

ESTRO
2022

Scientific Programme

ANNUAL
ESTRO
CONGRESS

Learning from Every Patient

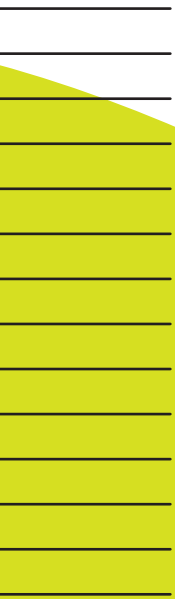
6-10 May 2022

ONSITE IN COPENHAGEN
& ONLINE

    **#ESTRO2022**

WWW.ESTRO.ORG

Saturday
7 May
2022



Track: Interdisciplinary

Teaching lecture: Developing a national infrastructure for proton beam therapy trials

Saturday, 7 May 2022 08:00 - 08:40

Chair: TBC

08:00 Developing a national infrastructure for proton beam therapy trials

SP - 0001

C. Nutting (United Kingdom)

Track: Radiobiology

Teaching lecture: The radiobiological clock in 2022

Saturday, 7 May 2022 08:00 - 08:40

08:00 The radiobiological clock in 2022

SP - 0002

M. Pruschy (Switzerland)

08:20 The radiobiological clock in 2022

SP - 0003

L. Dubois (The Netherlands)

Track: Clinical

Teaching lecture: Stereotactic radiotherapy in lung: Recent advances

Saturday, 7 May 2022 08:00 - 08:40

Chair: Piet Ost

08:00 Stereotactic radiotherapy in the lung: Recent advances

SP - 0004

T. Finazzi (Switzerland)

Track: Clinical

Teaching lecture: Palliative radiotherapy: Established standards and emerging concepts

Saturday, 7 May 2022 08:00 - 08:40

Chair: Carsten Nieder

08:00 Palliative radiotherapy: Established standards and emerging concepts

SP - 0005

Y. van der Linden (The Netherlands)

Track: Brachytherapy

Teaching lecture: Improving radiotherapy outcomes for vaginal tumours using a joint target concept

Saturday, 7 May 2022 08:00 - 08:40

	Chair: Cyrus Chargari	-
08:00	Improving radiotherapy outcomes for vaginal tumours using a joint target concept <i>H. Westerveld (The Netherlands)</i>	SP-0006
Track: Physics Teaching lecture: Commissioning and quality assurance of commercial in vivo dosimetry systems Saturday, 7 May 2022 08:00 - 08:40 Chair: Núria Jornet		
08:00	Commissioning and quality assurance of commercial in vivo dosimetry systems <i>M. Esposito (Italy)</i>	SP - 0007
Track: Physics Teaching lecture: Monte Carlo dose calculation in modern day radiotherapy Saturday, 7 May 2022 08:00 - 08:40 Chair: Jenny Bertholet		
08:00	Monte Carlo dose calculation in modern day radiotherapy <i>R. Kueng (Switzerland)</i>	SP - 0008
Track: RTT Teaching lecture: Patient education in 2022: Does the patient know better? Saturday, 7 May 2022 08:00 - 08:40 Chair: Bernd Wisgrill		
08:00	Use of social media, oncology platforms and other tools as base for education <i>J. De Munter (Belgium)</i>	SP - 0009
Track: Interdisciplinary Symposium: Education in radiation oncology: Advances and opportunities Saturday, 7 May 2022 08:45 - 10:00 Chair: Jesper Grau Eriksen Co-Chair: Jolien Heukelom		
08:45	Introduction	SP - 0010
08:48	Can virtual learning methods like VERT improve education in radiation oncology? <i>C. Poole (Ireland)</i>	SP - 0011
09:13	Virtual reality and other advanced learning environments in oncology training <i>D. Kok (Australia)</i>	SP - 0012
09:38	Weekly contouring rounds and education movies to improve organ at risk delineation in neuro-oncology	SP - 0013

D. Di Perri (The Netherlands), D. Hofstede, A. Postma, C.M. Zegers, L. In't Ven, F. Hoebbers, W. van Elmpt, L. Verheesen, H. Beurskens, E.G. Troost, I. Compter, D.B. Eekers

09:48 McMedHacks: Deep learning for medical image analysis workshops and Hackathon in radiation oncology OC - 0014

Y. Zou (Canada), L. Weishaupt, S. Enger

09:58 Closing remarks OC - 0015

Track: Radiobiology

Debate: This house believes that FLASH radiotherapy is a more promising avenue for the future of radiation oncology than particle radiotherapy

Saturday, 7 May 2022 08:45 - 10:00

Chair: Anna Dubrovskaya -

Chair: Monica Mangoni -

08:45 Introduction SP - 0016

08:47 For the motion (FLASH: Increasing the therapeutic index of radiotherapy) SP - 0017

K. Petersson (United Kingdom)

09:02 Against the motion (The great promise of particle radiotherapy: Preclinical and clinical evidence) SP - 0018

C. von Neubeck (Germany)

09:17 For the motion (FLASH radiotherapy as an immunomodulator) SP - 0019

C. Fouillade (France)

09:32 Against the motion (Particle radiotherapy-immunotherapy: A new concept for the optimal synergy?) SP - 0020

M. Durante (Germany)

09:47 Discussion SP - 0021

Track: Clinical

Symposium: New developments in the treatment of oesophageal cancer

Saturday, 7 May 2022 08:45 - 10:00

Chair: Marianne Nordmark -

Co-Chair: Yvonne Klaver -

08:45 New systemic treatments in non-metastasised oesophageal cancer SP - 0022

F. Lordick (Germany)

09:10 Technical developments in the radiation treatment of oesophageal cancer SP - 0023

K. Haustermans (Belgium)

09:35	Dose escalation in oesophageal cancer and its impact on outcomes <i>M. Hulsof (The Netherlands)</i>	SP - 0024
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Track: Clinical

Symposium: All the hassle with haematopoietic systems

Saturday, 7 May 2022 08:45 - 10:00

Chair: Dorota Gabrys	-
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Co-Chair: Bartłomiej Tomasik	-
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08:45	TSEI for non-T-cell lymphomas: Previous clinical experience and future needs <i>S. Blamek (Poland)</i>	SP - 0025
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09:03	Role of radiotherapy and dose-densification of in primary mediastinal B-cell lymphoma <i>G. Held (Germany)</i>	SP - 0026
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09:21	Big fields - big problem, small fields - small problem in lymphoma treatment? (IFRT vs ISRT vs INRT) <i>L. Specht (Denmark)</i>	SP - 0027
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09:39	CAR T-cel therapy; Is there a role for radiotherapy? <i>A. Niezink (The Netherlands)</i>	SP - 0028
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Track: Brachytherapy

Debate: Soft tissue sarcoma: Brachytherapy and/or EBRT or IORT - Current evidence

Saturday, 7 May 2022 08:45 - 10:00

Chair: Vratislav Strnad	-
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Chair: Csaba Polgar	-
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08:45	Introduction	SP - 0029
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08:47	Value of EBRT <i>A. Levy (France), C. Le Péchoux</i>	SP - 0030
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09:07	Value of brachytherapy <i>M. Gimeno Morales (Spain)</i>	SP - 0031
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09:27	Value of IORT <i>F. Roeder (Austria)</i>	SP - 0032
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09:47	Discussion	SP - 0033
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Track: Physics

Joint Symposium: ESTRO-EFOMP: CT innovations: DECT and beyond

Saturday, 7 May 2022 08:45 - 10:00

	Chair: Christoph Bert	-
	Chair: Liselotte Højgaard	-
08:45	Status and potential of dual-energy CT in radiotherapy <i>E. Baer (United Kingdom)</i>	SP - 0034
09:07	Clinical translation of CT innovations – Report from the 2021 physics workshop <i>V. Taasti (The Netherlands), T. Bortfeld, P. Wohlfahrt</i>	SP - 0035
09:29	EFOMP: Next-generation CT: Innovation from photon-counting CT <i>M. Kachelrieß (Germany)</i>	SP - 0036
09:51	Discussion	SP - 0037
Track: Physics		
Proffered Papers: Intra-fraction and real-time motion management		
Saturday, 7 May 2022 08:45 - 10:00		
	Chair: Bas Raaymakers	-
	Co-Chair: Christopher Kurz	-
08:45	Sub-second speed proton dose calculation with Monte Carlo accuracy using deep learning <i>O. Pastor-Serrano (The Netherlands), Z. Perkó</i>	OC - 0038
08:55	Improving 4D optimized Pencil Beam Scanned proton plan robustness using motion guided dose delivery <i>Y. Zhang (Switzerland), N. Vatterodt, A. Duetschler, S. Safai, D. Weber, A. Lomax</i>	OC - 0039
09:05	Gating latencies and resulting geometrical errors at clinical proton and photon accelerators <i>E. Worm (Denmark), J.B. Thomsen, J.G. Johansen, P.R. Poulsen</i>	OC - 0040
09:15	Gating has small impact on dose to OARs and PTV coverage in MR-guided daily ART of prostate cancer <i>I. Wahlstedt (Denmark), N. Andratschke, C.P. Behrens, S. Ehrbar, H.S. Gabrys, H. Garcia Schüller, M. Guckenberger, A.G. Smith, S. Tanadini-Lang, J.D. Tascón-Vidarte, I.R. Vogelius, J.E. van Timmeren</i>	OC - 0041
09:25	Hybrid 2D/4D MRI-guided MLC tracking on the Unity MR-linac <i>K. Keijnemans (The Netherlands), P. Borman, P. Uijtewaal, P. Woodhead, B. Raaymakers, M. Fast</i>	OC - 0042
09:35	LSTM networks for real-time respiratory motion prediction for a 0.35 T MR-linac <i>E. Lombardo (Germany), Y. Xiong, M. Rabe, L. Nierer, D. Cusumano, L. Placidi, L. Boldrini, S. Corradini, C. Belka, M. Riboldi, C. Kurz, G. Landry</i>	OC - 0043
09:45	Rapid distortion correction enables accurate real-time adaptive radiotherapy on an MRI-Linac <i>P. Liu (Australia), S. Shan, D. Waddington, B. Dong, G. Liney, P. Keall</i>	OC - 0044

Track: RTT

Symposium: Learning about the patients we do not see: A focus on inequities in radiotherapy access and provision

Saturday, 7 May 2022 08:45 - 10:00

Chair: Aileen Duffton

Co-Chair: TBC

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|-------|--|-----------|
| 08:45 | Inequalities in global access to radiotherapy services - An overview | SP - 0045 |
| | <u>M. Abdel-Wahab (Austria)</u> | |
| 09:10 | Ethnic disparities in outcomes with radiation therapy | SP - 0046 |
| | <u>N. Julka-Anderson (United Kingdom)</u> | |
| 09:35 | Inequality in toxicity management in radiotherapy - A focus on skin management | SP - 0047 |
| | <u>J. Daly (Belgium)</u> | |

Track: Physics

Mini-Oral: 01: Dosimetry

Saturday, 7 May 2022 08:45 - 09:45

Mini-Oral Theatre 1

Chair: Catherine Khamphan

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| 08:45 | Impact of suboptimal community dose delivery on TCP in advanced radiotherapy | MO - 0048 |
| | <u>V. Panettieri (Australia), P. Taylor, S.F. Kry</u> | |
| 08:45 | Influence of curing time and composition of 3D radiochromic dosimeters on proton LET dependency | MO - 0049 |
| | <u>L. Valdetaro (Denmark), P. Balling, P. Sandegaard Skyt, M. Krzysztof Sitarz, J. Breede Baltzer Petersen, L. Paul Muren</u> | |
| 08:45 | Optically stimulated luminescence dosimetry as alternative for radiochromic film in UHDR e-beams? | MO - 0050 |
| | <u>V. Vanreusel (Belgium), F. Galante, A. Gasparini, P. Leblans, G. Mariani, M. Pacitti, D. Vandenbroucke, G. Felici, L. de Freitas Nascimento, D. Verellen</u> | |
| 08:45 | Machine learning prediction of calibration curves in gel dosimetry | MO - 0051 |
| | <u>J. Pavoni (Brazil), K. Tozzi, J. Lizar</u> | |
| 08:45 | The impact of ion chamber components on kB,Q for reference dosimetry in MRgRT | MO - 0052 |
| | <u>J. Navarro Campos (The Netherlands), J. de Pooter, L. de Prez</u> | |
| 08:45 | A comprehensive daily QA routine at the ZAP-X system based on the RUBY phantom | MO - 0053 |
| | <u>K. Buesing (Germany), J. Harmsen, P.D. Klassen, H.K. Looe, B. Poppe, D. Poppinga</u> | |
| 08:45 | Real-time motion-including dose reconstruction for pencil beam scanning proton therapy | MO - 0054 |
| | <u>S. Skouboe (Denmark), P.R. Poulsen, T. Ravkilde</u> | |
| 08:45 | Safe classification of patients with CIED prior to RT of naso-/oropharyn- and esophageal carcinoma | MO - 0055 |
| | <u>L. Blümlein (Germany), B. Dobler, O. Kölbl, R. Ringler</u> | |

Track: Interdisciplinary

Mini-Oral: 02: Health economics & healthcare systems

Saturday, 7 May 2022 08:45 - 09:45

Mini-Oral Theatre 2

Chair: Ajay Aggarwal

Co-Chair: Theresa O'Donovan

- 08:45 The prioritisation of radiotherapy in National Cancer Control Plans: a global study MO - 0056
M.L. Yap, B. Wilson, A. Oar, J.M. Borras, J. Bourque (Canada), Y. Lievens, F.Y. Moraes, M. Malik, A. Polo, D. Rodin, Y. Romero, L. Stevens, E. Zubizarreta
- 08:45 Insights and challenges in innovation implementation in Dutch radiotherapy centers MO - 0057
H. Martinussen (The Netherlands), L. Boersma, M. Jacobs, H. de Boer, J. Cuijpers, M. Dirkx, K. De Jaeger, M. Mast, K. Mondriaan, R. Monshouwer, N. Nathan, A. Slot, G. Speijer, F. de Vreugt
- 08:45 Cost-effectiveness of hypofractionated radiotherapy in intermediate-risk prostate cancer. MO - 0058
M. Renouf (France), K. Zhou, G. Perrocheau, N. Magné, G. De Brisson de la Roche, I. Latorzeff, P. Pommier, G. Créhange, A. Paumier, G. Bera, C. Catton, M. Bellanger, S. Supiot
- 08:45 Cost and toxicity comparisons of two IMRT techniques for prostate cancer: a micro-costing study MO - 0059
I. Masson (France)
- 08:45 prognostic impact of waiting time between diagnosis and treatment in patients with cervical cancer. MO - 0060
A. Hack (The Netherlands), R.P. Zweemer, T.N. Jonges, F. Van der Leij, C.G. Gerestein, M. Peters, I.M. Jürgenliemk-Schulz, P.S. Van Rossum
- 08:45 Centralized proton therapy for medulloblastoma; an evaluation of the care infrastructure. MO - 0061
J.F. Nauta, J. Maduro, A. Bannink-Gawryszuk, I. Bosma, J. Bromberg, R. Enting, A. Fock, M. Heesters, B. Hoebe, L. Hooimeijer, E. Hoving, G. Janssens, H. Jeltema, W. Matysiak, B. Molenbuur, J. Nuver, S. Plasschaert, W. Tissing, N. van der Salm, C. van Rij, F. de Vos, A. Walenkamp, H. Langendijk, H. van der Weide (The Netherlands)
- 08:45 Clues to address barriers for access to proton therapy in the Netherlands MO - 0062
S. Thijssen (The Netherlands), L.J. Boersma, C. Roumen, M.J. Jacobs
- 08:45 Non-CNS patient outcomes treated via the NHS proton overseas programme MO - 0063
E.J. Hwang (United Kingdom), S. Gaito, A. France, D. Thwaites, V. Ahern, D. Indelicato, E. Smith

Track: Physics

Poster Discussion: 01: Image processing & analysis

Saturday, 7 May 2022 08:45 - 09:45

Poster Station 1

Chair: René Mario Winter

- 08:45 Multicenter comparison of measures for quantitative evaluation of automatic contouring PD - 0064
E. Brunenberg (The Netherlands), J. Derks van de Ven, M.J. Gooding, D. Boukerroui, Y. Gan, E. Henderson, G.C. Sharp, F. Vaassen, E. Vasquez Osorio, J. Yang, R. Monshouwer
- 08:45 Corrective-annotation auto-completion enables faster organ contouring PD - 0065

A. Smith (Denmark), J. Petersen, I. Wahlstedt, S.L. Risumlund, M.V.O. Felter, V.N. Hansen, I.R. Vogelius

- 08:45 Autocontouring of the mouse thorax using deep learning PD - 0066
J. Malimban (The Netherlands), D. Lathouwers, H. Qian, F. Verhaegen, J. Wiedemann, S. Brandenburg, M. Staring
- 08:45 AI auto-segmentation for MRgRT of prostate cancer: evaluating 269 MR images from two institutes PD - 0067
M. Kawula (Germany), I. Hadi, D. Cusumano, L. Boldrini, L. Placidi, S. Corradini, C. Belka, G. Landry, C. Kurz
- 08:45 Investigating intensity augmentation for deep learning contouring on prostate contrast-enhanced CT PD - 0068
D. Balfour (United Kingdom), D. Boukerroui, Y. McQuinlan, R. Baggs, J. Turner, M. Battye, P. Looney, W. van Elmpt, A. Dekker, M. Gooding
- 08:45 Automatic detection of facial landmarks in paediatric CT scans using a convolutional neural network PD - 0069
A. Rankin (United Kingdom), E. Henderson, O. Umney, A. Bryce-Atkinson, A. Green, E. Vásquez Osorio
- 08:45 A data mining-based approach to predict the growth of brain structures after pediatric radiotherapy PD - 0070
R.G. Raidou (Austria), L.P. Muren, L.V. Toussaint, D. Indelicato, C. Magg
- 08:45 A novel method for evaluating CBCT-based synthetic CTs PD - 0071
C. Sargeant (United Kingdom), A. Green, R. Chuter, A. McWilliam
- 08:45 Extended-field-of-view CT reconstruction using deep learning: PD - 0072
G. Paiva Fonseca (The Netherlands), M. Baer-Beck, E. Fournie, C. Hofmann, I. Rinaldi, M. Ollers, W. van Elmpt, F. Verhagen
- 08:45 Development of a new automated data-driven gated (DDG) CT for radiation treatment planning PD - 0073
T. Pan (USA), D. Luo
- 08:45 Improving spatial fidelity and image quality of mid-position MRI for lung radiotherapy PD - 0074
A. van Bochove, K. Keijneemans (The Netherlands), P. Borman, A. van Lier, M. Fast
- 08:45 3D MRI versus conventional ultrasound tumour measurements for treatment planning of eye tumours PD - 0075
L. Klaassen (The Netherlands), M. Jaarsma-Coes, T. Ferreira, K. Vu, M. Marinkovic, G. Luyten, C. Rasch, J. Beenakker

Track: Clinical

Poster Discussion: 02: Palliation, mixed sites

Saturday, 7 May 2022 08:45 - 09:45

Poster Station 2

Chair: Max Dahele

- 08:45 Predictive factors of severe radiation-induced lymphopenia in proton-treated patients PD - 0076
S. Pan, P. Sitch, S. Gaito, A. McPartlin, S. Sashidaran, E. Smith, G. Whitfield, A. Abravan (United Kingdom)
- 08:45 Systemic Therapy-Free Survival after Stereotactic Body Radiotherapy for Oligorecurrent Disease PD - 0077

J. Willmann (Switzerland), E. Vlaskou Badra, S. Adilovic, J.E. van Timmeren, M. Mayinger, M. Guckenberger, N. Andratschke

- 08:45 Three-year update of outcomes for SABR-treated extracranial oligometastases: A real world experience PD - 0078
M.K. Abutaleb (United Kingdom), W. Croxford, A. Fatimilehin, S. Bowen-Jones, M. Bewley, R. Colaco, R. Hall, P. Whitehurst, R. Woode, G. Radhakrishna, D. Woolf
- 08:45 Volumetric responses with stereotactic radiosurgery and immunotherapy in melanoma brain metastases PD - 0079
M. Shanker (Australia), H. Foley, S. Crowley, E. Thomson, C. Bradhurst, M. Huo, V. Atkinson, M. Foote, M. Pinkham
- 08:45 Post-operative radiosurgery for brain metastases: clinical and dosimetric evaluation PD - 0080
V. Pinzi (Italy), V. Pinzi, A. Romeo, M. Marchetti, S. Morlino, L. Fariselli
- 08:45 SBRT, Durvalumab+-Tremelimumab in metastatic SCC: preliminary safety results of a phase I/II trial PD - 0081
A. Levy (France), R. Bahleda, C. Brard, J. Durand-Labrunie, A. Hollebecque, E. Deutsch
- 08:45 The radio-therapeutic factors in oligometastatic lung adenocarcinoma treated with local ablative RT PD - 0082
G. Yang (Korea Republic of), K.H. Kim, C.G. Lee, H.I. Yoon
- 08:45 Benefit of replanning in MR-guided online adaptive radiation therapy in liver metastasis treatment PD - 0083
M. Mayinger (Switzerland), R. Ludwig, S. Christ, R. Dal Bello, A. Ryu, N. Weitkamp, M. Pavic, H. Garcia Schüler, L. Wilke, M. Guckenberger, J. Unkelbach, S. Tanadini-Lang, N. Andratschke
- 08:45 Development of a patient decision aid regarding SBRT radiation dose to peripheral tumors in the lung PD - 0084
T.L. Fink (Denmark), C. Kristiansen, R.S. Thing, T.S. Hansen, T.F. Hansen
- 08:45 SBRT in the management of oligometastatic gynaecological cancer: a mono-institutional experience. PD - 0085
G. Mandurino (Italy), A. Fodor, S.L. Villa, F. Zerbetto, S. Baroni, A. Sanchez Galvan, R. Tummineri, C.L. Deantoni, P. Mangili, A. Del Vecchio, S. Arcangeli, N.G. Di Muzio
- 08:45 PSMA-PET guided stereotactic body radiotherapy for bone oligorecurrent prostate cancer PD - 0086
F. Cuccia (Italy), R. Mazzola, E. Pastorello, G. Ingrosso, C. Franzese, M. Scorsetti, V. Figlia, N. Gaj-Levra, L. Nicosia, M. Rigo, F. Ricchetti, C. Vitale, G. Attinà, R. Ruggieri, F. Alongi
- 08:45 Developing rapid response MRI-guided palliative radiotherapy for metastatic spinal cord compression PD - 0087
R. Benson (United Kingdom), A. Sideris, L. McDaid, R. Chuter, R. Portner, L. Freear, A. Clough, C. Nelder, E. Pitt, M. Daly, M. Vassiliou, A. Rembielak, P. Hoskin, A. Choudhury, C. Eccles

Track: Interdisciplinary

Proffered Papers: Proton beam therapy

Saturday, 7 May 2022 10:30 - 11:30

Chair: Cai Grau

	Co-Chair: Dora Correia	-
10:40	Reduced tube feeding dependence by continuous improvements in head and neck radiotherapy <i>L. Van den Bosch (The Netherlands), H.P. van der Laan, A. van der Schaaf, J.G. van den Hoek, E. Oldehinkel, T.W. Meijer, H.H. Verbeek, R.J. Steenbakkers, J.A. Langendijk</i>	OC - 0088
10:50	Acute toxicities in proton therapy of head-neck cancer – a matched analysis of DAHANCA 35 pilot data <i>K. Nowicka-Matus (Denmark), J. Friborg, C.R. Hansen, E. Andersen, M. Bernsdorf, U. Elstrøm, M. Farhadi, C. Grau, J.G. Eriksen, J.G. Eriksen, J. Johansen, M. Nielsen, J.B.B. Petersen, E. Samsøe, P. Sibolt, B. Smulders, K. Jensen</i>	OC - 0089
11:00	Temporal lobe necrosis after proton therapy for skull base tumors and NTCP models evaluation <i>G. Riva (Italy), E. Fiorina, I. Cavallo, S. Molinelli, A. Vai, M. Ciocca, A. Iannalfi, E. Orlandi</i>	OC - 0090
11:10	Brainstem toxicity after proton or photon therapy in children with localized intracranial ependymoma <i>C. Dalmasso (France), C. Alapetite, S. Bolle, F. Tensaouti, A. Lusque, J. Desrousseaux, L. Claude, J. Doyen, S. Supiot, V. Bernier-Chastagner, P. Leblond, A. Ducassou, P. Péran, A. Sévely, M. Roques, A. Laprie</i>	OC - 0091
10:30	Enhanced RBE for late compared to early normal tissue damage in vivo <i>C. Bang Overgaard (Denmark), B. Singers Sørensen, N. Bassler, P. Poulsen, C. Grau, J. Overgaard, M. Krzysztof Sitarz, H. Spejlborg</i>	OC - 0092
11:20	Fast optimization of proton PBS arc therapy plans using early energy layer and spot selection <i>E. Engwall (Sweden), V. Wase, O. Marthin, C. Battinelli, L. Glimelius, R. Bokrantz, B. Andersson, A. Fredriksson</i>	OC - 0093
Track: Radiobiology		
Proffered Papers: Normal tissue radiobiology		
Saturday, 7 May 2022 10:30 - 11:30		
	Chair: Brita Singers Sørensen	-
	Co-Chair: Alexander van der Wiel	-
10:30	Beam pulse structure affects the magnitude of Flash effect in zebrafish embryo <i>E. Beyreuther (Germany), J. Pawelke, M. Brand, S. Hans, K. Hideghéty, K. Hideghéty, J. Jansen, L. Karsch, L. Karsch, E. Lessmann, S. Löck, M. Schürer, J. Seco, E.R. Szabo, U. Schramm</i>	OC - 0094
10:40	Neon minibeam radiotherapy (Ne MBRT): investigating biological mechanisms with synchrotron light <i>I. Martínez-Rovira (Spain), O. Seksek, J. Bergs, R. Hirayama, N. Matsufuji, T. Inaniwa, S. Koike, T. Shimokawa, Y. Prezado, I. Yousef</i>	OC - 0095
10:50	MALDI imaging detects lipid and peptide changes in a mouse model of radiation-induced brain injury <i>T. Suckert (Germany), E. Beyreuther, N. Bürger, J. Müller, E. Bodenstein, M. Meinhardt, M. Boucsein, E. Bahn, P. Hönscheid, M. Krause, A. Dietrich</i>	OC - 0096
11:00	Photon and proton irradiation lead to similar neuroinflammatory responses <i>M. Klaver (The Netherlands), D. Voshart, H. van Weering, F. van Buuren-Broek, A. Scholma, P. van Luijk, R. Coppes, L. Barazzuol</i>	OC - 0097

