PROGRAMME
Tuesday June 20

<u>08:00:</u> **Registration and breakfast**

<u>08:45:</u> **Welcome**

<u>08:55:</u> **Session 1: Biology-guided and adaptive radiotherapy anno 2023**
Chairs: Karin Haustermans, Jasper Nijkamp

Keynote address
08:55-09:15: Daniel Zips, Charité Mitte, Berlin, Germany
Response-adaptive radiotherapy

Oral presentations

1. **09:15-09:25: Jens Overgaard, Aarhus University Hospital, Denmark**
   Hyperthermia as an adjuvant to radiotherapy of locally advanced breast carcinoma. The ESHO 1-85 multicenter randomized trial by the European Society for Hyperthermic Oncology
2. **09:25-09:35: Azadeh Abravan, The University of Manchester, United Kingdom**
   Value of delta-radiomics features from 18-F FDG-PET in predicting loco-regional failure in head and neck cancer
3. **09:35-09:45: Pieter Populaire, KU Leuven, Belgium**
   Dose to functional lung volume and pulmonary toxicity in esophageal cancer trimodality therapy
4. **09:45-09:55: Simon Nyberg Thomsen, Aarhus University Hospital, Denmark**
   The importance of daily dose calculation for avoiding overdose to OAR in NSCLC patients receiving dose escalation
5. **09:55-10:05: Tord Hompland, Oslo University Hospital, Norway**
   Consumption and Supply based Hypoxia imaging can quantify different hypoxia levels and are strongly related to outcome after prostatectomy

<u>10:05:</u> **Coffee break**

<u>10:35:</u> **Session 2: Oligo-metastatic disease and reirradiation**
Chairs: Azadeh Abravan, Morten Høyer

Keynote address
10:35-10:55: Matthias Guckenberger, University Hospital Zürich, Switzerland
Value of metastases directed radiotherapy: oligometastatic disease and beyond

Oral presentations

6. **10:55-11:05: Anna Mann Nielsen, Copenhagen University Hospital – Herlev and Gentofte, Denmark**
   An interim analysis from a randomized, phase III trial of esophagus sparring radiotherapy for metastatic spinal cord compression

7. **11:05-11:15: Christina Truelsen, Aarhus University Hospital, Denmark**
Inter-fraction motion robustness in dose-escalated proton re-irradiation for locally recurrent rectal cancer: initial results from the prospective phase II trial, ReRad II

8. **11:15-11:25: Einar Dale, Oslo University Hospital, Norway**
Re-irradiation with dose painting of head and neck cancer: Clinical outcomes

9. **11:25-11:35: Julie Frikke Depner, Rigshospitalet, Copenhagen, Denmark**
Treating brain metastases in metastatic breast cancer: Outcomes after stereotactic radiosurgery examined in a retrospective, single-center cohort analysis

10. **11:35-11:45: Julie Kjems, Rigshospitalet, Copenhagen, Denmark**
The potential for oligometastatic treatment of distant metastatic disease in head and neck squamous cell carcinoma (HNSCC) – a real-world data analysis

11. **11:45-11:55: Mette Felter, Herlev and Gentofte Hospital, Denmark**
MR-guided stereotactic body radiotherapy in patients with oligometastatic disease in the infra-diaphragmatic region (SOFT): a phase 2, multicenter study

12. **11:55-12:05: Sakina Khan, Aarhus University Hospital, Denmark**
Remarkable local control and minimal toxicity in small ultra-central lung tumors or solitary lymph nodes after normo-fractionated radiotherapy

13. **12:05-12:15: Yuqing Xiong, University Hospital LMU Munich, Germany**
Daily plan adaptation in ultra-hypofractionated MRgRT for prostate cancer: comparison of adapted and non-adapted accumulated dose

12:15: **Lunch**

13:15: **Session 3: Automation and artificial intelligence**
Chairs: Stine Sofia Korreman, Anne Holm

Keynote addresses
13:15-13:35: Jan Unkelbach, University Hospital Zürich, Switzerland
Machine learning for supporting clinical target volume definition

13:35-13:55: Nico van den Berg, UMC Utrecht, The Netherlands
AI driven imaging & contouring workflow for MRI guided Radiotherapy

13:55-14:15: Joseph O. Deasy, Memorial Sloan Kettering Cancer Center, New York, USA
AI methods to derive treatment response biomarkers from longitudinal imaging

