DCCC Radiotherapy

DCCC Radiotherapy Annual meeting November 22-23, 2022

Conference center 'Severin', Skovsvinget 25, 5500 Middelfart

Programme

Tuesday, November 22

09:00-09:30 **Arrival and coffee**

09:30-09:45 **Welcome and news from the center management – Cai, Jesper and Stine**

09:45-10:30 **Flash talks – moderated by Jimmi Søndergaard & Christian Rønn**

1. Anders Tobias Frederiksen, Danish Centre for Particle Therapy: **Water tank phantom for proton in vitro studies: A proof of concept**
2. Folefac Charlemagne Asonganyi, Dept. of Experimental Clinical Oncology, Aarhus: **The rationale for using heat to enhance stereotactic radiation**
3. Morten Horsholt Kristensen, Dept. of Experimental Clinical Oncology, Aarhus: **Radioresistance in HNSCC – association with cancer stem cell markers, tumor volume and HPV/p16**
4. Priyanshu Sinha, Dept. of Experimental Clinical Oncology, Aarhus: **Combining Conventional therapies to enhance checkpoint inhibition: Testing the role of tumor size using in vivo model**
5. Anne Wilhøft Kristensen, Danish Centre for Particle Therapy: **Barriers affecting participation in a randomized trial comparing radiotherapy with photons and protons among Danish patients with head and neck cancer**
6. Stine Rauff Søndergaard, Dept. of Oncology, Vejle: **Clinicians and Shared decision making: a qualitative study on clinicians' experiences with the Decision Helper in a multi-center randomized trial**
7. Christina Truelsen, Dept. of Experimental Clinical Oncology, Aarhus: **Quality of life by Patient Reported Outcomes in patients with locally advanced rectal cancer receiving modern neoadjuvant radiotherapy**

10:30-10:50 **Coffee**

10:50-12:00 **Flash talks – moderated by Morten Høyer & Carsten Brink**

1. Dennis Tideman Arp, Dept. of Medical Physics, Oncology and Dept. of Clinical Medicine, Aalborg: **Intrapatient tumor position variation for rectal cancer patients using a point-based surface displacement metric**
2. Marie Tvilum, Danish Centre for Particle Therapy: **Exploring the benefits of adaptive radiotherapy in patients with NSCLC**
3. Simon Nyberg Thomsen, Dept. of Oncology, Aarhus: **The importance of adaptive radiotherapy for NSCLC patients receiving dose escalation**
4. Julie Kjems, Dept. of Oncology, Rigshospitalet: **The influence of tumor volume on the risk of distant metastases in head and neck squamous cell carcinomas**
5. Karen Wind, Dept. of Experimental Clinical Oncology, Aarhus: **Pattern of failure after radiotherapy for anal cancer**
6. Nora Forbes, Dept. of Oncology, Rigshospitalet: **Cardiac dose volume analysis of 5,151 patients with registry-based outcome data for ischemic heart disease**
7. Anna Mann Nielsen, Dept. of Oncology, Copenhagen: **Compliance assessment in a randomized phase III trial of esophagus sparring radiotherapy for metastatic spinal cord compression – an interim analysis**
8. Mette Van Felter, Dept. of Oncology, Herlev: **SOFT: MR-guided SBRT of infra-diaphragmatic metastases**
9. Nicklas Spindler, Dept. of Oncology, Herlev: **Early toxicity after SABR of oligometastatic bone metastases in the BONY-M phase II trial**
10. Minea Melissa Jokivuolle, Dept. of Oncology, Odense: **Time-Dependent Diffusion MRI for Non-Invasive Tumor Characterization on 1.5 T MR-Linac**
11. Anne Louise Højmark Bisgaard, Dept. of Oncology, Odense: **How to reduce ADC variation between centres?** Presented by Faisal Mahmood

12:00-13:00 **Lunch**

13:00-14:30 **The Danish radiotherapy studies - Report from the clinical groups (IP1-15)**

14:30-15:30 **The national focus areas – market place**
Including coffee

15:30-16:30 **The national infrastructures: What have we achieved**

16:30-17:30 **Presidential highlights session – moderator Jens Overgaard, president of the Steering Group**