11:10 Preclinical assessment of protective role of anti-androgens in reducing RT-induced bladder toxicity OC - 0098

R. Vago (Italy), S. Zuppone, G. Colciago, G. Fallara, A. Gebbia, N. Di Muzio, A. Spinelli, C. Fiorino, C. Cozzarini

11:20 Differentially expressed genes and pathways in normal skin fibroblasts after irradiation in vitro OC - 0099

C. Herskind (Germany), A. Sami, A. MacKay

Track: Clinical

Proffered Papers: Late-breaking

Saturday, 7 May 2022 10:30 - 11:30

Chair: Ben Slotman

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Chair: Anna Kirby

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10:30 IMRT vs IMRT and brachytherapy for early oropharyngeal cancers (Brachytrial) : A randomized trial OC - 0100

A. Budrukkar (India), V. Murthy, S. Kashid, M. Swain, V. Rangarajan, S. Ghosh Laskar, S. Kannan, S. Kale, R. Upereti, S. Gawli, P. Pai, G. Pantvaidya, T. Gupta, J.P. Agarwal

10:40 First results of FAST-Forward phase 3 RCT nodal substudy: 3-year normal tissue effects OC - 0101

D. Wheatley (United Kingdom), J. Haviland, J. Patel, M. Sydenham, A. Alhasso, C. Chan, S. Cleator, C. Coles, E. Donovan, A. Kirby, C. Kirwan, Z. Nabi, E. Sawyer, N. Somaiah, I. Syndikus, K. Venables, J. Yarnold, A.M. Brunt, J. Bliss

10:50 DBCG phase III randomized trial of hypo- vs standard fractionated RT in 2879 pN+ breast cancer pts OC - 0102

B. Offersen (Denmark), J. Alsner, H.M. Nielsen, T. Bechmann, M.H. Nielsen, I. Mjaaland, C. Kamby, C. Krkove, T. Lorincz, S. Al-Rawi, E.B. Stoere, A. Schreiber, M. Krause, U. Kasti, L.W. Matthiessen, P. Kedzierawski, T. Marinko, M. Luukkaa, T. Skyttä, M. Jensen, J. Overgaard

11:00 SCALOP2: A multicenter randomized trial of RT dose escalation and nelfinavir in pancreatic cancer OC - 0103

S. Mukherjee (United Kingdom), C. Qi, R. Shaw, J. Bridgewater, G. Radhakrishna, N. Patel, B. Tranter, P. Parsons, S. Falk, H. Wasan, D. Holyoake, R. Roy, M. Scott-Brown, C. Hurt, D. Sebag-Montefiore, T. Maughan, M. Hawkins, P. Corrie

11:10 Stereotactic radiation for treatment of oligometastases (SABR-COMET) – Extended long-term outcomes OC - 0104

D. Palma (Canada), R. Olson, S. Harrow, S. Gaede, A.V. Louie, C. Haasbeek, L. Mulroy, M. Lock, G.B. Rodrigues, B.P. Yaremko, D. Schellenberg, B. Ahmad, S. Senthil, A. Swaminath, N. Kopek, M. Liu, R. Schlijper, G.S. Bauman, J. Laba, X.M. Qu, A. Warner, S. Senan

11:20 PROMPTS RCT of screening MRI for spinal cord compression in prostate cancer (ISRCTN74112318) OC - 0105

D. Dearnaley (United Kingdom), V. Hinder, A. Hijab, G. Horan, N. Srihari, P. Rich, G. Houston, A. Henry, S. Gibbs, R. Venkitaraman, C. Cruickshank, S. Hassan, M. Mason, I. Pedley, H. Payne, S. Brock, R. Wade, A. Robinson, O. Din, K. Lees, J. Murray, C. Parker, C. Griffin, A. Sohaib (Senior Author), E. Hall (Senior Author)

10:30 Late Toxicity and Efficacy of Hypofractionated Prostate RT with Focal Boost in the DELINEATE trial OC - 0106

J. Murray (United Kingdom), A. Tree, L. Potts, R. Gunapala, E. Greenlay, E. Alexander, A. Gao, H. McNair, I. Blasiak-Wal, A. Sohaib, C. Parker, N. deSouza, D. Dearnaley

Track: Clinical

Proffered Papers: Upper GI

Saturday, 7 May 2022 10:30 - 11:30

Chair: Jean-Emmanuel Bibault

- | | | |
|-------|--|-----------|
| 10:30 | Randomised phase 2 trial of preop chemo(radio)therapy in gastric cancer: CRITICS-II interim results | OC - 0107 |
| | <i>M. Verheij (The Netherlands), A.E. Slagter, E.P. Jansen, H.W. van Laarhoven, A. Cats, J. van Sandick, N.C. van Grieken, P. Muller, K. Sikorska</i> | |
| 10:40 | Impact of the Radiation Therapy Quality Assurance in the phase II/III CONCORDE trial. | OC - 0108 |
| | <i>H. LOPEZ (France), G. Créhange, J. Blanc, C. M'vondo, R. Pereira, E. Rio, D. Peiffert, K. Gnep, K. Benezery, P. Ronchin, G. Noel, L. Mineur, A. Drouillard, M. Rouffiac, J. Boustani, A. Bertaut, F. Huguet</i> | |
| 10:50 | External validation of a prediction model for two-year mortality in esophageal cancer cohorts | OC - 0109 |
| | <i>M. Berbee (The Netherlands), C. Muijs, F. Voncken, L. Wee, E. Oldehinkel, A. Schaaf van der, J. Reitsma, E. Schuit</i> | |
| 11:00 | Acute cardiac effects after chemoradiotherapy in esophageal cancer patients - a prospective study | OC - 0110 |
| | <i>M.M.A. Søndergaard (Denmark), M. Nordsmark, K.M. Nielsen, S.H. Poulsen</i> | |
| 11:10 | Prognostic factors for isolated local recurrence after resection of pancreatic ductal adenocarcinoma | OC - 0111 |
| | <i>I. van Goor (The Netherlands), A. Nagelhout, M. Besselink, B. Bonsing, K. Bosscha, L. Brosens, O. Busch, G. Cirkel, R. van Dam, S. Festen, B. Groot Koerkamp, E. van der Harst, I. de Hingh, G. Kazemier, G. Meijer, V. de Meijer, V. Nieuwenhuijs, D. Roos, J. Schreinemakers, M. Stommel, R. Verdonk, H. van Santvoort, Q. Molenaar, L. Daamen, M. Intven</i> | |
| 11:20 | Feasibility and safety of daily adapted MR-guided SABR for pancreatic cancer in the UK | OC - 0112 |
| | <i>J. Good (United Kingdom), B. George, S. Teoh, A. Gaya, R. Owens, L. Aznar Garcia, M. Robinson, A. Martin, K. Chu, S. Mukherjee, T. Maughan</i> | |

Track: Brachytherapy

Proffered Papers: Physics

Saturday, 7 May 2022 10:30 - 11:30

Chair: Jose-Luis Guinot

Co-Chair: Danique Barten

- | | | |
|-------|--|-----------|
| 10:30 | GEC-ESTRO Best Junior Presentation: Brachytherapy treatment verification using a moving phantom | OC - 0113 |
| | <i>T. van Wagenberg (The Netherlands), C. van Beveren, M. Berbee, E. van Limbergen, F. Verhaegen, G. Paiva Fonseca</i> | |
| 10:40 | Improving brachytherapy needle ultrasound conspicuity with an echogenic coating | OC - 0114 |
| | <i>E. Brost (USA), B. Stish, C. Deufel</i> | |

10:50	Monte Carlo study of high atomic number inorganic scintillators for Ir-192 BT in vivo dosimetry <i>V. Kaveckyte (Sweden), E. Buch Jørgensen, J. Graversen Johansen, Å. Carlsson Tedgren</i>	OC - 0115
11:00	Online treatment verification during brachytherapy using an inorganic scintillator – a phantom study <i>J. Johansen (Denmark), E.B. Jørgensen, P. Georgi, K. Tanderup</i>	OC - 0116
11:10	Evaluation of the use of micro-silica bead thermoluminescent detectors for brachytherapy dosimetry. <i>S. Wilby (United Kingdom), S. Jafari, W. Polak, A. Palmer</i>	OC - 0117
11:20	Realization of the absorbed dose to water for the Intrabeam® - Electronic Brachytherapy X-ray source <i>T. Schneider (Germany), J. Solc</i>	OC - 0118

Track: Physics

Proffered Papers: Dosimetry

Saturday, 7 May 2022 10:30 - 11:30

Co-Chair: TBC Chair: TBC

10:30	Recovery of dose profiles of small photon fields in magnetic field using artificial neural networks <i>H.K. Looe (Germany), I. Blum, A. Schöfeld, T. Tekin, B. Delfs, B. Poppe</i>	OC - 0119
10:40	MLC modelling assessment with a set of standardized tests: Results from a multicentric study <i>J. Saez (Spain), R. Bar-Deroma, E. Bogaert, R. Cayez, T. Chow, M. Esposito, V. Feygelman, A.F. Monti, J. Garcia-Miguel, E. Gershkevitch, J. Goossens, C. Herrero, M. Hussein, C. Khamphan, W. Lechner, M. Lemire, A. Nevelsky, D. Nguyen, L. Paganini, M. Passler, L.I. Ramos Garcia, S. Russo, J. Shakeshaft, L. Vieillevisne, V. Hernandez</i>	OC - 0120
10:50	Improving QA: Increasing resolution of detector arrays in dosimetry systems using a simple add-on <i>M. van den Bosch (The Netherlands), S. van het Schip, H. van Velzen, W. de Kruijff</i>	OC - 0121
11:00	Accurate in water electron beam dose measurements using polarization imaging <i>E. Cloutier (Canada), L. Beaulieu, L. Archambault</i>	OC - 0122
11:10	Characterization of small active detectors for electronic brachytherapy dosimetry <i>F. Garcia Yip (Germany), T. Schneider, M. Reginatto, R. Behrens, L. Buermann, F. Grote</i>	OC - 0123
11:20	Skin dose study under rpm marker blocks in breast treatments <i>N. Garcia Apellaniz (Spain), N. Jornet, J. Pérez-Alija, S. Olivares, C. Ansón, F. Suriñach, P. Gallego, H. Vivancos, A. Ruiz, M. Barceló, F. Leo, P. Carrasco</i>	OC - 0124

Track: Physics

Proffered Papers: Photon radiotherapy planning

Saturday, 7 May 2022 10:30 - 11:30

	Chair: Linda Rossi	-
	Co-Chair: Marcel Nachbar	-
10:30	Prioritising toxicities in NTCP-TCP-based treatment plan optimisation <i>H.P. van der Laan (The Netherlands), A. van der Schaaf, L. Van den Bosch, E. Korevaar, S. Both, J. Langendijk</i>	OC - 0125
10:40	Novel methodology for re-irradiation treatment plan optimisation <i>L. Murray (United Kingdom), C. Thompson, C. Pagett, J. Lilley, B. Al-Qaiseh, S. Svensson, K. Eriksson, M. Nix, M. Aldred, L. Aspin, S. Gregory, A. Appelt</i>	OC - 0126
10:50	Validation of lexicographic optimisation-based planning for locally advanced cervical cancer <i>S. Trivellato (Italy), P. Caricato, R. Pellegrini, G. Montanari, V. Faccenda, S. Meregalli, E. Bonetto, S. Arcangeli, E. De Ponti</i>	OC - 0127
11:00	multi-institutional real-world validation of autoplanning for breast cancer <i>C. Fiandra (Italy), S. Zara, A. Alparone, G. Loi, A. Roggio, A. Ciarmatori, I. Benvenuto, A. Poggiu, A. Di Dio, E. Verdolino, F. Rosica, S. Ren Kaiser, L. Strigari, L. Reversi, E. Pierpaoli, P. Ferrari, L. Placidi, S. Comi, E. Infusino, M. Coeli, E. Gino, T. Licciardello, N. Romeo, N. Ciscognetti, G.M. Deotto, S. Cora, S. Pesente, L. Rossi, U. Ricardi, B. Heijmen, M. Marrocco</i>	OC - 0128
11:10	Adaptive Dose Painting vs standard IMRT in a randomized phase II trial: a dosimetric analysis. <i>T. Vercauteren (Belgium), A. De Bruycker, F. Duprez, J. Daisne, A.M.L. Olteanu, S. Deheneffe, D. Berwouts, W. De Neve, I. Madani, L. Paelinck, B. Speleers, I. Goethals, W. De Gersem</i>	OC - 0129
11:20	Pareto front analysis for implementing bone marrow sparing VMAT strategy for cervical cancer <i>S. Kuipers (The Netherlands), J. Godart, A. Corbeau, A. Sharfo, S. Breedveld, J. Mens, R. Nout, M. Hoogeman</i>	OC - 0130

Track: RTT

Proffered Papers: Improving patient experience and quality standards

Saturday, 7 May 2022 10:30 - 11:30

	Chair: Sophie Boisbouvier	-
		-
10:30	Safety culture and incident learning systems in radiation oncology across Australia and New Zealand. <i>L. Adamson (Australia), D. Thwaites, R. Beldham-Collins, J. Sykes</i>	OC - 0131
10:40	Identifying the priority challenges of facilitating national proton beam therapy clinical trials <i>L. Davies (United Kingdom), J. Parker, P. Teles Amaro, L. Whiteside, C. Eccles, R. Bailey, S. Falk, J. Webb, L. McHugh</i>	OC - 0132
10:50	Patient Experience of MR-guided Radiotherapy using a 1.5T MR-Linac <i>J. Westerhoff (The Netherlands), S. de Mol van Otterloo, T. Leer, L. Daamen, R. Rutgers, L. Meijers, M. Intven, H. Verkooijen</i>	OC - 0133
11:00	Patient-reported treatment experience is comparable for MR-linac and conventional linac	OC - 0134

K. Antonissen (The Netherlands), I. van Dijk - Stoltenborg, K. Brouwer - Ezendam, T. Lindeboom - Smit, M. den Hartogh, D. Schuring, P.M. Jeene

- 11:10 Predicting patient-reported symptom clusters in lung cancer patients: a machine learning approach OC - 0135

E. Rammant (Belgium), E. Deman, L. Poppe, C. Billiet, M. Lambrecht, R. Bultijnck, A. Van Hecke, D. Azria, J. Chang-Claude, A. Choudhury, D. De Ruysscher, B. Rosenstein, P. Symonds, R. Valdagni, A. Vega, A. Webb, C. West, V. Fonteyne, L. Veldeman, Y. Lievens, S. Van Hoecke

- 11:20 Acute toxicity reported by patients with prostate cancer receiving online MR-guided radiotherapy OC - 0136

P.K. Møller (Denmark), L. Dysager, U. Bernchou, A.S. Bertelsen, C. Brink, F. Mahmood, H.R. Jensen, O. Hansen, C.J. Nyborg, H. Pappot, K.B. Dieperink

Track: Radiobiology

Mini-Oral: 03: Radiobiology

Saturday, 7 May 2022 10:30 - 11:30

Mini-Oral Theatre 1

Chair: Paul Span

-

Co-Chair: Kim Kampen

-

- 10:30 A basis for combining atovaquone-mediated hypoxia alleviation with immunotherapy plus radiotherapy MO - 0137

G. Rodriguez-Berruete (United Kingdom), R. Puliyadi, R. Prevo, C.W. Pugh, G.S. Higgins

- 10:30 cGAS localization to micronuclei is dictated by nuclear chromatin status pre-DNA damage MO - 0138

S. Harding (Canada), K. MacDonald, S. Nicholson, M. Tageldeen, C. Arrowsmith

- 10:30 PORT-C improves LRC in a subset of patients with intermediate-risk HNSCC: A matched pair analysis MO - 0139

S. Patil (Germany), A. Linge, H. Hiepe, M. Grosser, F. Lohaus, V. Gudziol, A. Nowak, I. Tinhofer, V. Budach, M. Guberina, M. Stuschke, P. Balermipas, C. Rödel, H. Schäfer, A. Grosu, A. Abdollahi, J. Debus, C. Belka, S. Pigorsch, S.E. Combs, S. Boeke, D. Zips, M. Baumann, M. Krause, S. Löck

- 10:30 Glutamine transporters as regulators of prostate cancer radioresistance MO - 0140

U. Kahya (Germany)

- 10:30 Sulfasalazine radiosensitizes hypoxic colorectal cancer cells through the inhibition of xCT. MO - 0141

L. Kerkhove (Belgium), I. Dufait, M. De Ridder, S. de Mey, F. Geirnaert, K.L. Law, H. Vandenplas, T. Gevaert

- 10:30 Lack of robustness of in vitro clonogenic assays leads to serious uncertainty in RBE determination MO - 0142

R. Koch (Germany), E. Bahn

- 10:30 Cancer-Associated Fibroblasts in radiotherapy: bystanders or protagonists? MO - 0143

I. Martinez-Zubiaurre (Norway), T. Hellevik, R. Berzaghi, K. Lode, N. Yang

- 10:30 Deep learning to detect nuclei and DNA damage foci for ex vivo tissue radiation sensitivity analysis MO - 0144

I. Lauwers (The Netherlands), K. Pachler, M. Capala, N. Sijtsema, M. Hoogeman, G. Verduijn, S. Petit

Track: Clinical

Mini-Oral: 04: Sarcoma, skin cancer, malignant melanoma

Saturday, 7 May 2022 10:30 - 11:30

Mini-Oral Theatre 2

Chair: Rick Haas

-

Co-Chair: Pedro Meireles

-

Prospective single-arm trial of preoperative 42.75 Gy in 15 fractions for soft tissue sarcoma MO - 0145

B.A. Guadagnolo (USA), D. Mitra, A. Farooqi, C. Hempel, C. Dorber, R. Mathai, T. Willis, W. Wang, R. Ratan, N. Somaiah, K. Torres, K. Hunt, C. Scally, E. Keung, R. Satcher, J. Bird, P. Lin, B. Moon, V. Lewis, C. Roland, A. Bishop

RT with hyperthermia in recurrent and radiation-induced sarcomas: preliminary results of NCT04398095 MO - 0146

M. Spalek (Poland), A. Borkowska, M. Wągradzki, P. Castaneda-Wysocka, P. Rutkowski

Efficacy of perioperative radiotherapy in extraskeletal myxoid chondrosarcoma MO - 0147

J. Stelmes (Switzerland)

Clinical outcome after proton therapy for malignant and benign peripheral nerve sheath tumors MO - 0148

N. Bachmann (Switzerland), D. Leiser, A. Pica, B. Bachtiary, D.C. Weber

Preliminary results of carbon ion radiotherapy for malignant peripheral nerve sheath tumors. MO - 0149

A. Chalaszczyk (Italy), M.R. Fiore, A. Barcellini, V. Vitolo, A. Ghirelli, S. Russo, S. Molinelli, A. Vai, E. Orlandi

Sacral insufficiency fractures after CIRT for sacral chordoma: dosimetric and LET analysis. MO - 0150

M.R. Fiore (Italy), A. Ghirelli, S. Molinelli, G. Magro, A. Chalaszczyk, A. Mairani, A. Donatelli, S. Imparato, M. Ciocca, E. Orlandi

Outcomes after hypofractionated radiotherapy for non-metastatic Merkel cell carcinoma MO - 0151

K. Liu (USA), M. Milligan, J. Schoenfeld, R. Tishler, A. Ng, P. Devlin, E. Fite, G. Hanna, A. Silk, C. Yoon, M. Thakuria, D. Margalit

Hypofractionated versus conventional adjuvant radiotherapy for lymph node metastases of melanoma MO - 0152

L.H. Holtkamp (Australia), S.N. Lo, M. Drummond, J.F. Thompson, O.E. Nieweg, A.M. Hong

Track: Physics

Poster Discussion: 03: Functional imaging & modelling

Saturday, 7 May 2022 10:30 - 11:30

Poster Station 1

Chair: Eliana Maria Vasquez Osorio

-

10:30 Comparison of methods for T1-w brain MRI intensity normalization for quantitative MRI analysis PD - 0153

P. Wallimann (Switzerland), M. Mayinger, M. Bogowicz, M. Guckenberger, N. Andratschke, S. Tanadini-Lang, J.E. van Timmeren

- 10:30 Early prediction of therapeutic response by regular functional MRI during the treatment of NPC *PD - 0154*
W.L. Mui (Hong Kong (SAR) China), A.W.M. Lee, W.T. Ng, V.H.F. Lee, V. Vardhanabhuti, S.Y. Man, D.T.T. Chua, X.Y. Guan
- 10:30 Optimising oxygen-enhanced MRI for patients with head and neck carcinoma *PD - 0155*
M. Dubec (United Kingdom), R.A. Little, D.L. Buckley, C. Hague, J. Price, M. Berks, S. Cheung, A. Salah, D. Higgins, J.H. Naish, J.C. Matthews, M. van Herk, G.J. Parker, A. McPartlin, J.P. O'Connor
- 10:30 Functionality-optimised radiotherapy for lung cancer patients using 4DCT *PD - 0156*
A. Quinet (Belgium), Z. Paquier, Y. Jourani, P. Fernandes, P. Van Houtte, D. Van Geestel, N. Reynaert
- 10:30 Change in FDG-PET uptake of bone marrow: Radiation dose-response and possible compensatory effect *PD - 0157*
A.B. Olin (Denmark), I.R. Vogelius, L. Højgaard, F.L. Andersen, B.M. Fischer
- 10:30 Evaluation of ERI as response predictor in cervical cancer: a retrospective study on T2 and DWI MR *PD - 0158*
D. Cusumano (Italy), R. Autorino, L. Boldrini, B. Gui, L. Russo, S. Persiani, G. Panza, A. Nardangeli, M. Campitelli, M.G. Fernandina, G. Macchia, V. Valentini, M.A. Gambacorta
- 10:30 Deep learning and radiomics of PET/CT images for head and neck cancer treatment outcome prediction *PD - 0159*
B.N. Huynh (Norway), A.R. Groendahl, S.E.R. Langberg, O. Tomic, E. Malinen, E. Dale, C.M. Futsaether
- 10:30 Osteoradionecrosis of the mandible in head and neck cancer patients: dose-volume correlations *PD - 0160*
C. Muñoz-Montplet (Spain), J. Marruecos, I. Oliveras, M. Foix, D. Jurado-Bruggeman
- 10:30 Single-patient microbiota & inflammation profiles modulate dose-response curves for acute toxicity *PD - 0161*
E. Gioscio (Italy), T. Rancati, L. De Cecco, A. Barbara, B. Noris Chiorda, F. Badenchini, T. Giandini, A. Cicchetti, N. Zaffaroni, V. Doldi, E. Mancinelli, M.S. Serafini, A. Devecchi, L. Andreoli, E. Orlandi, R. Valdagni
- 10:30 Non-parametric modelling and validation to identify pericardial regions predisposing risk of death *PD - 0162*
M. Thor (USA), J. Zhu, A. Apte, P. Tran, J.H. Oh, A. Shepherd, A. Rimner, A.R. Tannenbaum, J.O. Deasy
- 10:30 Feasibility of Image-Based Data Mining in Breast Radiotherapy *PD - 0163*
T. Jaikuna (United Kingdom), M. Aznar, P. Hoskin, M. Van Herk, C. M L West, A. David, S. Gutiérrez-Enríquez, T. Rancati, B. S. Rosenstein, D. de Ruysscher, E. Sperk, P. Symonds, C. J Talbot, M. Carmen De Santis, A. Vega, A. Webb, J. Chang-Claude, P. Seibold, Z. Lingard, E. Vasquez Osorio
- 10:30 Proton therapy reduces the incidence of severe lymphopenia compared with photon *PD - 0164*
A. Abravan (United Kingdom), P. Sitch, M. van Herk, S. Gaito, A. McPartlin, S. Sashidaran, E. Smith, G. Whitfield, S. Pan