Oral presentations

14. **14:15-14:25: Bob Smulders, Aarhus University Hospital, Denmark**
Prediction of dose-sparing by protons assessed by a knowledge-based planning tool in radiotherapy of the brain

15. **14:25-14:35: Camilla Panduro Nielsen, Odense University Hospital, Denmark**
Consistency in contouring of organs at risk by AI and radiation oncologists in head and neck cancer patients

16. **14:35-14:45: Emma Riis Skarsø, Aarhus University Hospital, Denmark**
Multi-center auto-segmentation model for internal mammary nodes using clinical data: A DBCG study

17. **14:45-14:55: Maximilian Konrad, Odense University Hospital, Denmark**
An automatic open-source approach to organs at risk and target structure segmentation for T2 MR-guided brachytherapy of cervical cancer patients using nnU-Net

14:55: **Coffee break**

15:20: **Session 4: Clinical radiotherapy – CNS, head and neck, breast cancer**
Chairs: Birgitte Vrou Offersen, Christian Rønn Hansen

Keynote addresses
15:20-15:40: Anna Kirby, The Royal Marsden, Sutton, United Kingdom
Radiotherapy for Breast Cancer- which outcomes really matter to patients?

15:40-16:00: Gerben Borst, The Christie, Manchester, United Kingdom
Individualising treatment strategies for brain tumours

16:00-16:20: Gabriel Adrian, Skåne University Hospital, Lund, Sweden
HNSCC: Why we shouldn't forget about the clonogenic cell (and hopefully increase cure rates)

Oral presentations

18. **16:20-16:30: Alice Clarke, Aarhus University Hospital, Denmark**
Radiation dose-escalation for Glioblastoma: who may benefit?
19. **16:30-16:40: Jørgen Johansen, Odense University Hospital, Denmark**
Accelerated Loss of Lean Body Mass in Head and Neck Cancer Patients During Cisplatin-based Chemoradiation
20. **16:40-16:50: Lene Haldbo-Classen, Aarhus University Hospital, Denmark**
Is radiation dose to sleep-relevant brain structures associated with lower sleep quality in adults with primary non-glioblastoma brain tumours?
21. **16:50-17:00: Maja Olsen, Danish Cancer Society Research Center, Copenhagen, Denmark**
Socioeconomic differences in the pre-diagnostic interval among patients diagnosed with head and neck squamous cell carcinoma - a nationwide, population-based study from DAHANCA, Denmark, 2008-2019
22. **17:00-17:10: Morten Horsholt Kristensen, Aarhus University Hospital, Denmark**
Cancer stem cell expression and tumor volume as prognostic markers for radioresistance in HNSCC

17:15: **Poster discussion and refreshments**

19:00: **Conference dinner and networking - Varna Mansion**

Wednesday June 21

<u>08:00:</u> **Session 5: Proton radiobiology**
Chairs: Brita Singers Sørensen, Kathrine Røe Redalen

Keynote addresses
08:00-08:20: Eirik Malinen, Oslo University Hospital, Norway
Proton therapy of head & neck murine models - recent investigations on toxicity and tumor control

08:20-08:40: Armin Lühr, TU Dortmund, Germany
BiG-ART: Biology-Guided Alternatives for proton Radiotherapy Treatment planning

Oral presentations

23. **08:40-08:50: Esther Troost, University Hospital Carl Gustav Carus, Dresden, Germany**
Multi-parametric MRI for unraveling radiation-induced changes in primary brain tumor patients
24. **08:50-09:00: Fredrik Kalholm, Stockholm University, Sweden**
Modeling RBE with Qeff significantly improves prediction of cell survival for proton therapy compared to LET
25. **09:00-09:10: Maksym Fritsak, Paul Scherrer Institute, Villigen, Switzerland**
On the role of treatment uncertainties in the onset of radiation-induced optic neuropathy after proton therapy

<u>09:10:</u> **Session 6: Clinical radiotherapy – Genito-urinary cancer**

Chairs: Remi Nout, Jacob Lindegaard

Keynote address
09:10-09:30: Remi Nout, Erasmus University Medical Center, Rotterdam, The Netherlands

