraint reduces radiation-induced pneumonitis in locally advanced NSCLC treated with Intensity-Modulated Radiotherapy
16:00-16:10	Marciana N. Duma, München: Tangential field radiotherapy for breast cancer: the dose to the heart and heart subvolumes
16:10-16:20	Laura Tuomikoski, Helsinki: Post-RT saliva production can be predicted by measuring pre-RT salivary function and mean glandular doses
16:20-16:30	Line Schack, Aarhus: SNP analysis on late radiation induced toxicity analyzed by questionnaires and anal physiological methods in prostate cancer patients.
16:30-16:40	Camilla Stokkevåg, Bergen: Risk of radiation-induced secondary rectal and bladder cancer following radiotherapy of prostate cancer
16:40-16:50	Laura Rechner, Copenhagen: Risk-optimized proton therapy treatment planning to minimize second cancers after radiotherapy of the prostate
16:50-17:00	Britta Weber, Aarhus: Long-term outcomes and toxicity after proton beam radiotherapy of large non-peripapillary choroidal melanoma
17:15	Bus departure for New Moesgaard Museum
17:30	Welcome reception – New Moesgaard Museum
19:45	Busses return to Hotel Marselis
20:30	Dinner at Hotel Marselis

Thursday June 11, 2015

8:00-10:00	Session 3: Recent developments in functional imaging Chairs: Eirik Malinen and Stine Korreman
	<i>Keynote lectures</i>
8:00-8:20	Uulke van der Heide, Amsterdam: Recent developments in quantitative imaging for radiotherapy.
8:20-8:40	Karin Haustermans, Leuven: The role of functional imaging and molecular markers for organ-preserving strategies after chemo-radiotherapy for rectal cancer
	<i>Proffered papers</i>
8:40-8:50	Niels Raaijmakers, Utrecht: Validation is crucial in head and neck translational imaging research
8:50-9:00	Haley Clark, Vancouver: Preliminary findings using dynamic contrast-enhanced magnetic resonance imaging to identify functional aspects within the parotid
9:00-9:10	Catharina Zegers, Maastricht: Imaging of tumor hypoxia and metabolism in patients with head and neck squamous cell carcinoma
9:10-9:20	Ane Iversen, Aarhus: Metabolic imaging: the potential of [1- ¹³ C]lactate/[1- ¹³ C]pyruvate ratio to be a surrogate marker for hypoxia in hyperpolarized magnetic resonance spectroscopy

9:20-9:30	Joachim Chan, Wirral: Dose painting radiotherapy for high risk prostate cancer: delayed 18F-choline PET/CT imaging before neo-adjuvant hormone therapy improves detection rates
9:30-9:40	Endre Grøvik, Oslo: Feasibility of multi-echo dynamic MRI for simultaneous acquisition of T1-weighted and R2* contrast kinetics in rectal cancer
9:40-9:50	Katherina Farr, Aarhus: Perfusion SPECT imaging and radiation-induced injury in the lung after curative radiotherapy for NSCLC
9:50-10:00	Søren Møller, Copenhagen: Early changes in perfusion of glioblastoma during radio- and chemotherapy evaluated by T1*-dynamic contrast enhanced MRI
10:00-10:30	Coffee break and poster viewing
10:30-12:40	Session 4: Clinical results – hypoxia, dose painting and adaptive radiotherapy Chairs: Vincenzo Valentini and Jacob Lindegaard
	<i>Keynote lectures</i>
10:30-10:50	Daniel Zips, Tübingen: Hypoxia dose painting in head and neck cancer
10:50-11:10	Peter Hoskin, London: Hypoxia dose painting in prostate and cervix cancer
11:10-11:30	Ivan Vogelius, Copenhagen: FDG PET based dose painting in head and neck cancer
	<i>Proffered papers</i>
11:30-11:40	Marie Tvillum Petersen, Aarhus: The clinical implication of introducing adaptive radiotherapy in the treatment of lung cancer patients
11:40-11:50	Patrick Berkovic, Ghent: Adaptive radiotherapy for locally-advanced non-small cell lung cancer, can we predict when and for whom?
11:50-12:00	Anne Vestergaard, Aarhus: Acute gastro-intestinal morbidity in a Phase II trial of online adaptive radiotherapy for urinary bladder cancer.
12:00-12:10	Ralph Leijenaar, Maastricht: Early prediction of pathological response in rectal cancer patients using “PET Radiomics” with independent validation
12:10-12:20	Marianne Assenholt, Aarhus: Application of coverage probability treatment planning for lymph node boosting in locally advanced cervical cancer
12:20-12:30	Sara Thörnqvist, Bergen: Adaptive radiotherapy strategies for pelvic tumours – a review of clinical implementations
12:30-12:40	Hella Sand, Aalborg: Correlation between pretreatment FDG-PET biological target volume and location of T-site failure after definitive radiation therapy for head and neck cancers
12:40-13:40	Lunch break
13:40-14:50	Session 5: Novel concepts in design of clinical trials in radiotherapy Chairs: Philippe Maingon and Kari Tanderup