Track: Clinical

Poster Discussion: 04: Paediatrics, haematology

Saturday, 7 May 2022 10:30 - 11:30

Poster Station 2

- 10:30 The risk of neurocognitive impairment and the impact of sparing the hippocampus during pediatric CSI *PD - 0165*
D. Gram (Denmark), P. Brodin, T. Björk-Eriksson, K. Nysom, P. Munck af Rosenschöld
- 10:30 Nasopharyngeal Carcinoma in Children and Adolescents: Result of Patients Treated with 61,2-63 Gy *PD - 0166*
M. Dağdelen (Turkey), S. Kanat, T. Kurt Çatal, H. Yıldırım, E. Sedef Akovalı, S. Çavdar Karaçam, Ö. Uzel
- 10:30 Acute, late toxicities & early outcomes in children after proton therapy for head & neck malignancy *PD - 0167*
A. Pilar (United Kingdom), D. Saunders, S. Pan, S. Gaito, F. Charlwood, M. Lowe, E. Smith, A. Mcpartlin, N. Thorp
- 10:30 Early outcomes after proton therapy for paediatric and TYA pelvic sarcomas *PD - 0168*
M. Li (United Kingdom), S. Sashidharan, A. France, M. Clarke, N. Thorp
- 10:30 Active breathing control for children and teenage patients receiving thoracic radiotherapy *PD - 0169*
J. Gough (United Kingdom), S. Mowat, K. Robinson, L. Sellman, M. Youings, H. Mandeville
- 10:30 Breath-hold proton therapy for mediastinal lymphomas: the expected effect on cardiac toxicity *PD - 0170*
M. Berbee (The Netherlands), F. Vaassen, M. Cobben, K. Klugt van der, I. Lubken, B. Ta, L. Murrer, R. Canters
- 10:30 Lung function after total body irradiation in myeloablative allogeneic stem cell transplantation *PD - 0171*
X. Wang, J. Mortensen, H. Sengeloev, F. Kjaer-Kristoffersen, P. Meidahl Petersen, L. Specht (Denmark)
- 10:30 Multi-parameter patient selection strategy for Hodgkin lymphoma proton therapy *PD - 0172*
P. Loap (France), A. Mirandola, L. De Marzi, A. Barcellini, V. Vitolo, A. Iannalfi, R. Dendale, Y. Kirova, E. Orlandi
- 10:30 Deep Inspiration breath-hold in gastric lymphomas. *PD - 0173*
P. Meidal Petersen (Denmark), L.A. Rechner, L. Specht
- 10:30 Atlas-based auto-contouring of breast tissue in young female lymphoma patients *PD - 0174*
H. Chamberlin (United Kingdom), T. Jaikuna, C. Anandadas, R. Cowan, S. Astley, S. Howell, J. Radford, D. Azria, S. Gutiérrez Enriquez, T. Rancati, B. Rosenstein, D. de Ruysscher, E. Sperk, P. Symonds, C. Talbot, M.C. De Santis, A. Vega, L. Veldeman, A. Webb, C. West, J. Chang-Claude, P. Seibold, Z. Lingard, E. Vasquez Osorio, M. Aznar
- 10:30 Cardiac conduction system exposure during modern radiation therapy for mediastinal Hodgkin lymphoma *PD - 0175*
P. Loap (France), A. Mirandola, L. De Marzi, A. Barcellini, V. Vitolo, A. Iannalfi, R. Dendale, E. Orlandi, Y. Kirova
- 10:30 Efficacy and safety of total lymphoid irradiation in chronic lung allograft dysfunction phenotypes *PD - 0176*
A.A.A. Geng Cahuayme (Spain), M. Altabas González, M. López Meseguer, M. Vazquez Varela, B. Saez Gimenez, J. Garre Cristau, E. Recalde Vizcay, A. Giraldo Marín, J. Giralte López de Sagredo

Track: Interdisciplinary

Symposium: Presidential Symposium: Learning from every patient

Saturday, 7 May 2022 11:40 - 12:40

Chair: Anna Kirby

-

Chair: Ben Slotman

-

11:40 Introduction

SP - 0177

B. Slotman (The Netherlands)

11:55 Clinical trials: Innovative approaches to overcome barriers

SP - 0178

D. Palma (Canada)

12:10 Learning from patients

SP - 0179

J. Haviland (United Kingdom)

12:25 Learning from large patient cohorts

SP - 0180

B. Offersen (Denmark)

Track: Interdisciplinary

Joint Symposium: ESTRO-ASTRO: Is integration with immunotherapy the new challenge for radiation oncologists?

Saturday, 7 May 2022 14:15 - 15:30

Chair: Laura Dawson

-

Chair: Tim Illidge

-

14:15 Photon with immunotherapy/immunological consequences

SP - 0181

S. Formenti (USA)

14:33 Particle with immunotherapy/immunological consequences

SP - 0182

A. Abdollahi (Germany)

14:51 ESTRO-ASTRO: Is integration with immunotherapy the new challenge for radiation oncologists? Brachytherapy with immunotherapy

SP - 0183

E. Van Limbergen (The Netherlands)

15:09 Impact of radiation dose and field size on immune responses

SP - 0184

A. Sharabi (USA)

Track: Radiobiology

Symposium: Emerging radiobiological modifiers

Saturday, 7 May 2022 14:15 - 15:30

Chair: Ludwig Dubois

-

	Co-Chair: Pierre Montay-Gruel	-
14:15	Role of serine/glycine metabolism in radioresistance <i>K. Kampen (The Netherlands)</i>	SP - 0185
14:40	Nanomedicine in radiotherapy: Potential, challenges and emerging technologies <i>K. Prise (United Kingdom)</i>	SP - 0186
15:05	CRISPR-Cas combination therapy: What's in it for radiotherapy? <i>L. Marignol (Ireland)</i>	SP - 0187

Track: Clinical

Symposium: Large-scale collection of PROs for clinical use during follow-up

Saturday, 7 May 2022 14:15 - 15:30

	Chair: Lara C. Pedro	-
	Co-Chair: Sebastien Guihard	-
14:15	PRO for reporting radiation treatment outcome: How to select the right PROs? <i>I. Bhattacharya (United Kingdom)</i>	SP - 0188
14:33	Nation-wide app-based collection of PROs in early breast cancer patients treated with radiation therapy - The DBCG experience <i>R. Zachariae (Denmark), B. Offersen, N. Kroman, H. Melgaard Nielsen, T. Damsgaard, J. Overgaard, S. Lauritsen, E. Eskildsen, A. Bonde Jensen, P. Christiansen</i>	SP - 0189
14:51	Large-scale collection of PRO from patients treated with radiation for gynaecological malignancy <i>K. Kirchheiner (Austria)</i>	SP - 0190
15:09	ePROs in palliative radiotherapy <i>E. Oldenburger (Belgium)</i>	SP - 0191

Track: Clinical

Symposium: Lymphopenia

Saturday, 7 May 2022 14:15 - 15:30

	Chair: Eric Deutsch	-
	Co-Chair: Patricia Fernandes	-
14:15	Lymphopenia: Are we reinventing the wheel? <i>E. Deutsch (France)</i>	SP - 0192
14:33	How can we reduce the chance of patients developing lymphopenia: Protons vs photons? <i>A. Abravan (United Kingdom)</i>	SP - 0193
14:51	What is the impact of technique on the risk and severity of treatment-induced lymphopenia? <i>C. Muijs (The Netherlands)</i>	SP - 0194

15:09 How can we use AI in daily practice to minimise the risk of developing lymphopenia when irradiating solid tumours? SP - 0195

D. Routman (USA)

Track: Brachytherapy

Symposium: Preserving brachytherapy skills for the future

Saturday, 7 May 2022 14:15 - 15:30

Chair: Ina Jürgenliemk-Schulz -

Co-Chair: Artur Chyrek -

14:15 Status of brachytherapy education for brachytherapists and future needs in Europe SP - 0196

A. Sturdza (Canada)

14:33 Status of brachytherapy education for brachytherapists and future needs in North America SP - 0197

M. Kamrava (USA)

14:51 Status of brachytherapy education for medical physicists and future needs SP - 0198

C. Kirisits (Austria)

15:09 Lessons learned from brachytherapy education in Italy SP - 0199

A. Vavassori (Italy), R. Mazzarotto, C. Aristei, L. Tagliaferri

Track: Physics

Joint Symposium: ESTRO-AAPM: 50 shades of FLASH - From experimental beam lines to the clinic

Saturday, 7 May 2022 14:15 - 15:30

Chair: T. Lomax (Switzerland) -

Chair: TBC -

14:15 Radiobiology: What we know, what we don't, what the data tells us SP - 0200

B. S. Sørensen (Denmark)

14:33 Commissioning an experimental beam line for in vivo FLASH experiments SP - 0201

M. Kim (USA)

14:51 Translating FLASH into the clinic: Beam delivery and dosimetry SP - 0202

R. Moeckli (Switzerland)

15:09 Translating FLASH into the clinic: Treatment planning and preparing for clinical trials SP - 0203

A. Mascia (USA)

Track: Physics

Symposium: Automatic planning: Towards a sustainable future

Saturday, 7 May 2022 14:15 - 15:30

	Chair: Kari Tanderup	-
	Co-Chair: Jennifer Dhont	-
14:15	Keeping automatic planning up to date: How to incorporate changes to dose prescription, technique and OAR constraints <u>L. Marrazzo (Italy)</u>	SP - 0204
14:33	Automated planning for online adaptive radiotherapy <u>M. Palacios (The Netherlands)</u>	SP - 0205
14:51	How can treatment planning be improved if nobody can do standard planning anymore? <u>L. Rossi (The Netherlands)</u>	SP - 0206
15:09	Autoplaning for brachytherapy: Does it work? <u>R. Bijman (The Netherlands)</u>	SP - 0207
Track: RTT		
Symposium: What's new in RTT advanced practice?		
Saturday, 7 May 2022 14:15 - 15:30		
	Chair: Yatman Tsang	-
	Co-Chair: Amanda Webster	-
14:15	RTT advanced practice in IGRT: Ancient history or new era? <u>N. Anderson (Australia)</u>	SP - 0208
14:40	Individualised radiotherapy: Roles of RTT advanced practice <u>A. Duffton (United Kingdom)</u>	SP - 0209
15:05	Innovations in patient care through RTT advanced practice <u>L. Otto-Vollaard (The Netherlands)</u> , S. Quint, J. Nuytens, I. Steinvoot-Draat, I. de Pree, O. Tims	SP - 0210
Track: Physics		
Mini-Oral: 05: Image acquisition & processing		
Saturday, 7 May 2022 14:15 - 15:15		Mini-Oral Theatre 1
	Chair: TBC	-
	Co-Chair: Malin Kügele	-
	Inter-observer variability in MR-based target volume delineation of uveal melanoma <u>L. Klaassen (The Netherlands)</u> , M. Jaarsma-Coes, B. Verbist, K. Vu, Y. Klaver, M. Rodrigues, T. Ferreira, C. Nabarro, G. Luyten, C. Rasch, M. van Herk, J. Beenakker	MO - 0211
	Dosimetric and geometric impact of on-patient placement of air coils in a clinical MRI-only workflow <u>J. Scherman (Sweden)</u> , S. af Wetterstedt, E. Persson, L.E. Olsson, C. Jamtheim Gustavsson	MO - 0212

Is Monte Carlo uncertainty a good predictor of manual adjustments of deep-learning contours?	MO - 0213
<i>G. Ionescu (United Kingdom), P. Looney, J.M.Y. Willaime, F. Vaasen, W. van Elmpt, M.J. Gooding</i>	
Integral proton radiography scatter reduction through pencil beam pixel weighting and thresholding	MO - 0214
<i>D. Robertson (USA), C. Darne, C. Fekete, S. Beddar</i>	
3DCT reconstruction from single X-ray projection using Deep Learning	MO - 0215
<i>E. Loyer (Belgium), D. Dasnoy-Sumell, B. Macq</i>	
Integrated-mode proton radiography using 2D lateral projections and a scintillator	MO - 0216
<i>M. Simard (United Kingdom), D. Robertson, S. Beddar, C. Collins-Fekete</i>	
Deep learning auto-segmentation vs human inter observer variability of normal tissue in the brain	MO - 0217
<i>J. Kallehauge (Denmark), C.S. Byskov, C.R. Hansen, Y. Lassen-Ramshad, A. Trip, S. Lukacova, L. Haldbo-Classen, E.L. Lorenzen</i>	
A likelihood-based particle imaging filter using prior information	MO - 0218
<i>R. Fullarton (United Kingdom), L. Volz, N. Dikaos, R. Schulte, G. Royle, P. Evans, J. Seco, C. Collins Fekete</i>	

Track: Clinical

Mini-Oral: 06: GI

Saturday, 7 May 2022 14:15 - 15:15

Mini-Oral Theatre 2

Chair: James Good

-

Co-Chair: Daniel Portik

-

14:15	Quality assurance of preoperative radiotherapy in the CRITICS-II gastric cancer trial	MO - 0219
<i>A. Slagter (The Netherlands), M. Verheij, J. Buijsen, E. Hendriksen, M. Hulshof, S. Mook, K. Neelis, V. Oppedijk, T. Rozema, M. van der Sangen, E. Jansen</i>		
14:15	Dose-volume constraints for gastric and duodenal toxicity in pancreas moderately hypofractionated RT	MO - 0220
<i>S. BROGGI (Italy), P. Passoni, P. Tiberio, A. Cicchetti, B. Longobardi, N. Slim, M. Reni, A. Del Vecchio, N.G. Di Muzio, C. Fiorino</i>		
14:15	Short-term toxicity outcomes after MR-guided SBRT for (peri-)pancreatic tumors on a 1.5T MR-linac	MO - 0221
<i>H. Eijkelenkamp (The Netherlands), G. Grimbergen, H. Heerikens, G. Meijer, L. Daamen, Q. Molenaar, H. van Santvoort, B. Erickson, W. Hall, M. Intven</i>		
14:15	Propensity score-based comparison of SBRT versus thermal ablation for hepatocellular carcinoma	MO - 0222
<i>C. Franzese (Italy), D. Poretti, T. Comito, R. Muglia, L. Lo Faro, C. Ceriani, V. Pedicini, A. Teriaca, E. Lanza, F. D'antuono, L. Solbiati, P. Mancosu, S. Tomatis, M. Scorsetti</i>		
14:15	Simulation-CT Skeletal Muscle Index as a Biomarker for CRT compliance and survival in rectal cancer	MO - 0223
<i>S. Reina (Italy), G. Chiloio, M. Cintoni, B. Corvari, E. Meldolesi, E. Rinninella, G. Pulcini, M. Palombaro, A. Gasbarrini, M.C. Mele, V. Valentini, M.A. Gambacorta</i>		

- 14:15 Simultaneous integrated boost in short-course radiotherapy; a novel approach for rectal cancer MO - 0224
S. Vieira (Portugal), O. Parés, J. Stroom, C. Greco
- 14:15 Validation of outcome measures in a pooled analysis of rectal cancer trials of 5473 patients MO - 0225
G. Chiloiri (Italy), B. Gottardelli, A. Romano, C. Masciocchi, J. Van Soest, K. Bujko, R. Glynn-Jones, J. Gérard, S.Y. Ngan, C. Rödel, A. Sainato, C.J.H. van de Velde, A. Damiani, A. Dekker, M.A. Gambacorta, V. Valentini
- 14:15 Clinical outcomes of HIV-positive patients with anal cancer in the ANABASE multicentric cohort MO - 0226
C. Evin (France), L. Quéro, K. Le Malicot, S. Blanchet-Deverly, E. François, C. Buchalet, C. Lemanski, N. Baba Hamed, E. Rivin del Campo, L. Bauwens, P. Pommier, A. Lièvre, D. Tougeron, V. Macé, G. Sergeant, O. Diaz, D. Zucman, F. Mornex, C. Locher, A. De la Rochefordière, V. Vendrely, F. Huguet

Track: Physics

Poster Discussion: 05: Intra-fraction & real-time adaptation

Saturday, 7 May 2022 14:15 - 15:15

Poster Station 1

Chair: Jan-Jakob Sonke

- 14:15 reconstructing the dosimetric impact of intra-fractional prostate motion in MR-guided radiotherapy PD - 0227
Y. Xiong (Germany), M. Rabe, L. Nierer, S. Corradini, C. Belka, M. Riboldi, G. Landry, C. Kurz
- 14:15 Time-dependent non-linear respiratory tracking models to cope with complex breathing motion patterns PD - 0228
M. Giżyńska (The Netherlands), Y. Seppenwoolde, B. Heijmen
- 14:15 3D abdominal organ motion correlates strongly with the diaphragm during prolonged breath-holds PD - 0229
J. Veldman (The Netherlands), Z. van Kesteren, E. Gunwhy, M. Parkes, M. Stevens, J. van den Aardweg, G. van Tienhoven, A. Bel, I. van Dijk
- 14:15 Correlation between External and Internal Tumour Motion in Lung Stereotactic Ablative Radiotherapy PD - 0230
A. Ali (United Kingdom), J. Greenwood, L. Belshaw, G. Whitten, D. Irvine, A. Hounsell, C. McGarry
- 14:15 Impact of respiratory motion for breast cancer proton therapy in free breathing PD - 0231
L.B. Stick (Denmark), M.F. Jensen, C.J.S. Kronborg, E.L. Lorenzen, H.R. Mortensen, P.W. Nyström, S.E. Petersen, P. Randers, L.M.H. Thai, E.S. Yates, B.V. Offersen
- 14:15 Large intra-fractional tumor position variations in deep-inspiration breath-hold lung SBRT PD - 0232
W. Ottosson (Denmark), N.C. Rand Mømsen, S. Fortin Jørgensen, S.N. Bekke, P. Sibolt, C.P. Behrens, G. Fredberg Persson
- 14:15 Breathing amplitude is reduced by rapid shallow breathing at 60 breaths/minute PD - 0233
Z. van Kesteren (The Netherlands), J. Veldman, M. Parkes, G. Tienhoven, J. van den Aardweg, M. Stevens, A. Bel, I. van Dijk
- 14:15 Temporal accuracy for gated radiotherapy beams PD - 0234
J. Snäll (Sweden), A. Thoft, M. Kügele, A. Edvardsson

14:15	AI-based online adaptive CBCT-guided radiotherapy for bladder cancer using SIB and fiducial markers <i>S. Azzarouali (The Netherlands), K. Goudschaal, D. den Boer, J. Visser, M. Hulshof, A. Bel</i>	PD - 0235
14:15	Auto Beam Hold intrafraction monitoring performance for prostate radiotherapy with a hydrogel spacer <i>J. Bowden (United Kingdom), A. Starke, J. Galvin, M. Carroll, G. Smyth, S.L. Morris</i>	PD - 0236
14:15	The dosimetric impact of motion during ungated MR guided SBRT of adrenal gland metastases is limited <i>U. Bernchou, S.W. Hasler, F. Mahmood, A. Bertelsen, T. Schytte, C. Brink (Denmark)</i>	PD - 0237
14:15	Experimental demonstration of conformal carbon ion therapy for irregularly moving tumors <i>T. Steinsberger (Germany), M. Donetti, M. Lis, L. Volz, M. Wolf, M. Durante, C. Graeff</i>	PD - 0238

Track: Clinical

Poster Discussion: 06: CNS

Saturday, 7 May 2022 14:15 - 15:15

Poster Station 2

Chair: TBC

14:15	Radiotherapy dose escalation in glioblastoma in the era of functional imaging: A prospective study <i>R. Madan (India), C. draksham, N. Kumar, G. Trivedi, A.K. Yadav, M. Tripathi, S. Goyal, D. Khosla, R. Basher, C.K. Ahuja</i>	PD - 0239
14:15	Development of mid-treatment biological image guided adaptive radiotherapy (BIGART) for glioblastoma <i>M. Gupta (United Kingdom), L. Mancini, S. Bisdas, S. Manolopoulos, M. Kosmin</i>	PD - 0240
14:15	Resilience, spirituality and survival outcome in glioblastoma patients after radiotherapy <i>N. Dinapoli (Italy), L. Dinapoli, S. Chiesa, C. Mazzarella, E. Marconi, D.P.R. Chieffo, A. Fiorentino, V. Valentini, M. Balducci</i>	PD - 0241
14:15	Parameters driving oncologists' selection of glioma grade 2 and 3 patients for proton therapy <i>C. Skinnerup Byskov (Denmark), C. Rønn Hansen, R. Hedegaard Dahlrot, L. Dysager, T. Lignell Guldberg, L. Haldbo-Classen, S. Hansen, C. Aaqvist Haslund, M. Høyer, S. Lukacova, A. Muhic, P. Witt Nyström, Y. Ramshad-Lassen, A. Kirsten Trip, B. Weber, J. Folsted Kallehauge</i>	PD - 0242
14:15	Pediatric diffuse intrinsic pontine glioma treated with radiotherapy: the National multicenter study <i>H.J. Kim (Korea Republic of), J.H. Lee, D.H. Lim, Y. Kim, S. Park, S.D. Ahn, I.A. Kim, J.H. Im, J.W. Chung, J. Kim, I.H. Kim, H.I. Yoon, C. Suh</i>	PD - 0243
14:15	Post-radiation lesions are a favorable prognostic factor in diffuse glioma <i>A. van der Boog (The Netherlands), S. David, F. Cialdella, J.W. Dankbaar, T.J. Snijders, P.A. Robe, J.J. Verhoeff</i>	PD - 0244
14:15	Changes in cortical blood flow >1 year after radiation for glioma using arterial spin labelling MRI <i>M. Kosmin (United Kingdom), M. Gupta, M. Sokolska, B. Eiben, J. Markus, H. Hyare</i>	PD - 0245
14:15	The role of adjuvant RT in craniopharyngioma in 2021 WHO new classification of CNS tumor era	PD - 0246

B.M. Lee (Korea Republic of), J. Cho, J.H. Chang, S. Kang, E. Kim, J.H. Moon, S.S. Ahn, Y.W. Park, C. Suh, H.I. Yoon

14:15 Giant Vestibular Schwannomas – 1 versus 3 fractions? PD - 0247

L. Solway (United Kingdom), M. Hickman, S. Meade, H. Benghiat, H. Augustus, R. Stange, T. Jackson, G. Heyes, P. Monksfield, A. Kay, R. Irving, S. Chavda, A. Hartley, P. Sanghera

14:15 Treatment outcomes following Cyberknife radiosurgery for refractory Trigeminal Neuralgia. PD - 0248

M. Amorim (Portugal), C. Silva, M.A. Costa, G. Fonseca, C. Calçada, J. Conde, O. Carvalhosa, S. Ramos, J. Vale, A. Cavaco, P. Vieira, P. Genésio, P. Costa

14:15 Dynamics in the Sizes of Brain Metastases to Predict Survival Outcome of Stereotactic Radiotherapy PD - 0249

S.F. Lee (Hong Kong (SAR) China), P.L. Yip, C.W.H. Choi, V. Lee, A. Wong

14:15 Therapeutic use of Linac-based SRS in malignant spasticity: early results from a prospective trial PD - 0250

L. Nicosia (Italy), R. Avesani, E. Rossato, F. Ferrari, F. Cuccia, V. Figlia, N. Gaj-Levra, R. Mazzola, F. Ricchetti, M. Rigo, G. Attinà, C. Vitale, F. Marchioretto, M. Zamperini, A. De Simone, R. Ruggeri, F. Alongi

Track: Interdisciplinary

Award Lecture: E van der Schueren Award

Saturday, 7 May 2022 16:00 - 16:25

16:00 Introduction SP - 0251

16:05 Radiotherapy: Art or science? SP - 0252

P. Hoskin (United Kingdom)

Track: Interdisciplinary

Award Lecture: Jens Overgaard Legacy Award

Saturday, 7 May 2022 16:25 - 16:50

16:25 Introduction by Jens Overgaard SP - 0253

16:30 Evidence generating radiation therapy trials and guidelines through collaboration SP - 0254

B. Offersen (Denmark)

Track: Interdisciplinary

Proffered Papers: Personalised radiation therapy

Saturday, 7 May 2022 16:55 - 17:55

Chair: Wilko Verbakel -

Co-Chair: Sebastian Christ -

16:55 Dysphagia at 1 year is associated with mean dose to the inferior section of the brainstem OC - 0255

E.M. Vasquez Osorio (United Kingdom), A. Abravan, A. Green, M. van Herk, D. Ganderton, A. McPartlin

17:05 Biomarker development from joint analyses of HNSCC xenografts and patients treated by PORT-C OC - 0256

A. Linde (Germany), S. Patil, K. Gurtner, M. Grosser, F. Lohaus, V. Gudziol, A. Nowak, I. Tinhofer, V. Budach, M. Guberina, M. Stuschke, P. Balcermpas, C. Rödel, H. Schäfer, A.