Moving towards risk stratified radiotherapy for locally advanced cervical cancer

Oral presentations
26. **09:30-09:40: Kari Tanderup, Aarhus University Hospital, Denmark**
Peripheral neuropathy in cervix cancer patients: a trajectory analysis
27. **09:40-09:50: Anne Cobussen, Maastro/Aarhus University Hospital, The Netherlands/Denmark**
Clinical outcomes using a 3D printed tandem-needle-template and the EMBRACE-II planning aims for image guided adaptive brachytherapy in locally advanced cervical cancer
28. **09:50-10:00: Ingerid Knudtsen, Norwegian University of Science and Technology, Trondheim, Norway** PSMA-PET of prostate cancer patients with biochemical recurrence
29. **10:00-10:10: Marta Pelizzola, Aarhus University Hospital, Denmark**
Identification of syndromes from temporal evolution of symptoms in cervix cancer patients
30. **10:10-10:20: Simon Buus, Aarhus University Hospital, Denmark**
Clinical outcome of MRI based high-dose-rate brachytherapy combined with EBRT for prostate cancer
31. **10:20-10:30: Sofia Spampinato, Aarhus University Hospital, Denmark**
Patient-reported persistent symptoms after radiotherapy and association with quality of life for prostate cancer survivors

32. **10:30-10:40: Trine Tramm, Aarhus University Hospital, Denmark**
     T-lymphocytes and hypoxia predicts survival after brachytherapy in locally advanced cervical cancer

10:40: **Coffee break**

11:10: **Session 7: Clinical radiotherapy – Gastro-intestinal and lung cancer**
Chairs: Esther Troost, Lone Hoffmann

Keynote addresses
11:10-11:30: Karin Haustermans, UZ Leuven, Belgium
Proton therapy in esophageal cancer

11:30-11:50: Vincenzo Valentini, Policlinico Universitario A. Gemelli, Rome, Italy
The logical benefit of mining a large rectal cancer database: thoughts, judgements and imaginations

11:50-12:10: Marianne Guren, Oslo University Hospital, Norway
Improving clinical outcomes after chemoradiotherapy for anal cancer

Oral presentations

33. **12:10-12:20: Karen Wind, Aarhus University Hospital, Denmark**
     Pre-treatment immune-inflammation-related biomarkers and relation to disease-free survival in anal cancer
34. **12:20-12:30: Lise Bech Jellesmark Thorsen, Aarhus University Hospital, Denmark**
     National consensus based automatic delineation of thoracic organs at risk
35. **12:30-12:40: Nina Levin, Norwegian University of Science and Technology, Trondheim, Norway**
     Dose response relationship of acute esophagitis for patients with limited stage small cell lung cancer treated with chemoradiotherapy in a randomized phase II trial

12:40: **Lunch**

13:30: **Session 8: Preparing for the future**
Chairs: Niels Bassler, Kari Tanderup

Keynote addresses
13:30-13:50: Kristoffer Petersson, Oxford University/Lund University, United Kingdom/Sweden
FLASH Radiotherapy

13:50-14:10: Yolanda Prezado, Institut Curie, Paris, France
Divide and conquer: spatial fractionated radiation therapy

Oral presentations

36. **14:10-14:20: Katia Parodi, Ludwig-Maximilians-Universität München (LMU Munich), Germany**
     First in-silico demonstration of a novel platform for small animal image-guided, intensity modulated proton therapy
37. **14:20-14:30: Morten Busk, Aarhus University Hospital, Denmark**
     Development of preclinical orthotopic lung tumor mouse models generated by CRISPR/CAS9 in vivo gene knockout

38. **14:30-14:40: Signe Winther Hasler, Odense University Hospital, Denmark**
    A multicenter study of geometric accuracy of clinical MR sequences used for radiotherapy in Denmark
39. **14:40-14:50: Simon Vindbæk, Aarhus University Hospital, Denmark**
    Motion-induced proton dose change measured by 3D deformable dosimeters in an anthropomorphic phantom

14:50: **Closing session - poster prizes**
Chairs: Ludvig Muren, Jesper Eriksen

15:00: **Farewell**

POSTER DISCUSSION GROUPS

Poster discussion group 1: Preclinical studies

Chairs: Gabriel Adrian, Per Poulsen

1. **Anders Tobias Frederiksen, Aarhus University Hospital, Denmark**
   Evaluating in vitro setup designed for horizontal beamline irradiation at the Danish Centre for Particle Therapy
2. **Charlemagne A. Folefac, Aarhus University, Denmark**
   Targeting Solid Tumors with the combination of Stereotactic Radiation combine with hyperthermia
3. **Ingunn Hanson, University of Oslo, Norway**
   TGF-β3 injections increases severity of radiation induced oral mucositis and salivary gland fibrosis in a mouse model
4. **Line Kristensen, Aarhus University Hospital, Denmark**
   Skin toxicity of FLASH proton radiation within the Spread-out Bragg Peak
5. **Olga Zlygosteva, University of Oslo, Norway**
   Normal tissue response following proton and photon fractionated irradiation of the head and neck in a murine model
6. **Toralf Husevåg, University of Oslo, Norway**
   Predicting saliva production and fibrosis in mice post-irradiation using T2-weighted MRI-based radiomic features