	<i>Keynote lectures</i>
13:40-14:00	Philippe Lambin, Maastricht: Novel concepts of clinical research in radiation oncology: from clinical trials to rapid learning health care
14:00-14:20	Joe Deasy, New York: Data driven radiobiological modeling of tumor control probability
	<i>Proffered papers</i>
14:20-14:30	Armin Lühr, Dresden: Individual benefit for advanced head and neck cancer patients in terms of NTCP differences from intensity-modulated proton therapy for complete or sequential boost treatment versus intensity-modulated photon therapy
14:30-14:40	Morten Høyer, Aarhus: Radiation dose to the gastro-intestinal tract and patient-reported symptom domains after prostate cancer radiotherapy
14:40-14:50	Timo Deist, Maastricht: Clinical routine data as a viable source for radiation-induced lung toxicity prediction models
14:50-15:20	Coffee break and poster viewing
15:20-16:30	Session 6: How to establish clinical evidence in particle therapy? Chair: Phillippe Lambin and Morten Høyer
	<i>Keynote lecture</i>
	Michael Baumann, Dresden: Particle therapy, networks and infrastructure
	<i>Presentation by panelists (5 min each)</i>
	Philippe Maingon, Lyon
	Richard Pötter, Vienna
	Thomas Björk-Eriksen, Uppsala
	Jean-Philippe Pignol, Rotterdam
	Cai Grau, Aarhus
	Discussion
16:30-18:00	Poster viewing, including poster discussion groups. Refreshments.
18:00-19:30	Sculpture by the Sea (on your own)
19:30	Conference dinner (Varna Mansion, next to Hotel Marselis)

Friday June 12, 2015

8:00-10:00	Session 7: Image-guidance for adaptive radiotherapy and proton therapy Chairs: Jan-Jakob Sonke and Ludvig Muren
	<i>Keynote lectures</i>
8:00-8:20	Jan Lagendijk, Utrecht: The MR linac system and its impact on the radiotherapy process
8:20-8:40	Parag Parikh, St. Louis: Online adaptive radiation therapy in the abdomen: The challenge of bowel
8:40-9:00	Joao Seco, Boston: Image-guidance for adaptive proton therapy
9:00-9:20	Marta Peroni, Villigen: The adaptive challenge in proton therapy
	<i>Proffered papers</i>
9:20-9:30	Christopher Kurz, Munich: Comparing strategies for CBCT-based dose recalculation to foster adaptive IMRT and IMPT of head and neck cancer patients
9:30-9:40	Lucas Persoon, Maastricht: Is integrated transit planar EPID dosimetry able to detect geometric changes in lung cancer patients treated with volumetric modulated arc therapy (VMAT)
9:40-9:50	Andreas Gravgaard Andersen, Aarhus: A method to evaluate the robustness of single beam proton plans for pelvic lymph node irradiation with respect to inter-fractional motion
9:50-10:00	Per Poulsen, Aarhus: Calculation of interplay effects caused by liver tumor motion during scanning proton therapy in a commercial treatment planning system
10:00-10:20	Coffee break (please remember to take down your poster)
10:20-11:50	Session 8: Radiotherapy in Europe 2020 Chairs: Michael Bauman and Jens Overgaard
10:20-10:30	Jens Overgaard, Aarhus: Introduction
	<i>Keynote lectures</i>
10:30-10:50	Josep M Borras, Barcelona: The need for radiotherapy in Europe 2020: Not only data but also a cancer plan
10:50-11:10	Christoffer Johansen, Copenhagen: Patient-reported outcome measures
11:10-11:30	Vincenzo Valentini, Rome: Can automation reduce costs?
11:30-11:50	Yolande Lievens, Ghent: Cost calculation: a necessary step on the winding road towards widespread adoption of advanced radiotherapy technology
	Discussion
11:50-12:00	Ludvig Muren: Closing of the meeting