Grosu, A. Abdollahi, J. Debus, C. Belka, S. Pigorsch, S.E. Combs, S. Boeke, D. Zips, M. Baumann, S. Löck, M. Krause

- 17:15 Impact of RT dose and fractionation on biomarkers of systemic immune responses in early stage NSCLC OC - 0257
E. Gkika (Germany), E. Firat, S. Adebahr, I. Popp, G. Radicioni, J. Exner, A. Rühle, T. Sprave, U. Nestle, N. Nicolay, G. Niedermann, D. Duda, A. Grosu
- 17:25 External validation of osteoradionecrosis NTCP models in head and neck cancer patients. OC - 0258
N. den Haan (The Netherlands), S. van Dijk, L. van den Bosch, T. van Zon-Meijer, A. van den Hoek, R. Steenbakkers, H. Verbeek, E. Oldehinkel, A. van der Schaaf, H.P. van der Laan, H. Langendijk
- 17:35 Focal boosting in prostate cancer: risk modelling for individualized therapy OC - 0259
K. Guricova (The Netherlands), V. Groen, F. Pos, E. Monninkhof, K. Haustermans, R.J. Smeenk, J. van der Voort van Zyp, C. Draulans, S. Isebaert, P.J. van Houdt, L.G.W. Kerkmeijer, U.A. van der Heide
- 17:45 Predictive value of inflammatory markers in LARC patients undergoing neoadjuvant chemoradiotherapy OC - 0260
S. Mariani (Italy), V. Chiloio, N.D. Capocchiano, M. Savino, S. Reina, E. Meldolesi, C. Coco, B. Corvari, A. Damiani, V. De Luca, S. Manfrida, R. Persiani, S. Alfieri, V. Valentini, M.A. Gambacorta

Track: Radiobiology

Proffered Papers: Immuno-radiobiology

Saturday, 7 May 2022 16:55 - 17:55

Chair: Johann Matschke

Co-Chair: Gaber Plavc

- 16:55 ATR inhibition promotes IFN signaling via G2 checkpoint abrogation in irradiated human cancer cells OC - 0261
A. Eek Mariampillai (Norway), S. Hauge, I. Øynebråten, G.E. Rødland, A. Corthay, R.G. Syljuåsen
- 17:05 Factors determining the potency of platinum derivatives to enhance the abscopal effect OC - 0262
R. Luo (Germany), K. Onyshchenko, L. Wang, A. Grosu, E. Firat, G. Niedermann
- 17:15 Altered activation of the immune response causes radioresistance in HR-impaired breast cancer cells OC - 0263
S. Classen (Germany), E. Rahlf, J. Jungwirth, L. Poole, S. Gehre, M. Rückert, C. Petersen, K. Rothkamm, U. Gaipl, H. Pospiech, K. Borgmann
- 17:25 Radiosensitivity and immune cell infiltration signature for breast cancer OC - 0264
B. Kang (Korea Republic of), B.S. Jang, I.A. Kim
- 17:35 Using proton radiation or OXi4503 to convert non-immunogenic tumours into immune responders OC - 0265
M. Horsman (Denmark), S. Nygaard, S. Nielsen, M. Sitarz, P. Poulsen, M. Høyer, B. Sørensen, P. Elming
- 17:45 Immunotargeting of CD98hc for elimination of radioresistant head and neck squamous cell carcinoma OC - 0266
A.S. Köseer (Germany)

Track: Clinical

Proffered Papers: Lower GI

Saturday, 7 May 2022 16:55 - 17:55

Co-Chair: Jean-Emmanuel Bibault

-

Chair: TBC

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- 16:45 Comprising a consensus-based delineation guideline for locally recurrent rectal cancer OC - 0267
F. Pigneur (The Netherlands), B. Hupkens, P. Meijnen, H. Ceha, M. Berbee, M. Dieters, J. Burger, H. Rutten, J. Nederend, C. Marijnen, H. Peulen, M. Witte
- 16:55 Cell-free DNA as predictor of pathological complete response in locally advanced rectal cancer OC - 0268
C. Truelsen (Denmark), C. Kronborg, B. Singer Sørensen, L. Callesen, K. Spindler
- 17:05 Standard vs dose escalated chemoradiotherapy in anal cancer: Phase II results of the PLATO-ACT5 RCT OC - 0269
A. Gilbert (United Kingdom), J. Webster, S. Brown, J. Copeland, S. Ruddock, R. Adams, M. Harrison, R. Muirhead, A. Renehan, D. Sebag-Montefiore, M. Hawkins
- 17:15 Final results of the French national cohort ANABASE : treatment and outcome in anal cancer OC - 0270
V. Vendrely (France), C. LEMANSKI, P. POMMIER, K. LE MALICOT, E. FRANCOIS, E. RIVIN DEL CAMPO, P. REGNAULT, N. BABA-HAMED, P. RONCHIN, G. CREHANGE, D. TOUGERON, E. MENAGER-TABOUREL, O. DIAZ, M. HUMMELSBERGER, A. DE LA ROCHEFORDIERE, C. LEPAGE, L. QUERO
- 17:25 Hypoxia in anal cancer – a hypothesis generating study using a 15-gene hypoxia classifier OC - 0271
A.C. Lefèvre (Denmark), J. Alsner, B.S. Sørensen, T. Tramm, K. Toustrup, J. Overgaard, K.G. Spindler
- 17:35 External validation of the Hemo-Eosinophils-Inflammation index as a prognosticator in anal cancer OC - 0272
P. Franco (Italy), A. Porreca, M. Di Nicola, G. Mantello, F. Valvo, N. Slim, S. Manfrida, M.A. Gambacorta, F. De Felice, S. Vagge, M. Krengli, E. Palazzari, M.F. Osti, A. Gonelli, G. Catalano, P. Pittoni, M. Lupattelli, M.R. Niespolo, M.E. Rosetto, G. Macchia, O. Durante, F. Munoz, R.M. D'Angelillo, D. Genovesi, L. Caravatta

Track: Clinical

Multidisciplinary Tumour Board: Brain

Saturday, 7 May 2022 16:55 - 17:55

Chair: Stephanie Combs

-

Track: Brachytherapy

Proffered Papers: Physics, gynaecology, prostate

Saturday, 7 May 2022 16:55 - 17:55

Chair: Nicole Nesvacil

-

Co-Chair: Gabriel Paiva Fonseca

-

- 16:55 Brachytherapy versus advanced external beam radiotherapy in terms of dosimetry OC - 0273
T. Major (Hungary), G. Fröhlich, P. Ágoston, C. Polgár, Z. Takácsi-Nagy

17:05	Validation of automated adjustments of clinical prostate brachytherapy treatment plans <i>F. Dohlmar (Sweden), Å. Carlsson Tedgren, M. Sandborg, B. Morén, T. Larsson</i>	OC - 0274
17:15	Incorporating control of contiguous high-dose volumes in automated optimization for prostate BT <i>J.L. Commandeur, A. Bouter, L.R. Dickhoff (The Netherlands), D.L. Barten, H. Westerveld, B.R. Pieters, T. Alderliesten, P.A. Bosman</i>	OC - 0275
17:25	Simultaneous ThermoBrachytherapy can improve OAR sparing in prostate HDR Brachytherapy <i>I. Androulakis (The Netherlands), R.M. Mestrom, I.K. Kolkman-Deurloo, M.E. Christianen, G.C. van Rhoon</i>	OC - 0276
17:35	Multibody dynamic modelling of the behaviour of flexible cervical cancer brachytherapy instruments <i>R. Straathof (The Netherlands), J. Meijaard, S. van Vliet-Pérez, I. Kolkman-Deurloo, R. Nout, B. Heijmen, L. Wauben, J. Dankelman, N. van de Berg</i>	OC - 0277
17:45	First clinical results of integrated EMT for quantification of positional deviations in cervix BT <i>I. Kolkman-Deurloo (The Netherlands), J. Schiphof-Godart, L. Heerden van, G. Erp van, M. Christianen, J. Mens, R. Rijnsdorp, L. Luthart, R. Nout, M. Hoogeman</i>	OC - 0278

Track: Physics

Proffered Papers: FLASH

Saturday, 7 May 2022 16:55 - 17:55

Chair: Fernanda Villegas-Navarro

-

Co-Chair: TBC

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16:55	FlashDC project: development of a beam monitor for FLASH therapy <i>A. Trigilio, D. Carlotti, A. De Gregorio, P. De Maria, M. De Simoni, M. Fischetti, G. Franciosini, M. Garbini, M. Marafini, A. Muscato, V. Patera (Italy), A. Schiavi, A. Sciubba, M. Toppi, G. Traini, A. Sarti</i>	OC - 0279
17:05	Identification of dose rate transients at the start of every beam-on period for a gated MR-linac <i>M.F. Klavsen (Denmark), K. Boye, R. Hvass Hansen, I. R. Vogelius, C. P. Behrens, C. Ankjærgaard, C. E. Andersen</i>	OC - 0280
17:15	Time-resolved dose rate measurements in pencil beam scanning proton FLASH therapy <i>E. Kanouta (Denmark), P. Poulsen, G. Kertzscher, M. Sitarz, B. Sørensen, J. Johansen</i>	OC - 0281
17:25	Improved dose rate by scanning-pattern optimization in FLASH proton therapy of small lung lesions <i>R. José Santo (The Netherlands), S. Habraken, S. Breedveld, M. Hoogeman</i>	OC - 0282
17:35	Diamond detectors as a powerful real-time tool for commissioning UHDR electron beams in water <i>A. Gasparini (Belgium), G. Felici, F. Galante, F. Gomez, R. Kranzer, G. Mariani, M. Marinelli, M. Pacitti, J. Paz-Martin, V. Vanreusel, G. Verona Rinati, D. Verellen</i>	OC - 0283
17:45	Development of a novel diamond based Schottky diode detector for FLASH radiotherapy dosimetry	OC - 0284

G. Verona Rinati (Italy), G. Felici, F. Galante, A. Gasparini, L. Giuliano, S. Heinrich, M. Pacitti, G. Prestopino, V. Vanreusel, D. Verellen, C. Verona, M. Marinelli

Track: Physics

Proffered Papers: Applications of photon treatment planning

Saturday, 7 May 2022 16:55 - 17:55

Chair: Georgina Fröhlich

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|-------|---|-----------|
| 16:55 | Personalized trade-off: elective nodal coverage vs. NTCP in head-and-neck cancer using automated MCO | OC - 0285 |
| | <u>L.P. Kaplan (Denmark), L. Rossi, B.J.M. Heijmen, A.I.S. Holm, J.G. Eriksen, S.S. Korreman</u> | |
| 17:05 | From PTV-based planning to robust planning: external validation of a robustness evaluation approach | OC - 0286 |
| | <u>R. Kierkels (The Netherlands), A. Minken, E.W. Korevaar</u> | |
| 17:15 | Advantages of DIBH in IMRT of locally advanced NSCLC systematically investigated with autoplanning | OC - 0287 |
| | <u>K. Fjellanger (Norway), L. Rossi, B.J.M. Heijmen, H.E.S. Pettersen, S. Breedveld, I.M. Sandvik, T.H. Sulen, L.B. Hysing</u> | |
| 17:25 | Fully automated VMAT technique for radiation therapy of high-risk breast cancer | OC - 0288 |
| | <u>L. Redapi (Italy), L. Marrazzo, R. Pellegrini, P. Voet, I. Meattini, C. Arilli, M. Casati, A. Compagnucci, C. Talamonti, M. Zani, L. Livi, S. Pallotta</u> | |
| 17:35 | Dosimetric evaluation of dose calculation uncertainties for MR-only treatments of pelvic MRgRT | OC - 0289 |
| | <u>I. Coric (Germany), K. Shrestha, T. Roque, N. Paragios, D. Zips, D. Thorwarth, M. Nachbar</u> | |
| 17:45 | ESTRO-Jack Fowler University of Wisconsin Award: Sources of errors in radiotherapy as assessed with the IROC lung, H&N and spine phantoms | OC - 0290 |
| | <u>S. Edward (USA), C. Peterson, R. Howell, P. Balter, J. Pollard-Larkin, S. Kry</u> | |

Track: Clinical

Proffered Papers: Haematology

Saturday, 7 May 2022 16:55 - 17:55

Chair: Lena Specht

Co-Chair: Jessica Brady

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|-------|--|-----------|
| 16:55 | Patterns of failure in primary CNS lymphoma: the MSKCC experience from 2004-2018 | OC - 0291 |
| | <u>K. Tringale (USA), C. Grommes, B. Vachha, H. Hubbeling, A.N. Wijetunga, C. Hajj, J. Yahalom, B. Imber</u> | |
| 17:05 | Estimating risk of radiation toxicity for lymphoma patients using pre-chemotherapy PET-CT scans | OC - 0292 |
| | <u>R. Shakir (United Kingdom), V. Butterworth, J. Ramroth, D. Cutter, G. Ntentas</u> | |
| 17:15 | Early detection of chemo and RT-related heart toxicity in lymphoma patients: The CARDIO CARE Project. | OC - 0293 |
| | <u>M. Levis (Italy), B. Botto, A. Andreis, A. Gastino, L. Blasi, S. Bartoncini, M. Giorgi, A. Fava, F. Cavallo, S. Ferrero, C. Boccomini, L. Orsucci, U. Ricardi</u> | |

17:25	Proton therapy in mediastinal lymphoma patients in a nationwide cohort, using model-based selection <i>B. Ta (The Netherlands), S. Hutschemaekers, A. Crijns, P. Pisciotto, R. Canters, G. Vilches Freixas, P. Cambraia Lopes, A. Niezink</i>	OC - 0294
17:35	Colorectal cancer risk following radiotherapy and procarbazine for Hodgkin lymphoma <i>R. Shakir (United Kingdom), Y. Geurts, G. Ntents, B. Aleman, J. Ramroth, K. John, C. Janus, A. Krol, J. Roesink, R. van den Maazen, J. Zijlstra, F. van Leeuwen, D. Cutter, M. Schaapveld</i>	OC - 0295
17:35	The role of radiation therapy in the treatment of primary hepatic lymphomas <i>J. Ma (USA), R. Daou, J. Bou Eid, J. Lee, B. Fregonese, J. El-Khoury, N.A. Wijetunga, H. Hubbeling, K. Tringale, E. Lebow, B. Imber, J. Yahalom, C. Hajj</i>	OC - 0296

Track: Brachytherapy

Mini-Oral: 07: Brachytherapy

Saturday, 7 May 2022 16:55 - 17:55

Mini-Oral Theatre 1

Chair: Christian Kirisits

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Co-Chair: Elena Manea

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16:55	Atlas based auto-segmentation in the delineation of rectum and bladder in intrauterine brachytherapy <i>P. Caricato (Italy), S. Meregalli, S. Trivellato, E. Bonetto, V. Faccenda, D. Panizza, S. Arcangeli, E. De Ponti</i>	MO - 0297
16:55	TG-43 dosimetry characterization of the INTRABEAM system with spherical applicators <i>D.S. Ayala Alvarez (Canada), P.G.F. Watson, M. Popovic, V.J. Heng, M.D.C. Evans, J. Seuntjens</i>	MO - 0298
16:55	Determination of the optimal nadir PSA following partial gland ablation in prostate brachytherapy <i>B. Vanneste (The Netherlands), V. Skouteris, L. Campos Pinheiro, R. Stock, N. Stone</i>	MO - 0299
16:55	Rectal-spacer hyaluronic acid plus high-dose-rate prostate brachytherapy boost: long-term outcomes <i>A. Goñi Ramirez (Spain), B. De Paula Carranza, E. Saenz de Urturi Albisu, M. Pagola Divasson, M. Eiguren Bastida, N. Bulto Boqué, A. Ayete Andreu, D.I. Ortiz de Urbina Ugarte, V. Pastor Sanchis, A. Bartres Salido, N. Suarez, M. Erzilbengoa, J. Rosa Nieto</i>	MO - 0300
16:55	Focal salvage LDR prostate brachytherapy for radio-recurrent localised prostate cancer <i>D. Abhi (United Kingdom), W. Keough, C. Wood, P. Drewell, A. Law, A. Sundaramurthy, J. Brush, J. Keanie, D. McLaren</i>	MO - 0301
16:55	Implementation of high-dose-rate brachytherapy as monotherapy for over-sized prostatic gland <i>Y. Roussakis, G. Antorkas, A. Antoniou, C. Cloconi, E. Karagiannis, K. Ferentinos, C. Damianou, I. Strouthos (Cyprus)</i>	MO - 0302
16:55	Evaluation of deep-learning auto-segmentation methods in cervix cancer patients <i>V. Lancellotta (Italy)</i>	MO - 0303
16:55	Dosimetric comparison of ACE algorithm and TG-43 formalism in HDR brachytherapy of carcinoma cervix <i>S. Srivastava (India), A. K V, M. Jabir A, N. Moirangthem Singh</i>	MO - 0304

Track: RTT

Mini-Oral: 08: Patient care, preparation, immobilisation and IGRT verification protocols

Saturday, 7 May 2022 16:55 - 17:55

Mini-Oral Theatre 2

Chair: Philipp Scherer

Co-Chair: Siobhan Graham

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|-------|---|-----------|
| 16:55 | Novel method of investigating hearing protection for paediatric patients undergoing RT planning MRI
<i>A. Crawley (United Kingdom), A. Kruezi, C. Thould, A. Bainbridge, M. Sokolska</i> | MO - 0305 |
| 16:55 | Comparison between 2 surface guidance systems for lung treatments
<i>W. Vingerhoed (Belgium), P. Brokken, D.N.H. Flavia, G. De Kerf, K. Schaerlaeken, A. Sprangers, D. Verellen</i> | MO - 0306 |
| 16:55 | Deep inspiration breath hold and online CBCT verification in gastric lymphoma patients
<i>F. Ong (The Netherlands), S. Bouwhuis-Scholten, C. Oude Hesselink, Y. Reinders, E. van Dieren, L. Zwart</i> | MO - 0307 |
| 16:55 | Dosimetric Effects of Bladder Preparation and Its Impact on QoL for Ca Prostate SBRT Pts on MR-Linac
<i>S.T. Chiu (Hong Kong (SAR) China), M.C. Lee, Y.Y. Chan</i> | MO - 0308 |
| 16:55 | Impact of rectal filling regime on interfractional seminal vesicle changes in prostate radiotherapy
<i>S. Clausen (Denmark), N. Nyvang Andersen, L.M. Åström, P. Sibolt, D. Sjöström</i> | MO - 0309 |
| 16:55 | From Patient Reported Experience Measures (PREMs) to improvement actions at the Radiotherapy dept.
<i>C. Benazzouz (Belgium), D. Callens, J. Verstraete, E. Oldenburger, K. Vanhaecht, C. Berghen</i> | MO - 0310 |
| 16:55 | One stop shop single fraction MR-guided stereotactic radiotherapy: Workflow and patient satisfaction
<i>S. Verheijen (The Netherlands), R. de Moes, M.A. Palacios, C.J. Haasbeek, F.L. Schneiders, A.M. Bruynzeel, B.J. Slotman, F.J. Lagerwaard, S. Senan</i> | MO - 0311 |
| 16:55 | Systematic multi-disciplinary sequence evaluation for integration into the MR-linac workflow
<i>S. Alexander (United Kingdom), J. Chick, T. Herbert, R. Huddart, M. Ingle, A. Mitchell, S. Nill, U. Oelfke, A. Dunlop, S. Hafeez</i> | MO - 0312 |

Track: Physics

Poster Discussion: 07: Imaging & AI techniques

Saturday, 7 May 2022 16:55 - 17:55

Poster Station 1

Chair: Stephanie Tanadini-Lang

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|-------|---|-----------|
| 16:55 | A comparison of multiple deep learning-based auto-segmentation systems for head and neck cancer
<i>S. Temple (United Kingdom)</i> | PD - 0313 |
| 16:55 | An explainable deep learning pipeline for multi-modal multi-organ medical image segmentation
<i>E. Mylona (Greece), D. Zaridis, G. Grigoriadis, N. Tachos, D.I. Fotiadis</i> | PD - 0314 |

- 16:55 Evaluation of three AI-based CT auto-contouring systems for head&neck, thorax and pelvis *PD - 0315*
M. Casati (Italy), M. Loi, C. Arilli, L. Marrazzo, C. Talamonti, M. Zani, A. Compagnucci, G. Simontacchi, V. Di Cataldo, I. Desideri, P. Bonomo, N. Franza, D. Raspanti, R. Pellegrini, L. Livi, S. Pallotta
- 16:55 Contouring lumbosacral plexus based on MR neurography and MR/CT deformable registration technique *PD - 0316*
X. Cao (China), X. Gao, W. Li, P. Liu, S. Qin, H. Li, D. Wang
- 16:55 A novel method to predict OAR contour errors without a ground truth using geometric learning *PD - 0317*
E. Henderson (United Kingdom), A. Green, M. van Herk, E. Vasquez Osorio
- 16:55 Combining Single-Organ Deep Learning Segmentation Models for Total Marrow Irradiation *PD - 0318*
L. Crespi (Italy), P. Roncaglioni, D. Dei, N. Lambri, P. Mancosu, D. Loiacono
- 16:55 Evaluation of a synthetic-CT generation method for MRI-only head and neck cancer radiotherapy *PD - 0319*
S. Riga (Italy), C. Carsana, M. Felisi, D. Sibio, A.F. Monti, D. Lizio, R.G. Pellegrini, D. Curto, G. Muti, O.E. Panchi Maigualca, B. Bortolato, F. Bracco, A. Vanzulli, M. Palazzi, A. Torresin
- 16:55 Two-ways validation of the feasibility of AI-based synthetic CT for MR-only brain radiotherapy *PD - 0320*
S. Masitho (Germany), J. Szkitsak, J. Grigo, F. Putz, R. Fietkau, C. Bert
- 16:55 Comparison of synthetic CT generation methods for MRI-only definitive pelvic radiotherapy *PD - 0321*
L. O'Connor (Australia), J.H. Choi, J. Dowling, H. Warren-Forward, J. Martin, P. Greer
- 16:55 Artificial intelligence organ-at-risk dose prediction for high-risk prostate cancer IMRT *PD - 0322*
P. Brodin (USA), P. Shukla, M. Hauze, L. Shulte, C. Carpenter, R. Kumar, W. Bodner, S. Kalnicki, M. Garg, W. Tomé
- 16:55 Deep learning automatic applicator-based MRI registration in image guided adaptive brachytherapy *PD - 0323*
S. Ecker (Austria), L. Zimmermann, C. Kirisits, N. Nesvacil
- 16:55 A Geometry-Informed Deep Learning Framework for Ultra-Sparse 3D Tomographic Image Reconstruction *PD - 0324*
L. Shen (USA), W. Zhao, J. Pauly, L. Xing

Track: RTT

Poster Discussion: 08: Advances in radiotherapy planning & techniques

Saturday, 7 May 2022 16:55 - 17:55

Poster Station 2

Chair: Madalyne Chamberlain

- 16:55 Feasibility and safety of MR-guided stereotactic ablative body radiotherapy for Prostate Cancer *PD - 0325*
L. Geddes (Australia), D. Crawford, V. Batumalai, C. Pagulayan, L. Hogan, U. Jelen, C. Loo, N. Dunkerley, M. Picton, S. Alvares, S. Sampaio, M. Heinke, T. Twentyman, M. Jameson, J. De Leon

16:55	UK National Survey of Craniospinal Irradiation: Immobilisation and treatment techniques <i>S. Alexander (United Kingdom), K. Robinson, L. Sellman, S. Mowat, H. Mandeville</i>	PD - 0326
16:55	CTV delineation for high-grade gliomas: is there agreement with tumor cell invasion models? <i>W. Häger (Sweden), I. Toma-Dasu, M. Lazzeroni, M. Astaraki</i>	PD - 0327
16:55	Impact of image registration uncertainties on dose accumulations in online adaptive radiotherapy <i>A.B. Kristensen (Denmark), L.M. Åström, C.E. Andersen, P. Sibolt</i>	PD - 0328
16:55	Impact of Bladder Volume Changes on Prostate Position during MR-Guided Online Adaptive SBRT <i>W. Li (Canada), V. Malkov, V. Kong, J. Dang, I. Navarro, J. Winter, J. Padayachee, P. Chung</i>	PD - 0329
16:55	AI-based OAR annotation for pediatric brain radiotherapy planning <i>P. Bondiau (France), S. Bolle, A. Escande, L. Duverge, C. Demoor, A. Rouyar-Nicolas, B. Bertrand, A. Cannard, L. Hardy, C. Martineau-Huynh, N. Paragios, T. Roque, E. Deutsch, C. Robert</i>	PD - 0330
16:55	To re-opt or not to re-opt: a study on the need for online plan adaptation for prostate cancer <i>L. Verweij (The Netherlands), S.U. Tetar, O. Bohoudi, B.J. Slotman, A.M. Bruynzeel, F.J. Lagerwaard, M.A. Palacios</i>	PD - 0331
16:55	Clinical evaluation of organs at risk automatic-segmentation for T2-weighted MRI <i>N. Newman (USA), S. Stathakis, D. Thorwarth, D. Zips, M. Nachbar, S. Kandiban, A. Oumani, K. Shreshtha, T. Roque, N. Paragios, W.E. Jones III</i>	PD - 0332
16:55	Using MR- image quality test phantom for validating MRI-based synthetic CT images <i>P. Wang (China), M. Liu, J. Wu, D. Zhang, B. Tang, J. Xu, X. Xin, L.C. Orlandini</i>	PD - 0333
16:55	Feasibility of magnetic resonance-guided stereotactic ablative body radiotherapy of liver cancer <i>M. Picton (Australia), V. Batumalai, D. Crawford, C. Pagulayan, L. Hogan, U. Jelen, C. Loo, N. Dunkerley, L. Geddes, S. Sampaio, M. Heinke, T. Twentyman, M. Jameson, J. de Leon</i>	PD - 0334
16:55	Dosimetric differences between field and volume-based regional nodal RT in the POSNOC breast trial <i>H. Price (United Kingdom), Z. Nabi, R. Butt, R. Mir, P. Diez, D. Dodwell, S. Sadiq, M. Lewis, A. Goyal</i>	PD - 0335
16:55	Evaluation of a deep-learning segmentation software in thoracic organs at risk: an early analysis <i>A. Boschetti (Italy), C. Votta, A. Re, D. Piro, M. Marras, A. D'Aviero, F. Catucci, D. Cusumano, C. Di Dio, S. Menna, M. Iezzi, F.V. Quaranta, C. Flore, E.G. Sanna, D. Piccari, G.C. Mattiucci, V. Valentini</i>	PD - 0336

Sunday
8 May
2022



Track: Interdisciplinary

Teaching lecture: MR-guided radiotherapy: How to acquire and interpret imaging data for online adaption

Sunday, 8 May 2022 08:00 - 08:40

Chair: maria antonietta gambacorta

08:00 MR-guided radiotherapy: How to acquire and interpret imaging data for online adaption SP - 0337
L. Boldrini (Italy)

Track: Radiobiology

Teaching lecture: Mitochondria in tumour and normal tissue radiobiology

Sunday, 8 May 2022 08:00 - 08:40

Chair: Laure Marignol

08:00 Mitochondria in tumour and normal tissue radiobiology SP - 0338
F. Paris (France)

Track: Clinical

Teaching lecture: Breast cancer-related lymphoedema

Sunday, 8 May 2022 08:00 - 08:40

Chair: Birgitte Offersen

08:00 Breast cancer-related lymphoedema SP - 0339
L. Boersma (The Netherlands)

Track: Clinical

Teaching lecture: Fractionation and biology in bladder cancer

Sunday, 8 May 2022 08:00 - 08:40

Chair: TBC

08:00 Fractionation and biology in bladder cancer SP - 0340
A. Choudhury (United Kingdom)

Track: Brachytherapy

Teaching lecture: Artificial intelligence and brachytherapy: Current reality and perspectives

Sunday, 8 May 2022 08:00 - 08:40

Chair: Marisol De Brabandere

08:00 The physician point of view SP - 0341
L. Tagliaferri (Italy)

08:20 The physicist point of view SP - 0342
N. Nesvacil (Austria)

Track: Physics

Teaching lecture: Robust treatment planning in particle therapy: Clinical implementation and potential pitfalls

Sunday, 8 May 2022 08:00 - 08:40

Chair: Christian Richter

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08:00 Robust treatment planning in particle therapy: Clinical implementation and potential pitfalls

SP - 0343

E. Korevaar (The Netherlands)

Track: Physics

Teaching lecture: Essentials for risk management of a radiation oncology department

Sunday, 8 May 2022 08:00 - 08:40

Chair: Steven Petit

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08:00 Essentials for risk management of a radiation oncology department

SP - 0344

E. Ford (USA)

Track: RTT

Teaching lecture: Less is more: The increasing use of hypofractionation in routine clinical practice and its impact on patient care

Sunday, 8 May 2022 08:00 - 08:40

Chair: Maeve Kearney

-

08:00 How should IGRT practices be revised to reflect delivery of large doses per fraction?