Poster discussion group 2: Biology, biomarkers and adaptation

Chairs: Katia Parodi, Jørgen Johansen

7. **Ana Ureba, Stockholm University, Solna, Sweden**
   Biologically-guided automated treatment planning and evaluation: potential for treatment adaptation in head and neck cancer
8. **Demet Özcan, Aarhus University Hospital, Denmark**
   Exploring the analytical validity of CD20 as a potential biomarker for benefit of post-operative radiotherapy in breast cancer patients
9. **Eleni Kanouta, Aarhus University Hospital, Denmark**
   Scintillation imaging for in vivo monitoring of pre-clinical mouse treatments with conventional and FLASH proton pencil beam scanning
10. **Guillermo Garrido Hernandez, Norwegian University of Science and Technology, Trondheim, Norway**
    FDG-PET-based mid-treatment dose escalation of proton therapy in head and neck cancer
11. **Jacob Lilja-Fischer, Aarhus University Hospital, Denmark**
    HPV subtype not prognostic in p16+ oropharyngeal squamous cell carcinoma
12. **Marie Tvilum, Aarhus University Hospital, Denmark**
    Using image biomarkers to predict pattern of failure for patients with locally advanced NSCLC
13. **Sara Linde, Aarhus University Hospital, Denmark**
    Early radiologic and metabolic response to chemotherapy in patients with limited disease small cell lung cancer
14. **Tiril Hillestad, Oslo University Hospital, Norway**
    Early microenvironmental changes to radiation therapy in cervical cancer patients

Poster discussion group 3: Clinical studies A

Chairs: Slavka Lukacova, Mette Felter

15. **Daniella Østergaard, Rigshospitalet, Copenhagen, Denmark**
    Dose-accumulation analysis of target and organs at risk with clinical outcome after re-irradiation of diffuse midline glioma

16. **Hendrik Hansen, Maastricht University Medical Center, GROW School for Oncology and Reproduction Maastricht, the Netherlands**
    Automated plan quality monitoring for patient cohorts using dashboards: demonstration for a 'RapidPlan introduction' use case

17. **Hjørdis Hjalting Schmidt, Aarhus University Hospital, Denmark**
    Do changes in treatment over time affect survival and pattern of failure in 177 consecutive patients treated with chemoradiotherapy for limited disease small-cell lung cancer (LD-SCLC)?

18. **Ida M. H. Borgen, Oslo University Hospital, Norway**
    Assessing cognitive functioning in patients with diffuse glioma grade 2 and 3 in the PRO-GLIO trial – advantages and disadvantages of a cognitive screening battery versus a full neuropsychological assessment

19. **Liv Cathrine Heggebø, Radiumhospitalet, Oslo University Hospital, Norway**
    Quality of life, perception of treatment, and life perspectives in diffuse low-grade glioma patients – initial presentation of a qualitative sub-study in the PRO-GLIO trial

20. **Michael Ruben Teindl Laursen, Copenhagen University Hospital – Herlev and Gentofte, Denmark**
    Protocol: OLIGO-DK - Local ablative therapy of oligometastatic disease

21. **Sandy Mohamed, Aarhus University Hospital, Denmark**
    The value of MRI in response evaluation after primary (chemo-) radiotherapy for head and neck squamous cell carcinoma

22. **Slavka Lukacova, Aarhus University Hospital, Denmark**
    Examining clinical patterns in the referral of brain tumor patients to proton therapy: A single center retrospective study

Poster discussion group 4: Clinical studies B

Chairs: Camilla Kronborg, Einar Dale

23. **Anders W. Mølby Nielsen, Aarhus University Hospital, Denmark**
    Difference between planned and delivered dose to the internal mammary nodes in high-risk breast cancer patients

24. **Anne Lindegaard, Copenhagen University Hospital – Rigshospitalet, Denmark**
    A systematic review on clinical adaptive radiotherapy for head and neck cancer