17:30-18:00 **Danish radiotherapy in a Nordic perspective – Kjell Bergfeldt, Skandionkliniken, Sweden**

18:30 **Dinner**

Wednesday, November 23

07:30-08:30 Breakfast

08:30-10:15 Flash talks moderated by Gitte Persson & Jasper Nijkamp

1. Henrik Nissen, Dept. of Medical Physics, Vejle: **Experiences from the clinic after 2 years of using MR-only treatment planning for pelvic cancers**
2. Rune Slot Thing, Dept. of Medical Physics, Vejle: **Evaluation and clinical implementation of CBCT-based dose calculations for breast, lung, prostate and anal/rectal cancer patients**
3. Simon Skouboe, Danish Centre for Particle Therapy: **Real-time motion-including dose reconstruction for pencil-beam scanning proton therapy**
4. Eleni Kanouta, Danish Centre for Particle Therapy: **Time-resolved dose rate measurements in pencil beam scanning proton FLASH irradiations with a fiber-coupled scintillator detector system**
5. Mads Fjelbro Klavsen, Dept. of Health Technology, DTU: **The effect of different movement patterns on accumulated dose profiles during gated treatments on a Viewray MRIdian with a dose transient**
6. Daniella Østergaard, Section of Radiotherapy, Dept. of Oncology, Rigshospitalet: **Reirradiation of pediatric patients with diffuse midline glioma**
7. Sky Rohrer, Danish Centre for Particle Therapy: **Deep-inspiration breath-hold reproducibility in cine MV images of IMRT lung treatments**
8. Christian Rønn Hansen, Laboratory of Radiation Physics, Odense: **Larynx cancer survival model developed through open-source federated learning**
9. Emma Riis Skarsø, Oncology Dept. and Danish Centre for Particle Therapy: **Development of national DBCG deep learning-based auto-segmentation model of the CTVn_IMN**
10. Jesper Folsted Kallehauge, Danish Centre for Particle Therapy: **Deep Learning segmentation of structures for Cranial Spinal Irradiation (CSI)**
11. Kim Hochreuter, Dept. of Clinical Medicine, Aarhus: **Automated Segmentation of Tumor and Brain Barriers in Glioblastoma Patients**
12. Lasse Refsgaard, Dept. of Experimental Clinical Oncology, Aarhus: **Automated collection of a large retrospective national DICOM dataset – DBCG RT Nation**
13. Mathis Ersted Rasmussen, Danish Centre for Particle Therapy: **How to implement fancy computational models seamlessly into the clinic**
14. Fardous Reaz, Danish Centre for Particle Therapy: **Optimization of the metal collimator for proton GRID radiation therapy (PGRT)**
15. Nadine Vatterodt, Danish Centre for Particle Therapy: **The potential of including anatomical error scenarios for nasal cavity filling in robust optimized proton therapy treatment plans**
16. Saber Nankali, Dept. of Oncology, Aarhus: **Intrafraction tumor motion monitoring and dose reconstruction for pencil beam scanning proton therapy in the liver**

17. Villads Lundsteen Jacobsen, Danish Centre for Particle Therapy: **Uncovering proton boron capture therapy: A Monte Carlo study of high-LET particle production in clinical proton beams**

10:15-10:45 **Coffee – talk to flash talk presenters**

10:45-11:00 **DCCC RT 2.0 introduction to breakout session**

11:00-12:00 **DCCC RT 2.0 breakout session: Come and design the future!**
In this breakout session, we will brainstorm about the future developments in Danish radiotherapy, including national collaboration, organisation, scientific aims and involvement of researchers and clinicians. The session takes place in various rooms with predefined groups and engaged moderators.

12:00-13:00 **Lunch**

13:00-13:45 **Breakout session continued**

13:45-14:00 **Coffee**

14:00-14:45 **Break-out session report – plenary**

14:45-15:00 **Wrap up and goodbye – Cai, Jesper, and Stine**

DCCC Radiotherapy organization