SP - 0345

J. Ter-Minassian (Estonia)

08:20 How may shorter fractionation schedules affect patient care?

SP - 0346

A. Stewart-Lord (United Kingdom)

Track: Interdisciplinary

Symposium: Radiation-induced cardiac and vascular toxicity

Sunday, 8 May 2022 08:45 - 10:00

Chair: François Paris

-

Co-Chair: Eliana Maria Vasquez Osorio

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08:45 Resolving the spatial dependency of radiation induced cardiac toxicity

SP - 0347

K. Butterworth (United Kingdom)

09:03 Risk of acute coronary events in breast cancer patients after radiation therapy - Insights from a biologically-based model of atherosclerogenesis

SP - 0348

J.C. Kaiser (Germany)

09:21 Radiation-induced heart disease in the era of CT-based treatment planning of early breast cancer

SP - 0349

M.L. Milo (Denmark)

09:39 Radiation-induced carotid artery vasculopathy and stroke SP - 0350

J. Wilbers (The Netherlands)

Track: Radiobiology

Symposium: Beyond the nucleus: The role of mitochondria in radiation response

Sunday, 8 May 2022 08:45 - 10:00

Chair: Lara Barazzuol -

Co-Chair: TBC -

08:45 Mitochondrial DNA damage and RIG-I mediated innate immunity SP - 0351

M. Tigano (USA)

09:03 Targeting mitochondrial activity with metformin to reduce tumor hypoxia and increase radiation response in non-diabetic patients: Importance of patient selection SP - 0352

M. Koritzinsky (Canada), K. Han, J. Bruce, M. Milosevic

09:21 Preservation of mitochondrial integrity participates in radioresistance in head and neck mouse cancer models SP - 0353

P. Sonveaux (Belgium), D. Grasso

09:39 Cross-talk of radiotherapy-induced mitochondrial impairment and resulting metabolic reprogramming impact DNA DSB repair capacity SP - 0354

J. Matschke (Germany)

Track: Clinical

Symposium: Radiotherapy in head and neck advanced disease in surgery with reconstruction area

Sunday, 8 May 2022 08:45 - 10:00

Co-Chair: Daan Nevens -

Chair: Pierre Blanchard -

08:45 What is an optimal target in reconstructed tissue? SP - 0355

W. Budach (Germany)

09:03 Which dose and techniques should be used in reconstructed tissue? SP - 0356

J. Thariat (France)

09:21 Radiation-induced toxicity in the postoperative setting SP - 0357

H. Langendijk (The Netherlands)

09:39 Reconstruction after radiation – The surgeon point of view SP - 0358

TBC

Track: Clinical

Symposium: 2020 - Losing ground for radiotherapy?

Sunday, 8 May 2022 08:45 - 10:00

Chair: Vincent Grégoire -

	Co-Chair: Łukasz Kuncman	-
08:45	Locally advanced oesophagus where more is not better <u>G. Crehange (France)</u>	SP - 0359
09:03	Lung cancer: When does post-operative radiotherapy not provide a benefit? <u>A. Levy (France)</u> , O. Mercier, A. Botticella, A. Traore-Diallo, C. Berthold, G. Auzac, A. Bardet, C. Le Péchoux	SP - 0360
09:21	Pancreas: Preoperative chemoradiation in LAPC - Evidence from randomised trials <u>TBC</u>	SP - 0361
09:39	Rectum: Does chemotherapy intensification improve tumour response more than radiotherapy does? <u>E. Fokas (France)</u>	SP - 0362
Track: Brachytherapy		
Symposium: The use of imaging in prostate brachytherapy		
Sunday, 8 May 2022 08:45 - 10:00		
	Chair: B. Guix Melcior (Spain)	-
	Co-Chair: Georgina Fröhlich	-
08:45	Imaging for target definition in HDR prostate <u>G. Morton (Canada)</u>	SP - 0363
09:10	Image registration in CT-based and US-based HDR prostate brachytherapy <u>F.A. Siebert (Germany)</u>	SP - 0364
09:35	Real-time MRI-based HDR prostate brachytherapy <u>S. Buus (Denmark)</u>	SP - 0365
Track: Physics		
Symposium: Image guidance in particle therapy: Status and outlook		
Sunday, 8 May 2022 08:45 - 10:00		
	Co-Chair: Petra Trnkova	-
	Chair: Kathrine Røe Redalen	-
08:45	State-of-the-art X-ray-based in-room imaging <u>F. Albertini (Switzerland)</u>	SP - 0366
09:03	Treatment verification with secondary particles <u>V. Verburg (The Netherlands)</u>	SP - 0367
09:21	Radiographic and tomographic proton imaging <u>M. Bruzzi (Italy)</u>	SP - 0368
09:39	Towards MR integration in particle therapy <u>A. Hoffmann (Germany)</u>	SP - 0369
Track: Physics		
Pitch Session: Every radiotherapy physicist should know about AI/ML... but how much?		
Sunday, 8 May 2022 08:45 - 10:00		
	Chair: Charlotte Brouwer	-

	Chair: Marianne Aznar	-
08:45	Introduction	SP - 0370
08:50	Every physicist should also be a fully skilled data scientist <u>C. Robert (France)</u>	SP - 0371
09:02	Only the basics, leave it to the companies <u>W. Verbakel (The Netherlands)</u>	SP - 0372
09:14	A bit more than basics, enough so you can communicate with an independent expert and outsource this expertise <u>C. Brink (Denmark)</u>	SP - 0373
09:26	Full integration in the curriculum: this should match our teaching / understanding of radiation interaction with matter <u>C. Garibaldi (Italy)</u>	SP - 0374
09:38	Discussion	SP - 0375
Track: RTT		
Symposium: Personalised radiotherapy: Improving standards of care with personalised treatments		
Sunday, 8 May 2022 08:45 - 10:00		
	Chair: Sophie Perryck	-
	Co-Chair: Sarah Barrett	-
08:45	Personalised radiotherapy for head and neck patients: The RTT perspective <u>S. van Beek (The Netherlands)</u>	SP - 0376
09:10	Personalised treatment (or care) in palliative radiotherapy <u>V. Gram (Denmark)</u>	SP - 0377
09:35	Radiomics for head & neck <u>E. Forde (Ireland)</u>	SP - 0378
Track: Interdisciplinary		
Mini-Oral: 09: Personalised radiation therapy		
Sunday, 8 May 2022 08:45 - 09:45		Mini-Oral Theatre 1
	Chair: Brita Singers Sørensen	-
	Co-Chair: Rita Simoes	-
08:45	Extent of white matter connectivity has prognostic significance in MGMT-unmethylated glioblastoma <u>N. Rammohan (USA), A. Ho, A. Bajaj, T. Kruser, A. Korutz, M. Tate, S. Sachdev</u>	MO - 0379
08:45	Radiosensitivity Index and M2 macrophage in tumor microenvironment of glioblastoma <u>B. Jang (Korea Republic of), I.A. Kim</u>	MO - 0380
08:45	Saliva microbiota and inflammation markers predict acute toxicity after RT for head-and-neck cancer	MO - 0381

N.A. Iacovelli (Italy), T. Rancati, R. Ingargiola, S. Alfieri, L. De Cecco, F. Badenchini, A. Cavallo, A. Cicchetti, N. Zaffaroni, V. Doldi, E. Mancinelli, M.S. Serafini, A. Devecchi, R. Valdagni, E. Orlandi

08:45 Learning from every patient's biomarker - Stem cells, hypoxia, HPV and tumor volume in Dahanca 5 MO - 0382

J. Overgaard (Denmark), B. Singers Sørensen, K. Toustrup, P. Lassen, J. Alsner

08:45 A validated prognostic genetic profile independent of smoking in HPV-positive oropharynx cancer MO - 0383

J. Lilja-Fischer (Denmark), M. Stougaard, M.H. Kristensen, T. Steiniche, J.G. Eriksen, J. Overgaard

08:45 A CT-radiomics model to predict recurrence post curative-intent radiotherapy for stage I-III NSCLC MO - 0384

S. Hindocha (United Kingdom), T. Charlton, K. Linton-Reid, B. Hunter, C. Chan, M. Ahmed, E. Robinson, M. Orton, J. Lunn, S. Ahmed, F. McDonald, I. Locke, D. Power, S. Doran, M. Blackledge, R. Lee, E. Aboagye

08:45 Added value of MRI radiomics to predict pathological status of prostate cancer patients MO - 0385

G. Marvaso (Italy), M. Pepa, L.J. Isaksson, P.E. Summers, M. Zaffaroni, M.G. Vincini, G. Corrao, G.C. Mazzola, M. Rotondi, S. Raimondi, S. Gandini, S. Volpe, Z. Haron, S. Alessi, P. Pricolo, F.A. Mistretta, S. Luzzago, F. Cattani, G. Musi, O. De Cobelli, M. Cremonesi, R. Orecchia, G. Petralia, B.A. Jereczek-Fossa

08:45 Treatment time and circadian genotype interact to alter the severity of radiotherapy side-effects MO - 0386

C. Talbot (United Kingdom), A. Webb, E. Harper, D. Azria, A. Choudhury, D. de Ruyscher, A. Dunning, R. Elliott, S. Kerns, M. Lambrecht, T. Rancati, B. Rosenstein, P. Seibold, E. Sperk, A. Vega, L. Veldeman, J. Chang-Claude, C. West, T. Rattay, R.P. Symonds

Track: Clinical

Mini-Oral: 10: Lung

Sunday, 8 May 2022 08:45 - 09:45

Mini-Oral Theatre 2

Chair: Dirk De Ruyscher

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Co-Chair: Hela Hammami

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08:45 Durvalumab increases the risk of radiation pneumonitis in non-small-cell lung cancer patients MO - 0387

R. Stoffers (The Netherlands), A.G. Niezink, O. Chouvalova, A.H. van der Leest, J.F. Ubbels, M. Woltman-van Iersel, J.A. Langendijk, R. Wijsman

08:45 Outcome of immunotherapy in non-small cell lung cancer patients with brain metastasis (NCT03870464) MO - 0388

B. Bjørnhart (Denmark), K. Holmskov Hansen, J. Thor Asmussen, T. Lembrecht Jørgensen, J. Herrstedt, T. Schytte

08:45 Relationship between 4D CT quality and survival after lung cancer radiotherapy MO - 0389

M. van Herk (United Kingdom), G. Price, E. Vasquez Osorio, A. McWilliam, C. Faivre-Finn, A. Abravan

08:45 CCI and TNM stage do not influence early mortality risk after definitive radiotherapy in NSCLC MO - 0390

K.H. Jensen (Denmark), J. Friberg, I.R. Vogelius, M. Pøhl, M.S. Frank, O. Hansen, T. Schytte, C. Kristiansen, M. Knap, M. Skovborg, T. McCulloch, G. Persson

08:45	Predicting early mortality using muscle characteristics for patients with lung cancer <i>A. McWilliam (United Kingdom), D. McSweeney, K. Banfill, M. van Herk, C. Faivre-Finn, A. Green</i>	MO - 0391
08:45	Inter-observer variation in a national lung SABR rollout program: Lessons learnt & future directions <i>P. Diez (United Kingdom), F. McDonald, C. Brooks, A. Haridass, M. Hatton, C. Peedell, Y.M. Tsang, J. Conibear</i>	MO - 0392
08:45	CPAP ventilator- assisted lung SBRT: is DIBH clinically better than free breathing? <i>S. Appel (Israel), J. Goldstein, O. Haisraely, Y.R. Lawrence, Z. Symon, S. Dubinski</i>	MO - 0393
08:45	Cardiac Exposure in Lung Cancer Radiotherapy: Systematic Review of Heart Doses Published 2013-2020 <i>M. Kearney (Ireland), M. Keys, C. Faivre-Finn, Z. Wang, M. Aznar, F. Duane</i>	MO - 0394

Track: Physics

Poster Discussion: 09: Inter-fraction motion & adaptive radiotherapy

Sunday, 8 May 2022 08:45 - 09:45

Poster Station 1

Chair: Mirjana Josipovic

08:45	Daily dose evaluation based on synthetic CTs: accuracy of dose and complication risk assessment <i>V. Hamming (The Netherlands), J.A. Langendijk, S. Both, N.M. Sijtsema, J. Maduro</i>	PD - 0395
08:45	Robust dose summation to evaluate diaphragm motion impact in proton therapy of esophageal cancer <i>R. Canters (The Netherlands), V. Taasti, G. Vilches-Freixas, F. Vaassen, K. Van der Klugt, M. Berbee</i>	PD - 0396
08:45	Influence of manual segmentation in DIR on accumulated dose evaluation for cervical cancer <i>E. Gort (The Netherlands), J.C. Beukema, M.J. Spijkerman-Bergsma, M.L. de Vries-de Groot, S. Both, J.A. Langendijk, W.P. Matysiak, C.L. Brouwer</i>	PD - 0397
08:45	Accumulated dose comparison of stereotactic MRgRT and proton therapy for central lung tumors <i>M. Rabe (Germany), M.A. Palacios, J. van Sörnsen de Koste, C. Eze, M. Hillbrand, C. Belka, G. Landry, S. Senan, C. Kurz</i>	PD - 0398
08:45	Daily delivered dose in NSCLC patients receiving dose escalation <i>S.N. Thomsen (Denmark), D.S. Møller, M.M. Knap, A.A. Khalil, T.B. Nyeng, L. Hoffmann</i>	PD - 0399
08:45	Quantitative deformable image registration uncertainty framework for proton head and neck treatment <i>F. Amstutz (Switzerland), P.G. D'Almeida, X. Wu, F. Albertini, B. Bachtary, D.C. Weber, J. Unkelbach, A.J. Lomax, Y. Zhang</i>	PD - 0400
08:45	Assessment of CBCT based synthetic CT generation accuracy for adaptive radiotherapy planning <i>C. O'Hara (United Kingdom), D. Bird, R. Speight, S. Andersson, R. Nilsson, B. Al-Qaisieh</i>	PD - 0401
08:45	Impact of CBCT-based patient positioning uncertainty due to the ROI/DOF selection for proton therapy <i>M. Guo (Switzerland), E. Batin, A. Bolsi, S. Safai, D. Weber, A. Lomax, Z. Chen, Y. Zhang</i>	PD - 0402

08:45	Assessment of residual setup errors of clinical target volumes for head and neck radiotherapy <i>K. Ng Wei Siang (The Netherlands), S. Both, E. Oldehinkel, J. Langendijk, D. Wagenaar</i>	PD - 0403
08:45	Evaluating pharyngeal constrictors for adaptive radiotherapy intervention to reduce dysphagia <i>O. Paetkau (Canada), S. Wepler, J. Kwok, H. Quon, W. Smith</i>	PD - 0404
08:45	Analysis of the internal motion of the urethra caused by urethral catheters <i>D. Sevilano (Spain), A. Hervás, R. Rodríguez-Patrón, J.D. García-Fuentes, R. Colmenares, C. Vallejo, F. López-Campos, J.A. Domínguez-Rullán, T. Muñoz, M. Cámara, B. Capuz, R. Morís, P. Galiano, P. Retorta, S. Williamson, M.J. Béjar, D. Prieto, F. García-Vicente</i>	PD - 0405
08:45	The impact of using propagated contours for automatic replanning on CBCTs for H&N radiotherapy <i>D. Nash (United Kingdom), A. McWilliam, A.L. Palmer, E. Vasquez Osorio</i>	PD - 0406

Track: Clinical

Poster Discussion: 10: Urology 1

Sunday, 8 May 2022 08:45 - 09:45

Poster Station 2

Chair: Luca Incrocci

08:45	A new approach to imaging and rapid microbiome identification in prostate cancer patients <i>D. Gabrys (Poland), E. Maślak, M. Złoch, P. Pomastowski, F. Monedeiro, B. Buszewski, J. Mrochem-Kwarciak, K. Bojarska, W. Miśta</i>	PD - 0407
08:45	Long-term outcome after definitive photon vs. combined proton/photon irradiation for prostate cancer <i>S.A. Koerber (Germany), K. Ebel, R. Lotsch, J. Ristau, C.A. Fink, F. Schunn, I. Schlamp, J. Rademacher, T. Holland-Letz, S.B. Harrabi, J. Debus, K. Herfarth</i>	PD - 0408
08:45	cascade-net: a deep learning framework for segmentation of prostate and organs at risk in CT images <i>Z. Siavashpour (Iran Islamic Republic of), E. Showkatian</i>	PD - 0409
08:45	Re-irradiation for local recurrence of prostate cancer – results of an international survey <i>M. Chirilă (Romania), P. Chatterjee, K. Gordon, G. Kacso, B. Li, W. Ma, D.A. Martinez Perez, J. Murgic, M. Spalek, S. Turner, T. Zilli, P. Poortmans, M. Roach 3rd</i>	PD - 0410
08:45	Predictive factors of late GU toxicity after Cyberknife re-irradiation for locally recurrent PCa <i>G. Francolini (Italy), C. Cerbai, M. Loi, V. Di Cataldo, B. Detti, G. Simontacchi, L.P. Ciccone, L. Masi, R. Doro, A. Allegra, V. Salvestrini, C. Mattioli, G. Frosini, L. Burchini, M. Aquilano, G. Stocchi, I. Desideri, L. Livi</i>	PD - 0411
08:45	Impact of adjuvant radiotherapy on biochemical recurrence rates for pN1 prostate cancer patients <i>G. Corrao (Italy), G. Marvaso, F.A. Mistretta, S. Luzzago, I. Sabatini, E. Di Trapani, G. Cozzi, R. Bianchi, M. Ferro, D.V. Matei, G. Musi, M. Pepa, M. Zaffaroni, B.A. Jereczek-Fossa, O. De Cobelli</i>	PD - 0412
08:45	Outcomes in pelvic versus common iliac node positive prostate cancer treated with curative RT <i>P. Chopade (India), S. David, G. Panigrahi, P. Singh, P. Maitre, V. Murthy</i>	PD - 0413

- 08:45 Trend over time of patient-reported QoL domains after pelvic nodal irradiation for prostate cancer PD - 0414
A. Faiella (Italy), A. Gebbia, E. Villa, J.M. Waskiewicz, A. Magli, B. Avuzzi, E. Garibaldi, D. Cante, G. Girelli, M. Gatti, L. Ferella, B. Noris Chiorda, L. Rago, P. Ferrari, A. Bresolin, C. Piva, F. Badenchini, T. Rancati, R. Valdagni, V. Vavassori, F. Munoz, G. Sanguineti, N. Di Muzio, C. Fiorino, C. Cozzarini
- 08:45 Pelvic RT in prostate cancer: late intestinal toxicity is modulated by severity of acute symptoms PD - 0415
A. Gebbia (Italy), F. Munoz, A. Magli, D. Cante, E. Garibaldi, B. Noris Chiorda, G. Girelli, E. Villa, A. Faiella, J.M. Waskiewicz, B. Avuzzi, A. Pastorino, E. Moretti, L. Rago, A. Bresolin, C. Bianconi, F. Badenchini, T. Rancati, R. Valdagni, V. Vavassori, M. Gatti, G. Sanguineti, N. Di Muzio, C. Fiorino, C. Cozzarini
- 08:45 Derivation and external validation of a RAPID Risk score for predicting significant prostate cancer PD - 0416
M. Peters (The Netherlands), D. Eldred-Evans, M. J. Connor, M. Bertoncelli Tanaka, H. Bhola-Stewart, T. T Shah, S. Ahmad, M. Noureldin, K. Wong, H. Tam, D. Hrouda, M. Winkler, P. van Rossum, P. Kurver, S. Gordon, H. Qazi, H. U. Ahmed, U. Giovanni Falagario, I. Jambor, A. Briganti, T. Nordström, G. Carrieri, L. Powell, S. Joshi, E. Pegers
- 08:45 Planned total duration of triptorelin treatment in patients with prostate cancer, TALISMAN study PD - 0417
G. Crehange (France), T. Lebre, J. Rigaud, N. Pello-Leprince-Ringuet, A.S. Grandoulier, A. Thierry Vuillemin
- 08:45 Resect or Preserve? Comparing treatment strategies in clinically node positive bladder cancer PD - 0418
M. Swinton (United Kingdom), N.B.G. Mariam, J.L. Tan, L. Afferi, C. Lonati, M. Moshini, M. Lau, V. Ramani, V. Sangar, N. Clarke, H. Mistry, T. Elumalai, P. Hoskin, A. Choudhury

Track: Interdisciplinary

Proffered Papers: MR-guided radiotherapy

Sunday, 8 May 2022 10:30 - 11:30

Chair: Marcel van Herk

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Co-Chair: Vivian van Pelt

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- 10:30 Patterns of Care and Safety in 1800 patients treated on a high-field MR-Linac platform registry OC - 0419
J. Westerhoff (The Netherlands), L. Daamen, J. Christodouleas, E. Blezer, A. Choudhury, R. Westley, B. Erickson, C. Fuller, S. Hafeez, U. van der Heide, M. Intven, A. Kirby, S. Lalondrelle, B. Minsky, S. Mook, M. Nowee, C. Marijnen, K. Orling, A. Sahgal, C. Schultz, R. Tersteeg, A. Tree, C. Tseng, J. van der Voort van Zyp, H. Verkooijen, W. Hall
- 10:40 Considerations for the clinical implementation of MRI-guided ART for H&N and lung cancers OC - 0420
A. Clough (United Kingdom), E. Pitt, C. Nelder, R. Benson, L. McDaid, L. Whiteside, L. Davies, J. Parker, T. Awofisoye, L. Freear, J. Berresford, T. Marchant, A. McPartlin, C. Crockett, A. Salem, D. Cobben, C. Eccles
- 10:50 MR-Guided SBRT/Hypofractionated RT for Metastatic and Primary Ultracentral and Central Lung Lesions OC - 0421
M. Sandoval (USA), A. Sim, M. Bhandari, E. Wuthrick, B. Perez, T. Dilling, G. Redler, J. Andreozzi, L. Nardella, V. Feygelman, K. Latifi, S. Rosenberg
- 11:00 Adaptive MR guided stereotactic body radiotherapy for locally advanced pancreatic cancer OC - 0422