25. **Camilla Kronborg, Aarhus University Hospital, Denmark**
    Organ specific secondary cancer risk after radiotherapy for seminoma. Comparison of robust intensity modulated proton therapy (IMPT) vs IMRT and VMAT photon plans

26. **Camilla Skinnerup Byskov, Aarhus University Hospital, Denmark**
    Facility questionnaires from the European multicentre PROTECT phase III trial randomising proton vs. photon beam therapy in oesophageal cancer

27. **Maja Bruvo Lazovic, University College Absalon, Næstved, Denmark**
    Potential early predictors of permanent xerostomia following head and neck radiotherapy

28. **Johannes Tjelta, Haukeland University Hospital, Bergen, Norway**
    Radiation exposure to parent-in-treatment-room during pencil beam scanning pediatric proton therapy

29. **Tine Bisballe Nyeng, Aarhus University Hospital, Denmark**
    Risk of large intra-fractional target shift during stereotactic treatment of peripheral lung lesions.

30. **Veera Ahtiainen, Helsinki University Hospital, Comprehensive Cancer Center, Finland**
    Concept of individual dosing of Lu-177-PSMA radionuclide treatments based on prediction of tumor control and kidney tolerance

Poster discussion group 5: Imaging

Chairs: Anne Vestergaard, Mikko Tenhunen

31. **Anne Bisgaard, Odense University Hospital, Denmark**
    Longitudinal DWI for response assessment in patients with rectal cancer treated on MRI-linac
32. **Anne Vestergaard, Aarhus University Hospital, Denmark**
    Image changes after proton therapy of low and high grade gliomas
33. **Jesper Folsted Kallehauge, Aarhus University Hospital, Denmark**
    National Quality Assurance of Quantitative Diffusion Tensor MR Imaging in Patients with Glioblastoma Multiforme
34. **Laura Toussaint, Aarhus University Hospital, Denmark**
    A framework for quantifying longitudinal MRI changes after pediatric brain irradiation
35. **Marte Kåstad Høiskar, Norwegian University of Science and Technology, Trondheim, Norway**
    Quantitative dynamic contrast-enhanced MRI in head and neck cancer: a systematic comparison of different modelling approaches
36. **Minea Jokivuolle, Odense University Hospital, Denmark**
    Mapping tumor microstructure with time dependent diffusion MRI on a clinical 1.5 T MRI system
37. **Moritz Rabe, University Hospital, LMU Munich, Germany**
    Accuracy and reproducibility of brain diffusion-weighted imaging at a 0.35 T MR-linac in volunteers
38. **Nadine Vatterodt, Aarhus University Hospital, Denmark**
    Cross-platform assessment of CBCT-based dose evaluations for head and neck cancer proton therapy

Poster discussion group 6: Proton therapy A

Chairs: Armin Lühr, Michael Horsman

39. **Amit Ben Antony Bennan, German Cancer Research Center (DKFZ), Heidelberg, Germany**
    Impact of variable RBE models on jointly optimized (JO) photon – proton combined treatment plans
40. **Evangelia Choulilitsa, Paul Scherrer Institut, Villigen, Switzerland**
    Dosimetric benefit of Online Daily Adaptive Proton therapy for Head and Neck cancer patients
41. **Fardous Reaz, Aarhus University, Denmark**
    Design and commissioning of a proton minibeam collimator at the Danish Center for Proton Therapy for experimental studies on Spatially Fractionated Radiotherapy - current status and need for standardized reporting
42. **Jacob Johansen, Aarhus University Hospital, Denmark**
    Assessing the Effectiveness and Toxicity of Boron in Proton Therapy: Monte Carlo Simulations and In Vitro Clonogenic Assay
43. **Michael Horsman, Aarhus University Hospital, Denmark**
    Using immunotherapy to enhance the response of a C3H mammary carcinoma to proton radiation
44. **Niels Bassler, Aarhus University Hospital, Denmark**
    Variable Relative Biological Effectiveness in proton therapy is better described with experimentally obtained Qeff than LET
45. **Peter Lægdsmand, Aarhus University Hospital, Denmark**
    Relative Biological Effectiveness in Pencil Beam Scanning Proton Therapy of Pediatric Brain Tumors Near Brainstem
46. **Villads Jacobsen, Aarhus University Hospital, Denmark**
    Investigating Neutron Dose to Pregnant Patients Undergoing Proton Therapy: Validation of a MC Framework with H*(10) Measurements

Poster discussion group 7: Proton therapy B

Chairs: Esben Worm, Eirik Malinen

47. **Andreas Havsgård Handeland, Haukeland University Hospital, Bergen, Norway**
Robustness evaluation of linear energy transfer in proton therapy of paediatric posterior fossa tumours

48. **Anne Holm, Aarhus University Hospital, Denmark**
Does proton radiotherapy have an advantage in ipsilateral radiotherapy (RT) for neck metastases from unknown primary squamous cell carcinoma (CUP) in the primary and recurrent setting?

49. **Andreas Havsgård Handeland, Haukeland University Hospital, Bergen, Norway**
First application of an LET-inclusive NTCP model for brainstem necrosis following paediatric proton therapy in an independent cohort

50. **Esben Worm, Aarhus University Hospital, Denmark**
Motion variability and setup accuracy in CBCT-guided exhale-gated spot scanning proton therapy of hepatocellular carcinoma

51. **Ivanka Sojat Tarp, Aarhus University Hospital, Denmark**
Clinical benefit of range uncertainty reduction in robust optimization for proton therapy

52. **Lia Valdetaro, Odense University Hospital, Denmark**
Investigating the dose degradation around gold markers in spot-scanning proton therapy using 3D dosimeters

53. **Nina Ubbesen, Aarhus University Hospital, Denmark**
Dose to heart substructures between photon and proton therapy for esophageal cancer patients

54. **Sarah Eckholdt, Aarhus University Hospital, Denmark**
Patient-Specific Quality Assurance Using Monte Carlo Dose Calculations in Patients with Early Breast Cancer Treated with Proton Therapy

Poster discussion group 8: Treatment planning, automation, artificial intelligence A

Chairs: Joseph Deasy, Ditte Sloth Møller

55. **Anne Andresen, Aarhus University Hospital, Denmark**
Auto delineation of organ at risk in brain cancer patients using deep learning

56. **Helena Vivancos Bargalló, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain**
Laterality and lumpectomy/mastectomy classification for AI contouring of breast targets

57. **Jintao Ren, Aarhus University Hospital, Denmark**
Highly uncertain regions reveal potential errors: uncertainty analysis for improving deep learning segmentation of head and neck cancer tumor

58. **Kristoffer Moos, Department of Clinical Medicine, Aarhus University Hospital, Denmark**
Deep learning-based segmentation of organ-at-risk in the thorax region using a high-quality curated dataset

59. **Armin Lühr, TU Dortmund University, Germany**
CT or stopping power ratio prediction by deep learning for MR-only proton dose calculation?

60. **Rasmus Klitgaard, Aarhus University Hospital, Denmark**
The impact of range and treatment uncertainties on normal tissue complication probability models based on the rectum volume vs. wall during proton therapy of high-risk prostate cancer

61. **Sofie Tilbæk, Aarhus University Hospital, Denmark**
Evaluation of plan robustness in proton therapy for high-risk prostate cancer patients included in a national clinical trial

Poster discussion group 9: Treatment planning, automation, artificial intelligence B

Chairs: Thomas Ravkilde, Ebbe Lorenzen

62. **Karolina Klucznik, Aarhus University Hospital, Denmark**
Accuracy of motion-including prostate dose reconstruction based on pre- and post-treatment cone-beam CT scans

63. **Katrin Håkansson, Copenhagen University Hospital – Rigshospitalet, Denmark**
Online adaptive radiotherapy for head and neck cancer – first experience analysis of plan difference and synthetic CT uncertainty

64. **Laura Kaplan, Zealand University Hospital Næstved, Denmark**
An automated planning method to spare the rectal wall in treatment of prostate cancer

65. **Lars Hjorth Praestegaard, Aarhus University Hospital, Denmark**
Comprehensive automated structure QA in radiotherapy

66. **Line Ring, Aarhus University Hospital, Denmark**
Evaluation of manual and DirectOrgans algorithm for the delineation of organ at risk in thorax and pelvic radiation therapy

67. **Morten Nielsen, Odense University Hospital, Denmark**
A systematic approach to estimation of residual tolerances of organs being re-irradiated

68. **Saber Nankali, Aarhus University, Denmark**
Spot scanning proton therapy of hepatocellular carcinoma: Intrafraction tumor motion monitoring and dose reconstruction

69. **Thomas Ravkilde, Aarhus University Hospital, Denmark**
An easily extendible framework for advanced automated plan checks