M. Ejlsmark (Denmark), T. Schytte, O. Hansen, U. Bernchou, A. Bertelsen, S. Dettelsen, M.B. Mortensen, C.R. Hansen, H. Jensen, R. Bahij, B. Weber, P. Pfeiffer

11:10 Patient specific deep learning contour propagation on prostate magnetic resonance linac patients OC - 0423

S. Fransson (Sweden), D. Tilly, R. Strand

11:20 Target volume time trends during daily adaptive 5-fraction MR-guided radiotherapy OC - 0424

E. Koper (The Netherlands), M. Kamer, O. Bohoudi, M.A. Palacios, S. Senan, F.L. Schneiders, B. Slotman, F. Lagerwaard, A. Bruynzeel

Track: Radiobiology

Proffered Papers: Tumour radiobiology

Sunday, 8 May 2022 10:30 - 11:30

Chair: Kasper Rouschop -

Co-Chair: Daan Boreel -

10:30 Avoidance of DNA Replication Stress Leads to Decreased Cytosolic DNA in Breast Cancer Stem Cells OC - 0425

F. Meyer (Germany), A. Engel, L. Poole, A. Krause, T. Wagner, A. Dubrovskaya, C. Peitzsch, C. Petersen, K. Rothkamm, K. Borgmann

10:40 ALDH genes as regulators of prostate cancer radioresistance, stemness and bone metastases OC - 0426

I. Gorodetska (Germany), A. Offermann, J. Püschel, V. Lukiyanchuk, D. Gaete, A. Kurzyukova, V. Labitzky, F. Schwarz, T. Lange, F. Knopf, B. Wielockx, M. Krause, S. Perner, A. Dubrovskaya

10:50 Interplay of cancer stemness and amino acid transporters regulates radioresistance in HNSCC OC - 0427

A.S. Köseer (Germany)

11:00 Development of DNA polymerase theta inhibitors as tumour specific radiosensitisers OC - 0428

R. Prevo, M. Ranzani, R. Puliyadi, G. Rodriguez-Berriguete, H. Robinson, E. Rajendra, V. Grinkevich, M. Boursier, A. Cicconi, D. Piscitello, A. Cerutti, J. Majithiya, R. Heald, M. Stockley, G. Smith, G. Higgins (United Kingdom)

11:10 Tamoxifen induces metabolic adaptations leading to radioresistance in breast cancer OC - 0429

F. Naumann (The Netherlands), G. Adema, F. Sweep, J. Bussink, P. Span

11:20 Multi-candidate immunohistochemical assessment of prognostic biomarkers in the CHHiP prostate trial. OC - 0430

A. Wilkins (United Kingdom)

Track: Clinical

Proffered Papers: Head & neck

Sunday, 8 May 2022 10:30 - 11:30

Chair: TBC S. Tribius (Germany) -

Co-Chair: Jørgen Johansen (Denmark) -

10:30 Tumour volume in oropharyngeal cancers – more important than ever! OC - 0431

G. Adrian (Sweden), H. Carlsson, E. Kjellén, J. Sjövall, B. Zackrisson, P. Nilsson, M. Gebre-Medhin

- 10:40 Patterns of failure in oral cavity squamous cell carcinoma treated with adjuvant radiotherapy OC - 0432
A. Das (Canada), I. Mallick, S. Chatterjee
- 10:50 Positive predictive value of post radiotherapy FDG PET-CT is affected by treatment and HPV-status OC - 0433
S. Zhou (United Kingdom), C. Chan, H. Dyab, R. Rulach, F. Hendry, C. Maxfield, M.F. Hendry, A. James, C. Lamb, D. Grose, C. Wilson, S. Schipani, Y.C. Lau, C. Paterson
- 11:00 Unknown Primary Head and Neck SCC: a phase-4 population-based cohort study from DAHANCA OC - 0434
S.B. Nielsen (Denmark), N.M. Lyhne, M. Andersen, J. Johansen, C. Godballe, H. Primdahl, T. Kjærgaard, J. Overgaard
- 11:10 Loco-regional failure is associated with the stem cell marker SLC3A2, volume and HPV/p16 in HNSCC OC - 0435
M.H. Kristensen (Denmark), B.S. Sørensen, J. Alsner, C.R. Hansen, R. Zukauskaitė, E.S. Hinsby, C. Maare, J. Johansen, H. Primdahl, C.A. Christensen, M. Andersen, J. Lilja-Fischer, T. Tramm, J. Overgaard, J.G. Eriksen
- 11:20 External validation of NTCP models for dysphagia and xerostomia in the elderly patients with HNSCC OC - 0436
L. Sommers (The Netherlands), H.P. van der Laan, L. van den Bosch, J. van den Hoek, T. van Zon-Meijer, E. Oldehinkel, H. Verbeek, G. Halmos, R. Steenbakkers, J. Langendijk

Track: Clinical

Proffered Papers: Lung

Sunday, 8 May 2022 10:30 - 11:30

Chair: Cécile Le Péchoux -

Co-Chair: Jose Belderbos -

- 10:30 Impact of introducing IMRT on curative intent radiotherapy and survival for lung cancer OC - 0437
C. Chan (United Kingdom), I. Fornaçon-Wood, N. Bayman, K. Banfil, J. Coote, A. Garbett, M. Harris, A. Hudson, J. Kennedy, L. Pemberton, G. Price, A. Salem, H. Sheikh, P. Whitehurst, D. Woolf, C. Faivre-Finn
- 10:40 Proton-therapy and concurrent chemotherapy in stage III NSCLC: effects on hematological toxicity OC - 0438
F. Cortiula (The Netherlands), L. Hendriks, M. Steens, S. Dursun, G. Bootsma, R. Canters, I. Rinaldi, V.T. Taasti, R. Houben, K. Reynders, S. Peeters, A. Angrisani, D. Hattu, D. De Ruysscher
- 10:50 Geometric and dosimetric stability of high FDG-uptake volumes during dose escalated RT of NSCLC OC - 0439
D.S. Møller (Denmark), L. Hoffmann, A. Haraldsen, M.M. Knap, A.A. Khalil, C.M. Lutz
- 11:00 Comparing target volumes in a randomized trial of high-dose radiotherapy in small cell lung cancer OC - 0440
N. Levin (Norway), S. Danielsen, T.O. Halvorsen, K.T. Killingberg, K.R. Redalen, B.H. Grønberg
- 11:10 Risk of cardiac death increases with dose to cardiac sub structure avoidance region in lung cancer OC - 0441
A. Abravan (United Kingdom), C. Faivre-Finn, K. Banfill, A. McWilliam, M. van Herk

11:20 Association of sinoatrial node radiation dose with atrial fibrillation and mortality in lung cancer OC - 0442

K.H. Kim (Korea Republic of), J. Oh, J.S. Chang, H.I. Yoon

Track: Brachytherapy

Proffered Papers: Gynaecology

Sunday, 8 May 2022 10:30 - 11:30

Chair: Alina Sturdza -

Co-Chair: Reno Eufemon Cereno -

10:30 3D-Image-guided brachytherapy plus irradiation in stage-I-III inoperable endometrial cancer. OC - 0443

A. Rovirosa (Spain), Y. Zhang, C. Chagari, E. Van der Steen-Banasik, P. Wojcieszek, M. Stankiewicz, D. Najjari, P. Hoskin, K. Han, B. Segedin, R. Potter, K. Tanderup, E. Van Limbergen

10:40 Patient experience and time-action analysis during cervical cancer brachytherapy OC - 0444

S. van Vliet - Perez (The Netherlands), R. van Paassen, L. Wauben, R. Straathof, N. van de Berg, J. Dankelman, B. Heijmen, I. Kolkman-Deurloo, R. Nout

10:50 Automated optimization for cervix brachytherapy requires more than the EMBRACE-II planning aims OC - 0445

L. Dickhoff (The Netherlands), E.M. Kerkhof, B.R. Pieters, H. Westerveld, L.J. Stalpers, L.A. Velema, D.L. Barten, H. Gratama van Andel, Y. Niatsetski, C.L. Creutzberg, P.A. Bosman, T. Alderliesten

11:20 Fully automated adaptive multi-criteria planning for EMBRACE II cervical cancer brachytherapy OC - 0446

R. Bijman (The Netherlands), L. Rossi, S. Breedveld, I. Kolkman-Deurloo, J. Mens, M. Christianen, H. Abusaris, R. de Boer, R. Rijnsdorp, M. Huges, B. Heijmen, R. Nout

11:00 Clinical quality assurance in image guided brachytherapy of cervical cancer OC - 0447

L. Alex (Switzerland), M. Baumgartl, K. Uher, L. Motisi, C. Linsenmeier, M. Keane, N. Kremer, P. Petric

11:10 Scintillator-based in vivo dosimetry during pulsed dose rate brachytherapy for cervical cancer OC - 0448

P. Georgi (Denmark), S. K. Nielsen, A. T. Hansen, S. B. Hokland, H. Spejlberg, S. Rylander, L. U. Fokdal, J. Lindegaard, P. Petric, K. Tanderup, J. G. Johansen

Track: Physics

Proffered Papers: Optimisation & algorithms in proton & ion radiotherapy

Sunday, 8 May 2022 10:30 - 11:30

Chair: Jan Unkelbach -

10:30 Uncertainty analysis shows equivalence of PTV-based VMAT and robust IMPT for model-based selection OC - 0449

J. Rojo Santiago (The Netherlands), E. Korevaar, Z. Perkó, S. Both, S.J. Habraken, M.S. Hoogeman

10:40 Model-based selection of NSCLC patients for proton therapy with heterogeneous dose distributions OC - 0450

G.H. van Bogerijen (The Netherlands), M. Fuglsang Jensen, M. Lykkegaard Ehmsen, L. Hoffmann, M. Shamshad, C.M. Lutz, M.M. Knap, H.R. Mortensen, D.S. Møller, J.J. Nuytens

10:50 Comparative of different dose prediction and robust mimicking strategies for automatic IMPT planning OC - 0451

E. Borderias-Villaruel (Belgium), M. Huet-Dastarac, A.M. Barragán-Montero, M. Holmstrom, X. Geets, E. Sterpin

11:00 The role of RBE and LET in treatment efficacy of carbon ion radiotherapy for sacral chordoma OC - 0452

S. molinelli (Italy), G. Magro, A. Mairani, A. Allajbej, A. Chalaszczyk, A. Mirandola, M. Ciocca, M.R. Fiore, E. Orlandi

11:10 Proton arc therapy with optimized settings reduces toxicity for head and neck cancer patients OC - 0453

B.A. de Jong (The Netherlands), C. Battinelli, E. Engwall, G. Janssens, J.A. Langendijk, E.W. Korevaar, S. Both

11:20 A simple ion-type-independent in-vitro RBE description to improve proton RBE modelling OC - 0454

L. Tian (Germany), A. Lühr

Track: Physics

Proffered Papers: Radiomics & modelling

Sunday, 8 May 2022 10:30 - 11:30

Chair: Marta Bogowicz

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Chair: Claudio Fiorino

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10:30 RBE models of brainstem toxicity from proton therapy of paediatric ependymoma OC - 0455

A.H. Handeland (Norway), D.J. Indelicato, L.F. Fjæra, K.S. Ytre-Hauge, H.E.S. Pettersen, Y. Lassen-Ramshad, L.P. Muren, C.H. Stokkevåg

10:40 Cranial irradiation leads to nearly 3x accelerated biological aging in glioma patients OC - 0456

S. Huisman (The Netherlands), F. Cialdella, A. van der Boog, J. Verhoeff, S. David

10:50 Modeling outcome after salvage post-prostatectomy radiotherapy: impact of pelvic nodes irradiation OC - 0457

M. Olivieri, C. Cozzarini, A. Magli, D. Cante, B. Noris Chiorda, F. Munoz, A. Faiella, E. Olivetta, M.A. Signor, C. Piva, B. Avuzzi, L. Ferella, A. Pastorino, E. Garibaldi, M. Gatti, L. Rago, T. Statuto, S. Broggi, A. Fodor, C. Deantoni, T. Rancati, G. Sanguineti, R. Valdagni, N. Di Muzio, C. Fiorino (Italy)

11:00 Combined radiomics and dosiomics predicts radiation pneumonitis : a model with external validation OC - 0458

Z. Zhang (The Netherlands), L. Wee, L. Zhao, Z. Wang, A. Dekker

11:10 Tumor Control Probability following Radiosurgery of Brain Metastases With and Without Retreatment OC - 0459

M. Sharma (USA), M.T. Milano, M. Cummings, I.E. Naqa

11:20 Deep learning based time to event analysis with PET, CT and joint PET/CT for H&N cancer prognosis OC - 0460

Y. Wang (Germany), E. Lombardo, S. Zschaek, J. Weingärtner, A. Holzgreve, N. Albert, S. Marschner, M. Avanzo, G. Fanetti, G. Franchin, J. Stancanella, F. Walter, S. Corradini, M. Niyazi, C. Belka, M. Riboldi, C. Kurz, G. Landry

Track: RTT

Proffered Papers: AI & advanced practice

Sunday, 8 May 2022 10:30 - 11:30

Chair: Cynthia Eccles

-

Co-Chair: Samaneh Shoraka

-

10:30 IGRT practice in the Netherlands: Does the current RTT curriculum need to be adapted? OC - 0461
K. van Engen (The Netherlands), M. Kamphuis, M. Soumokil-de Bree, L. van Zadelhoff

10:40 An artificial intelligence approach to tumor volume delineation in glioblastoma OC - 0462
M. Hannisdal (Norway)

10:50 AI surpassing human expert: a multi-centric evaluation for organ at risk delineation OC - 0463
D. Azria (France), L. Boldrini, M. De Ridder, P. Fenoglietto, M.A. Gambacorta, T. Gevaert, G. Gungor, F.J. Lagerwaard, A.E. Marciscano, M. Michalet, H. Nagar, R. Pennell, I. Serbez, B. Vanspeybroeck, T. Zoto Mustafayev, A. Caffaro, L. Hardy, S. Kandiban, A. Oumani, T. Roque, N. Paragios, K. Shreshtha, E. Ozyar

11:00 A new model of care for rapid lung SABR treatment planning: Evaluation of the advanced RTT role. OC - 0464
R. Woodey (United Kingdom), N. Bayman, C. Chan, J. Coote, C. Faivre-Finn, R. Goldstraw, M. Harris, L. Pemberton, A. Salem, H. Sheikh, P. Whitehurst, D. Woolf

11:10 A comparison of doctor and therapeutic radiographer (RTT) prostate contours on T2 weighted MRI OC - 0465
G. Smith (United Kingdom), A. Dunlop, S. Alexander, H. Barnes, T. Herbert, R. Lawes, J. Murray, A. Pathmanathan, P. Patel, K. Sriharan, N. Sundahl, R. Westley, A. Tree, H. McNair

11:20 Clinical value of dual energy CT based delineation in the treatment planning for prostate patients OC - 0466
H.K. Mortensen (Denmark), M.P.R. Mathisen, J. Mortensen, H. Lindberg, L.S. Mouritsen, L.H. Dohn, J.M. Edmund

Track: Physics

Mini-Oral: 11: Intra-fraction motion management

Sunday, 8 May 2022 10:30 - 11:30

Mini-Oral Theatre 1

Chair: Sara Abdollahi

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Co-Chair: Helen Grimes

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10:30 Dosimetric impact of intrafraction upper abdominal tumor motion during MR-guided SBRT MO - 0467
G. Grimbergen (The Netherlands), H. Eijkelenkamp, H. Heerikens, B. Raaymakers, M. Intven, G. Meijer

10:30 First demonstration of 3D cine-MRI guided MLC-tracking for extremely hypofractionated prostate SBRT MO - 0468
P. Borman (The Netherlands), P. Uijtewaal, D. de Muinck Keizer, P. Woodhead, B. Raaymakers, H. de Boer, M. Fast

10:30 Extensive evaluation of dosimetric robustness for respiratory motion of lung tumor radiotherapy MO - 0469
N. Olofsson (Sweden), K. Wikström, A. Flejmer, A. Ahnesjö, A. Dasu

10:30	Markerless lung tumor localization in cine MV images of deep-inspiration breath-hold IMRT treatments <i>S. Rohrer (Denmark), D.S. Møller, L. Hoffmann, S. Skouboe, M.L. Ehmsen, T. Ravkilde, M. Knap, P.R. Poulsen</i>	MO - 0470
10:30	Motion management in liver SBRT and its impact on treatment time <i>N. Hardcastle (Australia), M. Gaudreault, A. Yeo, E. Ungureanu, R. Barnes, C. Markham, S. Chander, J. Chu</i>	MO - 0471
10:30	Limitations of phase-sorting based pencil beam 4D proton dose calculation under irregular motion <i>A. Duetschler (Switzerland), J. Prendi, S. Safai, D.C. Weber, A.J. Lomax, Y. Zhang</i>	MO - 0472
10:30	4D log file-based proton dose reconstruction: Fraction-wise interplay analysis in clinical practice <i>S. Spautz, J. Thiele, M. Tschiche, E.G. Troost, C. Richter, K. Stützer (Germany)</i>	MO - 0473
10:30	Using the ICD lead as a tracking surrogate for cardiac radioablation: impact of cardiac motion <i>L. Rigal (France), J. Bellec, A. Hervouin, M. Lederlin, K. Benali, R. Martins, R. De Crevoisier, A. Simon</i>	MO - 0474

Track: Clinical

Mini-Oral: 12: Head and neck

Sunday, 8 May 2022 14:15 - 15:15

Mini-Oral Theatre 2

Chair: TBC; Co-Chair: B. Hassine Samia

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Simple strategy to select head and neck cancer patients for adaptive radiotherapy in the first week <i>Y. Gan (The Netherlands), J.A. Langendijk, A. van der Schaaf, L. van den Bosch, E. Oldehinkel, Z. Lin, S. Both, C.L. Brouwer</i>	MO - 0475
Statistical discrepancies in GTV delineation for H&N cancer across expert centers <i>A. Leroy (France), N. Paragios, E. Deutsch, V. Grégoire, D. Mitrea, A. Pêtre, R. Sun, Y.G. Tao</i>	MO - 0476
Pretherapeutic sarcopenia predicts survival of elderly patients undergoing radiation for HNSCC <i>E. Haehl (Germany), L. Alvino, A. Rühle, A. Fabian, J. Zou, S. Spohn, C. Zamboglou, E. Gkika, A. Grosu, N. Nicolay</i>	MO - 0477
Is proton therapy a risk factor for radiation ulcers in oropharyngeal carcinoma? <i>H. Langendijk (The Netherlands), A. van den Hoek, T. Meijer, E. Oldehinkel, H. Verbeek, J. Free, S. Both, D. Scandura, R. Steenbakkers</i>	MO - 0478
Hypofractionation and the risk of post radiation mucosal ulcers in oropharyngeal carcinoma. <i>G. Verduijn (The Netherlands), S. Petit, N. Sijtsema, I. Lauwers, Y. van Norden, A. Sewnaik, R. Nout, A. van der Lugt, M. Hoogeman, W. Heemsbergen</i>	MO - 0479
Risk of acute mucositis following an increase in high dose CTV1 in HNSCC patients <i>R. Zukauskaitė (Denmark), J. Grau Eriksen, E. Andersen, J. Johansen, E. Samsøe, S. Long Krogh, J. Overgaard, C. Grau, C. Rønn Hansen</i>	MO - 0480

Mandibular osteoradionecrosis after postoperative radiotherapy for oral cavity cancer MO - 0481

M. Möring (The Netherlands), H. Mast, E. Wolvius, G. Verduijn, S. Petit, N. Sijtsema, B. Jonker, R. Nout, W. Heemsbergen

Carbon ion radiotherapy for head and neck mucosal melanoma: single-center experience in 40 patients. MO - 0482

S. Ronchi (Italy), B. Vischioni, A. Cicchetti, M. Bonora, R. Ingargiola, E. Rossi, S. Russo, M. Ciocca, E. Orlandi

Track: Radiobiology

Poster Discussion: 11: Radiobiology

Sunday, 8 May 2022 10:30 - 11:30

Poster Station 1

Chair: TBC

10:30 Long-lasting anti-tumor immunity with conventional and FLASH radiotherapy of high grade glioma PD - 0483

E. Liljedahl, E. Konradsson, E. Gustafsson, T. Bäckström, C. Ceberg, H. Nittby Redebrandt (Sweden)

10:30 Changes of immune status in patients with different pd-l1 expression after SBRT of metastases PD - 0484

A. Zozulya (Russian Federation), S. Novikov, I. Baldueva, A. Artemyeva, A. Muravceva, D. Girdyuk, N. Emelyanova, E. Turyaeva, E. Fedosova, F. Antipov, A. Arseniev, S. Kanaev, A. Belyaev

10:30 Dynamic of immune profile after SABR PD - 0485

S. Novikov (Russian Federation), A. Zozulya, I. Baldueva, A. Arseniev, S. Kanaev, N. Emelyanova

10:30 A flow cytometry-based screen to identify compounds that inhibit DNA repair after radiation PD - 0486

G.E. Rødland (Norway), C. Naucke, S. Hauge, T. Stokke, R. G. Syljuåsen

10:30 Radiotherapy-induced gene expression changes in breast cancer cell lines PD - 0487

C. Gomà (Spain), F. Brasó-Maristany, N. Lorman-Carbó, A. Prat, M. Mollà

10:30 Caffeic Acid Phenethyl Ester, a natural radiosensitizer for lung adenocarcinomas PD - 0488

È. Prades-Sagarra (The Netherlands), R. Biemans, N.G. Lieuwes, P. Lambin, A. Yaromina, L.J. Dubois

10:30 Effect of C-ions on activation of mucosal melanoma cells through alterations in Ca²⁺ signaling PD - 0489

A. Charalampopoulou (Italy), A. Barcellini, F. Carnevale, M. Ciocca, P. Faris, F. Moccia, M.G. Pullia, G. Volpi, A. Facchetti

10:30 Superficial wIRA-hyperthermia and re-irradiation: Role of oxygen-dependent radiosensitization PD - 0490

A. Thomsen (Germany), M.R. Saalman, M. Notter, N.H. Nicolay, A. Grosu, P. Vaupel

Track: Clinical

Poster Discussion: 12: GI

Sunday, 8 May 2022 10:30 - 11:30

Poster Station 2

Chair: Pierfrancesco Franco

10:30	Resectable cervical esophageal cancer : Surgery or definitive chemoradiotherapy with dose escalation <i>J. Moon (Korea Republic of)</i>	PD - 0491
10:30	A PET/CT-based radiomic signature as a predictor of early progression in LA-Pancreatic Cancer <i>M. Fiore (Italy), E. Cordelli, P. Trecca, G.M. Petrianni, G. D'Ercole, R. Coppola, M.L. Calcagni, P. Soda, S. Ramella</i>	PD - 0492
10:30	Acute toxicity of short course radiotherapy with prolonged interval to surgery for rectal cancer <i>M. Verweij (The Netherlands), S. Hoendervangers, L. von Hebel, A. Pronk, A. Schiphorst, E. Consten, E. Verdaasdonk, T. Rozema, L. Verkooijen, H. van Grevenstijn, M. Intven</i>	PD - 0493
10:30	Secondary dosimetric analysis of a phase II study on radiation volume de-escalation in rectal cancer <i>G. D'Ercole (Italy), M. Fiore, R. Alaimo, P. Trecca, G.M. Petrianni, L.E. Trodella, M. Marrocco, C. Greco, E. Ippolito, S. Ramella</i>	PD - 0494
10:30	Stereotactic MR-guided Adaptive RT for rectal cancer: toxicity, radiological & pathological response <i>A. Castelluccia (Italy), D. Marchesano, G. Grimaldi, I. Annessi, F. Bianciardi, C. Borrazzo, A. Di Palma, R. El Gawhary, M. Masi, M. Rago, M. Valentino, L. Verna, P. Gentile</i>	PD - 0495
10:30	Downstaging as an early predictor in rectal cancer: results of a pooled dataset of 4167 patients <i>G. Chiloiro (Italy), M. Savino, A. Romano, C. Masciocchi, J. Van Soest, J. Gérard, S.Y. Ngan, C. Rödel, A. Sainato, A. Damiani, A. Dekker, M.A. Gambacorta, V. Valentini</i>	PD - 0496
10:30	Prognostic role of GLUT-1 in locally advanced rectal cancer <i>T.H. Kim (Korea Republic of), C. Song, J. Kim, Y.J. Kwak, H.S. Lee</i>	PD - 0497
10:30	Atlas-based auto-segmentation of pelvic CTVs in FDG-PET-CT planning of anal cancer <i>M.N. Duma (Germany), M. Bieder, M. Böhm, M. Freesmeyer, R. Drescher, S. Weimann, A. Wittig</i>	PD - 0498
10:30	Bonesparing radiotherapy for anal cancer. -Initial planning quality for the DACG II trial <i>C. Kronborg (Denmark), L. Nyvang, J. Hansen, E. Serup-Hansen, B. Havelund, E. Wilken, S.P. Mc Ilroy, K.G. Spindler</i>	PD - 0499
10:30	Outcomes and hemato-immunological toxicity in anal cancer patients with or without HIV infection <i>C. Velten (USA), P. Brodin, M. Gjini, S. Zhu, M. Hauze, S. Kalnicki, C. Guha, M. Garg, R. Kabarriti</i>	PD - 0500
10:30	Patterns of failure in anal cancer after IMRT and chemotherapy: Impact of 1 vs 2 doses of Mitomycin. <i>Z. Al Habsi (Canada), K. Joseph, A. Abraham, M. Al Balushi, G. Tankel, K. Mulder, H. Warkentin, D. Schiller, K. Tankel, N. Usmani, D. Severin, K. Paulson, H. Karachiwala, C. Wong, T. Nijjar, C. Doll</i>	PD - 0501
10:30	Stereotactic MR guided online adaptive radiotherapy for abdominal and pelvic lymph node metastases <i>K. Owczarczyk (United Kingdom), H. Harford-Wright, S. Shergill, T. Sevvitt, J. Lynch, J. Harris, B. George, A. Gaya, J. Good</i>	PD - 0502

Track: Interdisciplinary

Proffered Papers: Highlights of Proffered Papers - Best Papers

Sunday, 8 May 2022 11:40 - 12:40

Chair: Esther Troost

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Chair: Umberto Ricardi

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11:40 Brachytherapy Best Paper: Effect of dose and fractionation de-escalation in low-risk cervix cancer treated with EBRT and BT OC - 0503

M. Serban (Denmark), M. Gallois, T. Urtubey, R. Nout, A. de Leeuw, L. Fokdal, M. Assenholt, S. Spampinato, K. Bruheim, B. Segedin, S. Chopra, M. Schmid, N. Nesvacil, S. Ecker, K. Kirchheiner, R. Pötter, H. Westerveld, F. Huang, L. Velema, L.T. Tan, M. Valgma, H. Mathiesen, J. Lindegaard, I. Jürgenliemk-Schulz, K. Tanderup

11:50 Clinical Best Paper: CD8 positive cells indicate gain of postmastectomy radiotherapy: a study of the DBCG82bc cohort OC - 0504

T. Tramm (Denmark), P.S. Nielsen, J.B. Georgsen, J. Overgaard, J. Alsner

12:00 Interdisciplinary Best Paper: Coverage with evidence development: generating real-life evidence on SBRT in Belgium OC - 0505

Y. Lievens (Belgium), L. Boesmans, H. Engels, X. Geets, N. Jansen, S. Janssens, M. Lambrecht, V. Remouchamps, S. Roosens, K. Stellamans, D. Verellen, C. Weltens, R. Weytjens, N. Van Damme

12:10 Physics Best Paper: Salivary gland dose response modelling using PSMA PET/CT OC - 0506

V. Mohan (The Netherlands), N. Bruin, J. van de Kamer, J. Sonke, W. Vogel

12:20 Radiobiology Best Paper: Differential effect of PBS Proton FLASH on tumor control and skin toxicity in a mouse leg model OC - 0507

B.S. Sørensen (Denmark), M.K. Sitarz, C. Ankjærgaard, J. Johansen, C.E. Andersen, E. Kanouta, C. Grau, P. Poulsen

12:30 RTT Best Paper: Predicted reduction in Δ NTCP by model based selected proton therapy for oesophageal cancer patients OC - 0508

P. Klinker (The Netherlands), E. Korevaar, A. Koops, M. Dieters, V. Mul, A. Niezink, J. Langendijk, C. Muijs

Track: Clinical

Multidisciplinary Tumour Board: Oesophageal cancer

Sunday, 8 May 2022 11:40 - 12:40

Chair: Marianne Nordsmark

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Track: Interdisciplinary

Symposium: Management of radio-recurrent prostate cancer

Sunday, 8 May 2022 14:15 - 15:30

Chair: Alison Tree

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Co-Chair: Monica-Emilia Chirilă

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14:15 Clinician: Evidence and best option for salvage techniques SP - 0509

A. Kishan (USA)

14:33	Physicist: Integration of imaging modalities in treatment planning <i>U. van der Heide (The Netherlands)</i>	SP - 0510
14:51	Clinician 2: Is SBRT possible after previous dose-escalated radiotherapy? <i>N. van As (The United Kingdom)</i>	SP - 0511
15:09	Brachytherapist: Focal or whole gland salvage brachytherapy? <i>P. Wojcieszek (United Kingdom)</i>	SP - 0512

Track: Radiobiology

Symposium: The hypoxic tumour microenvironment

Sunday, 8 May 2022 14:15 - 15:30

Chair: Fernando Lopez Campos

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Co-Chair: Alexander van der Wiel

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14:15	Hypoxia and alterations in the redox pathways in response to radiation <i>E.J.. Moon (United Kingdom)</i>	SP - 0513
14:33	Hypoxia and HPV in Head and Neck Cancers: novel opportunities for personalized treatment <i>P. Span (The Netherlands)</i>	SP - 0514
14:51	Extracellular vesicles in hypoxia-induced remodelling of the tumour microenvironment <i>K. Rouschop (The Netherlands)</i>	SP - 0515
15:09	Inflammatory microenvironment remodelling after radiation therapy <i>M. Rodríguez-Ruiz (Spain)</i>	SP - 0516

Track: Clinical

Joint Symposium: ESTRO-EORTC: Oligometastatic Disease

Sunday, 8 May 2022 14:15 - 15:30

Chair: Morten Høyer

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Chair: Piet Ost

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14:15	Countability rather than number of metastases to select patients for local ablative therapies (LAT) in oligometastatic disease and novel endpoints for trials and registries. <i>J. Widder (Austria)</i>	SP - 0517
14:33	"It takes more than one course of local ablative radiotherapy in oligometastatic cancer patients": challenges and opportunities of repeat LAT and combination with systemic therapy <i>M. Scorsetti (Italy)</i>	SP - 0518
14:51	Registry trials for oligometastatic disease: rational and current status of the E2R OligoCare project <i>P. Ost (Belgium)</i>	SP - 0519

15:09 Going beyond clinical trials in the era of real world data SP - 0520
C. Fortpied (Belgium)

Track: Clinical

Joint Symposium: ESTRO-IASLC: Advances in radiotherapy for lung cancer

Sunday, 8 May 2022 14:15 - 15:30

Chair: Ben Slotman -

Chair: Heather Wakelee -

14:15 Radiotherapy in oligometastatic disease SP - 0521
F. McDonald (United Kingdom)

14:33 Radiomics and radiotherapy: State of the art and future challenges SP - 0522
D. De Ruyscher (The Netherlands)

14:51 Combining radiotherapy and immunotherapy SP - 0523
C. Faivre.Finn (United Kingdom)

15:09 Prophylactic cranial irradiation in lung cancer: Where are we? SP - 0524
B. Slotman (The Netherlands)

Track: Brachytherapy

Symposium: Ocular plaque brachytherapy

Sunday, 8 May 2022 14:15 - 15:30

Chair: Frank-André Siebert -

Co-Chair: Michele Keane -

14:15 Ocular plaque brachytherapy with I-125 and Ru-106: Treatment planning and QA aspects SP - 0525
M. De Brabandere (Belgium)

14:40 GEC-ESTRO survey on global Ru-106 eye plaque brachytherapy practice SP - 0526
L.S. Fog (Australia), M. De Brabandere, E. Placidi, A. Slocker, L. Tagliaferri, Á.C. Tedgren, M. Andrassy, C. Schulz, E.C. Chimfwembe, F. Siebert

15:05 Clinical management and treatment outcomes of eye plaque treatment of uveal melanoma SP - 0527
B. Fionda (Italy)

Track: Physics

Debate: This house believes that in 10 years particle therapy will be in a better place than now!

Sunday, 8 May 2022 14:15 - 15:30

Chair: Ludvig Muren -

Chair: Marco Schwarz -

14:15	Introduction	SP - 0528
14:17	For the motion - Protons for Protons <i><u>T. Bortfeld (USA)</u></i>	SP - 0529
14:32	Against the motion - Photons against Protons <i><u>M. Guckenberger (Switzerland)</u></i>	SP - 0530
14:47	For the motion (rebuttal) - Photons for Protons <i><u>M. Aznar (United Kingdom)</u></i>	SP - 0531
15:02	Against the motion (rebuttal) - Protons against Protons <i><u>E. Troost (Germany)</u></i>	SP - 0532
15:17	Discussion	SP - 0533

Track: Physics

Joint Symposium: ESTRO-ISMIR: Quantitative MRI for radiation oncology

Sunday, 8 May 2022 14:15 - 15:30

Chair: Petra van Houdt -

Chair: Oliver Gurney-Champion -

Chair: Daniela Thorwarth -

14:15	Why quantitative MRI in radiotherapy <i><u>K.R. Redalen (Norway)</u></i>	SP - 0534
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14:30	Technical challenges of qMRI <i><u>K. Keenan (USA)</u></i>	SP - 0535
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14:45	Quantitative MRI on an MR-Linac <i><u>A. Wetscherek (United Kingdom)</u></i>	SP - 0536
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15:00	The future of qMRI in radiotherapy: From prognostic to predictive <i><u>C. Fuller (USA)</u></i>	SP - 0537
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15:15	Panel discussion	SP - 0538
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Track: RTT

Symposium: RTTs: AI and digital awareness

Sunday, 8 May 2022 14:15 - 15:30

Chair: Ingrid Kristensen -

Co-Chair: Grete May Engeseth -

14:15	AI is an essential component of a curriculum for RTTs <i>M. Coffey (Ireland)</i>	SP - 0540
14:40	The changing face of the RTT profession in the AI environment <i>C. Gillan (Canada), B. Hodges, D. Wiljer, M. Dobrow</i>	SP - 0541
15:05	Dealing with a national cyber attack: A multi-disciplinary approach <i>A. Flavin (Ireland)</i>	SP - 0542

Track: Physics

Mini-Oral: 13: Implementation of new technology

Sunday, 8 May 2022 14:15 - 15:15

Mini-Oral Theatre 1

Co-Chair: Stefanie Ehrbar

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Chair: Livia Marrazzo

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14:15	FLASH-dose and dose-rate calculations for 1x34Gy lung SBRT using proton transmission beams <i>P. van Marlen (The Netherlands), W. Verbakel, B. Slotman, M. Dahele</i>	MO - 0543
14:15	4pi-IMRT based path-finding for dynamic trajectory radiotherapy <i>P. Mackeprang (Switzerland), J. Bertholet, S. Mueller, G. Guyer, H.A. Loebner, D. Frei, W. Volken, O. Elicin, D.M. Aebersold, M.K. Fix, P. Manser</i>	MO - 0544
14:15	A quasi-optimal non-coplanar 4π-VMAT solution for treating head & neck cancers <i>J. Simms (United Kingdom), C. Rowbottom, R. Dawson</i>	MO - 0545
14:15	Data augmentation for deep learning multipurpose prostate target and OAR segmentation in CT and CBCT <i>M. Lempart (Sweden), C. Jamtheim Gustafsson, M. Nilsson, M. P. Nilsson, N. Svanberg, J. Scherman, P. Munck af Rosenschöld, L. E. Olsson</i>	MO - 0546
14:15	A federated learning IT-infrastructure to support the Dutch model-based approach for proton therapy <i>P. Kalendralis (The Netherlands), M. Sloep, J. Snel, N.M. George, M. Veening, A. Van der Schaaf, J.A. Langendijk, A. Dekker, J. Van Soest, R. Fijten</i>	MO - 0547
14:15	Systematic input evaluation for deep learning-based pre-treatment quality assurance <i>C. Wolfs (The Netherlands), F. Verhaegen</i>	MO - 0548
14:15	No need for manual adjustments of deep learning segmentation in oropharyngeal cancer? <i>H. van de Glind (The Netherlands), I.G. van Bruggen, J.A. Langendijk, S. Both, C.L. Brouwer</i>	MO - 0549
14:15	Pre-study QA reduces delineation errors and minimize dose to OAR in a central lung tumour SBRT trial <i>L. Hoffmann (Denmark), G.F. Persson, L. Nygård, T.B. Nielsen, S. Borrisova, F. Gaard-Petersen, M. Josipovic, A.A. Khalil, R. Kjeldsen, M.M. Knap, C. Kristiansen, D.S. Møller, W. Ottosson, H. Sand, R. Thing, M. Pøhl, T. Schytte</i>	MO - 0550

Track: Clinical

Mini-Oral: 14: Urology

Mini-Oral Theatre 2

Sunday, 8 May 2022 10:30 - 11:30

Chair: Luca Nicosia

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Co-Chair: Nejla Fourati

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Short-term RT for early PCa with concomitant boost to the DIL (phase II trial AIRC-IG-13218)-updates MO - 0551

G. Corrao (Italy), G. Marvaso, M. Pepa, M. Zaffaroni, M.G. Vincini, F. Bellerba, S. Gandini, S. Volpe, D.P. Rojas, D. Zerini, C.I. Fodor, P. Pricolo, S. Alessi, G. Petralia, F.A. Mistretta, R. Cambria, F. Cattani, O. De Cobelli, R. Orecchia, B.A. Jerezek-Fossa

Propensity score-matched analysis comparing prostate EBRT versus EBRT + HDR brachytherapy MO - 0552

J. Tamihardja (Germany), I. Lawrenz, P. Lutyj, J. Kraft, M. Zimmermann, S. Weick, M. Flentje, B. Polat

ENRT+ PET-guided SIB for prostate cancer lymph nodal relapses: long-term outcomes MO - 0553

A. Fodor (Italy), C.L. Deantoni, C. Fiorino, C. Cozzarini, I. Dell'Oca, P. Mangili, R. Tummineri, F. Zerbetto, A. Sanchez Galvan, G. Mandurino, S.L. Villa, S. Baroni, J. Saddi, P. Pacifico, L. Perna, S. Broggi, A. Del Vecchio, M. Picchio, L. Gianolli, N. Di Muzio

Pelvic dose accumulation from time-successive prostate and lymph node radiation (NCT02274779) MO - 0554

L. Vaugier (France), V. Guimas, S. Chiavassa, G. Delpon, S. Supiot

Radiotherapy for node-positive prostate cancer correlates with improved survival MO - 0555

T. Elumalai (United Kingdom), R. Portner, N.B.G. Mariam, T. Young, S. Hughes, K. Wickramasinghe, R. Bhana, K.T. Jayaprakash, M. Sabar, A. Hudson, P. Hoskin, H. Mistry, A. Choudhury

Treating oligometastatic prostate cancer – a survey among the German Society for Radiation Oncology MO - 0556

P. Rogowski (Germany), C. Trapp, R. von Bestenbostel, D. Konnerth, S. Marschner, N. Schmidt Hegemann, C. Belka, M. Li

Estimates of α/β ratios for individual late urinary toxicity endpoints: analysis of a cohort trial MO - 0557

T. Rancati (Italy), E. Gioscio, A. Cicchetti, B. Rosenstein, P. Seibold, B. Avuzzi, D. Azria, A. Choudhury, D. De Ruysscher, A.M. Dunning, R. Elliott, S. Kerns, M. Lambrecht, E. Sperk, P. Symonds, C. Talbot, A. Vega, L. Veldeman, R. Valdagni, A. Webb, J. Chang-Claude, C. West

Predicting Prostate Cancer Response to Brachytherapy Using AI Driven Digital Pathology MO - 0558

M. Keyes (Canada), C. MacAulay, M. Guillaud

Track: Brachytherapy

Poster Discussion: 13: Brachytherapy

Sunday, 8 May 2022 14:15 - 15:15

Poster Station 1

Chair: Angeles Rovirosa

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14:15 Interstitial HDR Brachytherapy in head and neck carcinomas: experience in COVID pandemic PD - 0559

A. Sharma (India), R. Bharat, V. Pareek, A. Vivekanandan, G. Shyam, V. Gosh, S. Gupta, J. Yadav, S. Mullassery, R.K. Bisht, P.A. Patil, S. Mallick, D.N. Sharma, S. Nirala

- 14:15 HDR brachytherapy boost for cervical cancer: 4 fractionation scheme efficacy and toxicity analysis *PD - 0560*
M. Le Guyader (France), D. Lam Cham Kee, J. Hannoun-Levi, M. Gautier, M. Chand Fouche, B. Thamphya
- 14:15 Planning with electronic brachytherapy in patients with cervical cancer *PD - 0561*
S. Lozares (Spain), V. Gonzalez, S. Pellejero, J.A. Font, A. Gandía, D. Villa, V. Alba, S. Jiménez, J. Díez, R. Castro, A. González
- 14:15 Source path verification - Advanced Gynecological Brachytherapy Applicator (Venezia) *PD - 0562*
H. Vaithianathan (Australia), T. Kupfer
- 14:15 QA primary program for a skin surface brachytherapy plan *PD - 0563*
C. Arrichiello (Italy), F. Buonanno, G. Ametrano, F. Gherardi, E. Iannaccone, P. Muto
- 14:15 Feasibility of real-time in vivo dosimetry for HDR gynaecological brachytherapy using a MOSFET. *PD - 0564*
F. Mahmood (United Kingdom), J. Mason, R. McLauchlan
- 14:15 Which is the most appropriate treatment modality in the radiotherapy of low-risk prostate cancer? *PD - 0565*
G. Fröhlich (Hungary), P. Ágoston, K. Jorgo, G. Stelczer, C. Polgár, Z. Takácsi-Nagy, T. Major
- 14:15 Permanent interstitial brachytherapy for prostate cancer implenting prostatic artery embolization *PD - 0566*
H. Haddad (Germany), H. Hermani, P. Bischoff, H. Hanitzsch, A. Heidrich, A. Schaefer, A. Kovács, M. Pinkawa
- 14:15 PSA nadir has a significant prognostic value after prostate Iodine brachytherapy *PD - 0567*
P. Fernandes (Portugal), S. garcia, M. Trigo
- 14:15 Long-term results of Iodine-125 seed brachytherapy in low and intermediate risk prostate carcinoma *PD - 0568*
J. Guinot (Spain), V. Gonzalez-Perez, J. Casanova, M.A. Santos, V. De los Dolores, A. La Rosa, A. Sanchez-Rodriguez, A. Laborda, S. Canos, V. Cotanda, C. Guardino, M.I. Tortajada, L. Arribas
- 14:15 Assessment of Catheter Displacement on Single Fraction HDR Prostate Brachytherapy Treatment *PD - 0569*
S.K. Abdul Wahab, M. Boutros, G. Sands, A. Nisbet (United Kingdom)
- 14:15 Axially rigid active steerable needle for high-dose-rate prostate brachytherapy *PD - 0570*
M. Vries (The Netherlands), J. Sikorski, S. Misra, J. van den Dobbelsteen

Track: Clinical

Poster Discussion: 14: Urology 2

Sunday, 8 May 2022 14:15 - 15:15

Poster Station 2

Chair: Sofia Spampinato

- 14:15 Determining interobserver variability in prostate bed CTV target delineation using MRI *PD - 0571*
K. Sriharan (United Kingdom), H. Akhiat, D. Cahill, S.L. Choi, A. Choudhury, P. Chung, J. Diaz, L. Dysager, W. Hall, L. Kerkmeijer, C.A. Lawton, J. Murray, C.J. Nyborg, F.J. Pos,

M. Rigo, T. Schytte, M. Sidhom, A. Sohaib, A. Tan, J. van der Voort van Zyp, D. Vesprini, M.J. Zelefsky, A. Tree

- 14:15 Ten-year outcomes of post prostatectomy radiotherapy and external validation of an updated nomogram *PD - 0572*
S. Chin (Australia), P. Horsley, H. Mistry, N. Aherne, T. Shakespeare
- 14:15 Protective Effect of Metformin for Biochemical Failure post Radical Prostatectomy or Radiation *PD - 0573*
L. Huynh (USA), E. Keit, E. Huang, R.C. Carillo, T. Ahlering, S. Boyle, C.A. Enke, M.J. Baine
- 14:15 1.5T MR-guided RT versus linac-based VMAT SBRT in localized prostate cancer: a toxicity comparison *PD - 0574*
L. Nicosia (Italy), C. Vitale, F. Cuccia, M. Rigo, V. Figlia, R. Mazzola, N. Giaj-Levra, F. Ricchetti, R. Ruggeri, F. Alongi
- 14:15 Toxicity and QoL report of 1.5T MR-guided SBRT for prostate cancer in the first 100 patients *PD - 0575*
F. Cuccia (Italy), V. Figlia, M. Rigo, L. Nicosia, R. Mazzola, N. Giaj-Levra, F. Ricchetti, G. Attinà, E. Pastorello, C. Vitale, A. De Simone, D. Gurrera, S. Naccarato, G. Sicignano, R. Ruggieri, F. Alongi
- 14:15 Ultra-hypofractionated SBRT following radical prostatectomy: first results of a phase II trial *PD - 0576*
A. Montero (Spain), O. Hernando, X. Chen-Zhao, J. Valero, A. Prado, E. Sanchez, M. Lopez, R. Ciervide, M. Garcia-Aranda, B. Alvarez, M. de la Casa, R. Alonso, P. Fernandez-Leton, C. Rubio
- 14:15 Patient-reported acute urinary toxicity after daily adaptive MR-guided SBRT for prostate cancer *PD - 0577*
T. Willigenburg (The Netherlands), F.R. Teunissen, J. van der Velden, J. de Boer, J. van der Voort van Zyp
- 14:15 Long term toxicity of prostate-only or pelvic SBRT: A Comparative Study *PD - 0578*
Withdrawn
- 14:15 Ultra-hypo compared to moderate-hypo fractionated prostate IGRT with HDR brachytherapy boost. *PD - 0579*
A. Martin (Canada), D. Carignan, M. Beaudry, É. Ménard, W. Foster, É. Vigneault, S. Magnan, B. Lachance, É. Poulin, F. Lacroix, L. Archambault, L. Beaulieu, P. Després
- 14:15 Assessment of acute toxicity with HDR focal boost and whole gland SBRT in localised prostate cancer *PD - 0580*
J. Padayachee (Canada), Z. Liu, A. Berlin, J. Helou, J. Winter, V. Kong, R. Glicksman, S. Raman, R. Weersink, P. Chung
- 14:15 Offline-adaptive planning of mpMRI- and PSMA-PET- based dose escalation: results of a phase II trial *PD - 0581*
S. Spohn (Germany), M. Gaine, M. Mix, J. Ruf, M. Benndorf, D. Baltas, A. Grosu, C. Zamboglou
- 14:15 Phase II trial of SBRT for adrenal metastases: efficacy and impact on hormonal production. *PD - 0582*
C. Franzese (Italy), S. Stefanini, M. Massaro, T. Comito, P. Navarria, E. Clerici, A. Teriaca, D. Franceschini, G. Reggiori, S. Tomatis, A. Lania, M. Scorsetti

Track: Interdisciplinary

Award Lecture: Honorary Physicist Award

Sunday, 8 May 2022 16:00 - 16:25

16:00 Introduction SP - 0583

16:05 TBC SP - 0584

C. Faivre Finn (United Kingdom)

Track: Interdisciplinary

Award Lecture: Iridium Award Lecture - in memoriam for Professor Janusz Skowronek

Sunday, 8 May 2022 16:25 - 16:50

16:25 Introduction SP - 0585

16:30 You'll never walk alone - The lesson Late Prof. Janusz Skowronek taught me SP - 0586

P. Wojcieszek (Poland)

Track: Interdisciplinary

Proffered Papers: Patient-reported outcomes

Sunday, 8 May 2022 16:55 - 17:55

Chair: Jo Haviland

16:55 High sensitivity of PROMs detecting boost-vs-no-boost during breast radiotherapy OC - 0587

G. Heilemann (Austria), A. Renner, D. Kauer-Dorner, I. Simek, S. Konrad, D. Georg, J. Widder

17:05 Impact of persistent symptoms on long-term quality of life of cervical cancer survivors in EMBRACE I OC - 0588

S. Spampinato (Denmark), K. Tanderup, R. Nout, S. Smet, J.C. Lindegaard, L.U. Fokdal, R. Pötter, A. Sturdza, B. Segedin, I. Jürgenliemk-Schulz, K. Bruheim, U. Mahantshetty, C. Chargari, B. Rai, R. Cooper, E. van der Steen-Banasik, M. Sundset, E. Wiebe, E. Villafranca, E. Van Limbergen, S. Chopra, K. Kirchheiner

17:15 Successful pregnancies after helical Tomotherapy craniospinal irradiation for adult medulloblastoma OC - 0589

E. Coassin (Italy), L. Barresi, C. Cappelletto, A. Tosoni, P. Chiovati, A. Drigo, A. Brandes, M. Mascarin

17:25 A National Survey of Patient Reported Outcome Measures (PROMs) Use within Radiotherapy in England OC - 0590

L. Oliver (United Kingdom), D. Hutton, M. Cain, M. Bates, T. Hall, S. Evans, A. Bowman, A. Cree

17:35 Defining the psychiatric burden of mental and substance use disorders in cancer patients OC - 0591

S. Baliga (USA), B. Klamer, J. Palmer, S. Wells-Di Gregorio, S. Kale, M. Bonomi, M. Old, J. Rocco, D. Blakaj

17:45 Impact of palliative care referral on distress in patients undergoing RT for HNSCC: Randomized Trial OC - 0592

J.P. Agarwal (India), S. Sinha, S. Lewis Salins, S. Pandey, J. Deodhar, N. Salins, S. Ghosh Laskar, A. Budrukhar, T. Gupta, V. Murthy, M. Swain, S. Nair, P. Chaturvedi

Track: Radiobiology

Proffered Papers: Microenvironment

Sunday, 8 May 2022 16:55 - 17:55

Chair: Kasper Rouschop

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Co-Chair: Sissel Hauge

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- 16:55 SPECT Imaging of CAIX and monitoring of hypoxia after OXPHOS inhibition in murine tumor models OC - 0593
D. Boreel (The Netherlands), P. Span, H. Peters, A. Kip, M. Boswinkel, G. Adema, S. Heskamp, J. Bussink
- 17:05 Head and Neck Squamous Cell Carcinoma derived CAFs alter their phenotype after ionizing radiation OC - 0594
M. Ansems (The Netherlands), V. Mekers, A. Beerkens, M. Dotinga, K. Strepj, J. Honings, W. Weijs, G.J. Adema, J.H. Kaanders, J. Bussink
- 17:15 Human mesenchymal stromal cells increase glioblastoma radioresistance by cellular networks OC - 0595
M. Strack (Germany), A. Rühle, D.H. Heiland, O. Schnell, A. Grosu, N.H. Nicolay
- 17:25 Gene regulatory networks of metabolic stress responses in cervical cancer OC - 0596
C. Fjeldbo (Norway), C.H. Julin, M. Jonsson, E. Aarnes, T. Hompland, T. Hillestad, V.E. Skingen, A. Nilsen, U.B. Salberg, A.K. Lie, G.B. Kristensen, G.B. Kristensen, H. Lyng
- 17:35 Fractionated radiotherapy and its effect on the tumour microenvironment: a small animal study. OC - 0597
R. D'Alonzo (Australia), S. Keam, K. MacKinnon, A. Cook, A. Nowak, S. Gill, P. Rowshanfarzad, M. Ebert
- 17:45 Hypoxia can impair cell migration due to extracellular matrix compositional and structural changes OC - 0598
C. Guerrero Quiles (United Kingdom), J. Gonzalez Abalos, J. Humphries, M. Humphries, A. Whetton, A. Choudhury, C. West

Track: Clinical

Proffered Papers: Oligometastatic disease

Sunday, 8 May 2022 16:55 - 17:55

Chair: Jonas Willmann

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Co-Chair: Joachim Widder

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- 16:55 Factors associated with SBRT doses in oligometastatic disease: an EORTC/ESTRO OligoCare analysis OC - 0599
M. Guckenberger (Switzerland), F. Alongi, U. Ricardi, M. Scorsetti, P. Balcermpas, L. Livi, Y. Lievens, P. Braam, B.A. Jerezczek-Fossa, K. Stellamans, I. Ratosa, H. Peulen, J. Widder, S. Ramella, L. Verbeke, P. Dirix, K. Khanfir, T. Zilli, H. Hemmatazad, P. Jeene, G.B. Ivaldi, E. Clementel, B. Fournier, C. Fortpied, P. Ost
- 17:05 SBRT for oligo-metastatic disease in Belgium: a prospective national registration project. OC - 0600
Y. Lievens (Belgium), L. Boesmans, H. Engels, N. Jansen, S. Janssens, V. Remouchamps, S. Roosens, K. Stellamans, D. Verellen, N. Van Damme
- 17:15 Incidence and outcomes of oligometastatic esophagogastric cancer: A multicenter cohort study OC - 0601

T. Kroese (The Netherlands), S. Christ, M. Burger, G. Buijs, P. van Rossum, C. Gutschow, M. Hüllner, U. Mühlematter, R. van Hillegersberg, M. Guckenberger

- 17:25 A pREDictive model of polymetastatic disease on oligometastatic colorectal cancer: the RED LaIT-SABR OC - 0602
L. Nicosia (Italy), D. Franceschini, F. Perrone Congedi, F. Casamassima, M.A. Gerardi, M. Rigo, R. Mazzola, M. Perna, V. Scotti, A. Fodor, A. Iurato, F. Pasqualetti, G. Gadducci, S. Chiesa, R.M. Niespolo, A. Bruni, G. Alicino, L. Frassinelli, P. Borghetti, A. Di Marzo, A. Ravasio, B. De Bari, M. Sepulcri, D. Aiello, G. Mortellaro, C. Sangalli, M. Franceschini, G. Montesi, F.M. Aquilanti, G. Lunardi, R. Valdagni, I. Fazio, L. Corti, V. Vavassori, E. Maranzano, S.M. Magrini, S. Arcangeli, V. Valentini, F. Paiar, S. Ramella, N.G. Di Muzio, L. Livi, B.A. Jereczek-Fossa, M.F. Osti, M. Scorsetti, F. Alongi
- 17:35 PEACE V – STORM randomized phase II trial for oligorecurrent nodal prostate cancer: acute toxicity OC - 0603
T. Zilli (Switzerland), S. Siva, R. Heikkilä, P. Dirix, N. Liefhooghe, F. Otte, A. Gomez-Iturriaga, W. Everaerts, M. Shelan, A. Conde-Moreno, F. López Campos, A. Papachristofilou, M. Guckenberger, M. Scorsetti, A. Zapatero, A. Villafranca Iturre, C. Eito, F. Couñago, P. Muto, L. Van De Voorde, V. Fonteyne, D. Moon, K. Thon, C. Mercier, V. Achard, K. Stellamans, E. Goetghebeur, D. Reynders, P. Ost
- 17:45 Early toxicity after SABR of oligometastatic bony metastases in the BONY M phase II trial OC - 0604
N.J. Spindler (Denmark), M.V.O. Felter, O. Hansen, T.B. Nielsen, M.H. Suppli, M. Josipovic, L.Ø. Poulsen, F. Gaard-Petersen, H.M.B. Sand, T.M. Abramova, M. Johansen, J.S. Kornerup, M.D. Alsaker, E. Serup-Hansen, P. Geertsens, I.R. Vogelius, C. Behrens, G.F. Persson

Track: Clinical

Proffered Papers: Urology

Sunday, 8 May 2022 16:55 - 17:55

Chair: Sofia Spampinato -

Co-Chair: Pirus Ghadjar -

- 16:55 Early outcomes of a randomized trial of SBRT and Abiraterone in mCPRC: ARTO trial NCT03449719 OC - 0605
G. Francolini (Italy), B. Detti, V. Di Cataldo, S. Caini, A.R. Alitto, S. Parisi, C. Demofonti, A. Bruni, G. Ingrosso, G. Timon, A. Tagliagambe, M. Aquilano, L.P. Ciccone, V. Salvestrini, G. Frosini, C. Cerbai, A. Allegra, L. Burchini, I. Desideri, M. Mangoni, I. Meattini, L. Livi
- 17:05 Multi-institutional outcomes of Gleason grade group 5 prostate cancers treated with EBRT and ADT OC - 0606
V. Murthy (India), S. Chilukuri, I. Mallick, P. Maitre, A. Agarwal, A.S. Moses, F. James, K. Narang, T. Kataria, A. Anand, D.N. Dutta, S. Mitra, S. Pavamani, S. Mallick, N. Mahale, M. Chandra, A. Narayan, T. Shahid, M. Sairam, V. Kannan, S. Mohanty, T. Basu, C. Hotwani, B. G
- 17:15 Radiotherapy guided by functional imaging for macroscopic local recurrence following prostatectomy OC - 0607
N. Benziene (France), P. Sargos, T. Zilli, A. Giraud, G. Ingrosso, M. Di Staso, F. Trippa, E. Meyer, G. Francolini, U. Schick, J.M. Cosset, E. Martin, V. Ferrari, V. Achard, N. Giraud, C. Pasquier, N. Magné, D. Pasquier, S. Supiot, I. Latorzeff, K. Gnep, P. Pommier, T. Perennec, H. Zaine
- 17:25 Phase II trial of hypofractionated postoperative radiotherapy in prostate cancer: NCT02192788 OC - 0608
A. Hervás (Spain), A. Zapatero, A.M. Carballo, M. Barrado, F. López-Campos, C. Cano, C. Martín de Vidales, A. Rodríguez, C. Eito, A. Salinas, P. Peleteiro, I. Visus, I. Rodríguez

Melcón, G. Vázquez, A. Lazo, F. Couñago, L. Guerrero, A. Otero, W.A. Vasquez, P. Samper, B. Caballero, G. Sancho, R. Pérez, J. Olivera, A. del Rey

- 17:35 Radiotherapy quality assurance of the PEACE-1 trial: Initial results of individual case reviews OC - 0609

N. Alyamani (Belgium), P. Sargos, P. Blanchard, S. Supiot, P. Ronchin, P. Pommier, T. Duberge, M. Silva, Y. Hammoud, A. Hasbini, J. Khalifa, K. Gnep, C. Scrase, J. Saez, L. Vieilleveigne, M. Christiaens, T. Zilli, H. Ribault, A. Bossi, K. Fizazi, N. Andratschke

- 17:45 Characteristics of modern EBRT and its association with second primary cancer incidence OC - 0610

M. Jahreis (The Netherlands), K. Aben, M. Hoogeman, M. Dirkx, F. Pos, T. Janssen, A. Dekker, B. Vanneste, A. Minken, C. Hoekstra, R.J. Smeenk, L. Incrocci, W. Heemsbergen

Track: Brachytherapy

Proffered Papers: Prostate, head & neck, eye

Sunday, 8 May 2022 16:55 - 17:55

Chair: Luca Tagliaferri -

Co-Chair: Ann Henry -

- 16:55 ESTRO-Elekta Brachytherapy Award: HDR brachytherapy boost improves metastatic free survival in high and very-high risk prostate cancer OC - 0611

I. Visus (Spain), A. Barco, J. Obeso, M. Barrado, A. Sola, E. Villafranca, N. Fuentemilla, S. Pellejero, P. Navarrete, E. Martinez

- 17:05 Recurrence characteristics in prostate cancer patients after (salvage) focal HDR brachytherapy OC - 0612

M. Rasing (The Netherlands), M. Peters, M. van Son, J. Lagendijk, M. Moerland, S. van de Pol, W. Eppinga, J. Noteboom, J. van der Voort van Zyp

- 17:15 Pre-treatment Neutrophil to Lymphocyte Ratio predicts Overall Survival in Prostate Brachytherapy OC - 0613

S. Garcia (Portugal), P. Fernandes, L. Trigo

- 17:25 HDR-BT for primary tumors and relapses after surgery in patients with BCC of the H&N region. OC - 0614

A. Chyrek (Poland), W. Burchardt, G. Bieleńda, M. Adamska, A. Chicheł

- 17:35 Results of sole postoperative interstitial, high-dose-rate brachytherapy of tongue tumours OC - 0615

Z. Takacs-Nagy (Hungary), O. Ferenczi, T. Major, H. Akiyama, G. Frohlich, F. Oberna, M. Revesz, M. Poosz, C. Polgar

- 17:45 Local control, metastasis and visual function after brachytherapy in choroidal melanoma. OC - 0616

M. González Cantero (Spain), M. Teja Ubach, M. Rodríguez Roldán, M.I. Garrido Botella, E. González Del Portillo, A. Escribano Uzcudun, I. Rodríguez Rodríguez, R.M. Morera López

Track: Physics

Proffered Papers: New technologies in clinical practice

Sunday, 8 May 2022 16:55 - 17:55

Chair: Daniela Schmitt -

- 16:55 Camera-based in-vivo dosimetry using dual-material 3D printed scintillator arrays OC - 0617

N. Lynch (Canada), T. Monajemi, J. Robar

17:05	Comprehensive 3D verification of SRS treatments with virtual spherical phantom EPID dosimetry <i>P. Greer (Australia), C. Dempsey, G. Kaur, B. Zwan, K. Kandasamy, J.F. Calvo-Ortega, P. Ostwald</i>	OC - 0618
17:15	Flat panel proton radiography with a patient specific imaging field for accurate WEPL assessment <i>C. Seller Oria (The Netherlands), J. Free, G. Guterres Marmitt, B. Knäusl, S. Brandenburg, A.C. Knopf, A. Meijers, J.A. Langendijk, S. Both</i>	OC - 0619
17:25	Prompt-gamma imaging for prostate cancer proton therapy: CNN-based detection of anatomical changes <i>J. Pietsch (Germany), N. Piplack, J. Berthold, C. Khamfongkhrua, C. Khamfongkhrua, J. Thiele, T. Hölscher, E. Traneus, J. Janssens, J. Smeets, K. Stützer, S. Löck, C. Richter</i>	OC - 0620
17:35	Comparison of hypoxia adapting relative biological effectiveness models for proton therapy <i>G. Garrido Hernandez (Norway), H. Henjum, M. Høiskar, T. Dahle, K. Redalen, K. Ytre-Hauge</i>	OC - 0621
17:45	Universal and dynamic ridge filter for pencil beam scanning (PBS) proton therapy <i>V. Maradia (Switzerland), I. Colizzi, A. Savenije, D. Meer, J.M. Schippers, D.C. Weber, A.J. Lomax, O. Actis, S. Psoroulas</i>	OC - 0622

Track: Physics

Proffered Papers: Application of functional & quantitative imaging

Sunday, 8 May 2022 16:55 - 17:55

Chair: Faisal Mahmood

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Co-Chair: Adam Szmul

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16:55	First-in-human clinical translation of oxygen-enhanced MRI onto an MR Linac <i>M. Dubec (United Kingdom), A. Datta, A. Clough, D.L. Buckley, R.A. Little, M. Berks, S. Cheung, C. Eccles, D. Higgins, J.H. Naish, J.C. Matthews, M. van Herk, R.G. Bristow, G.J. Parker, P. Hoskin, A. McPartlin, A. Choudhury, J.P. O'Connor</i>	OC - 0623
17:05	An objective measure of response on WBMRI in mHSPC treated with ADT, EBRT, and Radium-223 <i>V. GIACOMETTI (United Kingdom), A.C. Grey, A. McCann, K.M. Prise, A.R. Hounsell, C.K. McGarry, J.M. O'Sullivan, J.M. O'Sullivan</i>	OC - 0624
17:15	Differences between HPV positive and negative oropharyngeal cancer detected by Non-Gaussian IVIM <i>N. Sijtsema (The Netherlands), I. Lauwers, G. Verduijn, D. Poot, A. van der Lugt, J. Hernandez-Tamames, M. Hoogeman, S. Petit</i>	OC - 0625
17:25	Is pre-radiotherapy metabolic heterogeneity of Glioblastoma predictive of progression free survival? <i>F. TENSAOUTI (France), F. Desmoulin, J. Gilhodes, S. Ken, J. Lotterie, G. Noël, G. Truc, M. Sunyach, M.C. Charissoux, N. Magné, V. Lubrano, P. Péran, E.C. Moyal, E.C. Moyal, A. Laprie</i>	OC - 0626
17:35	TCP predictions of an automated dose painting strategy based on FDG and FMISO PET imaging	OC - 0627

M. Lazzeroni (Sweden), A. Ureba, N.H. Nicolay, A. Ruehle, B. Thomann, D. Baltas, M. Mix, I. Toma-Dasu, A.L. Grosu

17:45 Proton therapy treatment verification with prompt gamma rays and fast neutrons – a feasibility study OC - 0628

H.E.S. Pettersen (Norway), E. Alagoz, L.B. Hysing, T. Kögler, D. Lathouwers, W. Lionheart, J. Obhodas, G. Pausch, H.M. Ratliff, M. Rovituso, S. Schellhammer, L.M. Setterdahl, K. Skjerdal, D. Sudac, J.A. Turko, K.S. Ytre-Hauge, I. Meric

Track: Brachytherapy

Proffered Papers: Breast, rectum

Sunday, 8 May 2022 16:55 - 17:55

Chair: Tibor Major, Co-chair: A. Stewart (UK)

16:55 The use of hyaluronic acid hydrogel as a tumour bed marker in breast cancer brachytherapy. OC - 0629

J. Wiercińska (Poland), J. Winiecki, A. Wronczewska, A. Lebioda, P. Rhone, K. Pławski, R. Makarewicz

17:05 Simulation of interstitial multi-catheter breast brachytherapy using a 3D surface imaging system OC - 0630

F. GASSA (France), A. SERRE, P. Pommier, A. Seneclauze, S. Mancini

17:15 Automatisations of catheter reconstruction in interstitial breast BT using electromagnetic tracking OC - 0631

C. Dürrbeck (Germany), N. Abu-Hossin, M. Lotter, S. Kreppner, D. Lubgan, R. Fietkau, V. Strnad, C. Bert

17:25 Endorectal brachytherapy to enhance complete response receiving neoadjuvant CTRT in rectal cancers OC - 0632

R. Engineer (India), D. Dutta, A. Saklani, A. D'Souza, L. Scaria, S. Ankathi, A. Baheti, J. Poddar, M. Patil

17:35 Endorectal contact radiation boosting: making the case for dose and volume reporting. OC - 0633

E. Van Limbergen (The Netherlands), C. Hazelaar, F. Vaassen, M. Bellezzo, A. Verrijssen, Y. Willems, B. Vanneste, G. Paiva Fonseca, J. Buijsen, J. Leijten, A. Appelt, F. Verhaegen, M. Berbee

17:45 Prediction models for rectal toxicity after brachytherapy in patients with pelvic cancer OC - 0634

F. Tohidinezhad (The Netherlands), Y. Willems, M. Berbee, E. Van Limbergen, F. Verhaegen, A. Dekker, A. Traverso

Track: Physics

Mini-Oral: 15: Treatment plan optimisation & adaptation

Sunday, 8 May 2022 16:55 - 17:55

Mini-Oral Theatre 1

Co-Chair: Lena Nenoff

The need for treatment adaptation in carbon ion radiotherapy of pancreatic cancer MO - 0635

S. molinelli (Italy), A. Vai, S. Russo, P. Loap, G. Meschini, G. Magro, C. Paganelli, A. Barcellini, V. Vitolo, M. Ciocca, E. Orlandi

Optimization of adaptive aperture to improve organs at risk sparing in proton therapy MO - 0636

M. Bogowicz (The Netherlands), V. Taasti, M. Unipan, G. Bosmans, P. Broussard, W. van Elmp

Efficient workflow and high quality robust IMPT plans, can we have it both?	MO - 0637
<u>I. van Bruggen (The Netherlands), R. Kierkels, M. Holmström, S. Both, J. Langendijk, E. Korevaar</u>	
Novel optimization functions designed for re-irradiation treatment planning	MO - 0638
<u>J. Ödén (Sweden), K. Eriksson, S. Svensson, E. Setterquist, J. Lilley, C. Thompson, C. Pagett, A. Appelt, L. Murray, R. Bokrantz</u>	
Pre-treatment generation of 'per-fraction' plans to improve on the conventional 'one-plan' approach	MO - 0639
<u>L. Rossi (The Netherlands), S. Breedveld, B. Heijmen</u>	
Is robust planning safe? A comparison of margin and robust photon plans on different target shapes	MO - 0640
<u>J. Robbins (United Kingdom), E. Vasquez Osorio, A. Green, M. van Herk</u>	
Machine learning automated planning for rectal cancer VMAT: Model sharing and external validation	MO - 0641
<u>R. Kierkels (The Netherlands), A. Arents-Huls, M. de Boer, P.M. Jeene, M. den Hartogh, D. Fransen, P. Thulin, M. Hölmstrom, E. van der Wal</u>	
Comparison of different approaches for automatic plan adaptation in MR-guided radiotherapy	MO - 0642
<u>B. Tengler (Germany), M. Hagmüller, L.A. Künzel, D. Zips, D. Thorwarth</u>	

Track: RTT

Mini-Oral: 16: RTT treatment planning, OAR & target definitions

Sunday, 8 May 2022 16:55 - 17:55

Mini-Oral Theatre 2

Co-Chair: TBC

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Chair: TBC

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16:55	PlanQA: a tool for treatment planning education through quantitative and qualitative analysis	MO - 0643
	<u>A. Vaniqui (The Netherlands), C. Meevisser-Dijcks, P. Simons, B. Hanbeukers, M. de Rooy, R. Canters, W. van Elmpt</u>	
16:55	Practice patterns for outlining the axilla and IMC, findings of the RTQA for the ATNEC trial.	MO - 0644
	<u>R. Butt (United Kingdom), Z. Nabi, R. Mir, J. Hills, D. Wheatley, I. Bhattacharya, A. Ranger, S. Cramp, N. Hammonds, A. Goyal, Y.M. Tsang</u>	
16:55	Evaluation of routine contouring of the pharyngeal constrictor muscles	MO - 0645
	<u>G.M. Engeseth (Norway), C.G. Boer, V. Vingelsgård, L.B. Hysing</u>	
16:55	Do planning scans represent inter-fractional planning margins in adaptive cervix EBRT?	MO - 0646
	<u>A. Krishnan (United Kingdom), R. Butt, D. Megias</u>	
16:55	Relationships between Monte Carlo calculated dose parameters and lung densities in lung SBRT	MO - 0647
	<u>Y. Tsang (United Kingdom), J. Duong, G. Jackson, R. DeSouza, K. Ko, P. Nariyangadu, C. Clark</u>	
16:55	Clinical evaluation of self-learning GAN based pseudo-CT generation software for low field pelvic MR	MO - 0648

P. Fenoglietto (France), T. Gevaert, M. Boussaer, E. Delasalles, D. Ioannidou, K. Shreshtha, T. Roque, N. Paragios, D. Azria, E. Ozyar, G. Gungor

16:55 Feasibility of MR-guided stereotactic ablative body radiotherapy of lymph node oligometastases MO - 0649

V. Batumalai (Australia), D. Crawford, C. Pagulayan, L. Hogan, U. Jelen, C. Loo, N. Dunkerley, M. Picton, L. Geddes, S. Alvares, S. Sampaio, M. Heinke, T. Twentymann, M. Jameson, J. de Leon

16:55 Partial irradiation in cervical cancer MRgRT: a dosimetric evaluation MO - 0650

C. Votta (Italy), L. Boldrini, G. Chiloio, A. Romano, E. Bonelli, R. Autorino, M. Bianchi, M. Campitelli, E. Galofaro, A. Nardangeli, M. Nardini, L. Placidi, M.A. Gambacorta, V. Valentini

Track: RTT

Poster Discussion: 15: Advances in patient care & treatment verifications

Sunday, 8 May 2022 16:55 - 17:55

Poster Station 1

Chair: TBC

16:55 SGRT with Innovative Open-face Mask and Mouth Bite: Management of Patient Motion in SRS and SRT. PD - 0651

X. Jiang (China), J. Liu, X. Huang, L. Liu, L. Lin, Y. Wang, W. Diao, W. Cai, C. Lin

16:55 Comparison of brain planar kV and CBCT imaging modalities for positional accuracy using 6DoF couch PD - 0652

S. Sirianni (United Kingdom), C. Dean, A. Cole, L. Wiles, R. Lewis

16:55 Reproducibility of deep inspiration breath hold during RT for lung cancer patients. PD - 0653

A.B. Rasmussen (Denmark), D.S. Møller, L. Hoffmann, M.M. Knap, H. Schmidt, M.L. Ehmsen, T. Ravkilde, E. Worm, M.H. Andersen

16:55 Surface Guided Radiotherapy accuracy vs tattoos position in 5- fractions breast radiotherapy. PD - 0654

D. gonsalves (Spain), J. Fernandez, A. Seral, J.I. Sanchez, E. Luguera, I. Pajaro, A. Parra, C. Ferrer, L. López, S. López, A. Carreras, E. López

16:55 The design and construction of a simulated linac control area (SLCA) for Radiation Therapy PD - 0655

M. Kirby (United Kingdom), B. Porritt, K. Calder, J. Calendar, R. Young, D. Watson

16:55 Evaluating therapeutic radiographers' role in instigating prehabilitation and rehabilitation advice PD - 0656

Y. Wang (United Kingdom), D. Hutton, J. McNamara, H. Pennington, R. Appleyard

16:55 Exploring RTT perceptions of image-guided adaptive radiotherapy competency framework against role seniority PD - 0657

D. Megias (United Kingdom), L. Codd, Y. Tsang

16:55 Understanding and improving awareness among Radiation Technologists for research: An Indian survey PD - 0658

P. Das (India), S. Guria, S.L. Debnath, J. Singh, C. Shekhar, Y. Lamba, M. ., S. Hooda, D.K. Saini, S. Gopal, S. Arora, S. Dutt, L. Nair, A. Singh, P. Patil, A. Sharma, S. Mallick, D.N. Sharma

16:55 Barriers in education and professional development of Belgian RTTs: a qualitative study PD - 0659

F. Sousa (Belgium), A. Vaandering, J.G. Couto, M. Somoano, D. Van Gestel

- 16:55 The Psychological Impact of the COVID-19 Pandemic on Radiation Therapists in Norway and Canada *PD - 0660*
S. Johansen (Norway)
- 16:55 Implementation of marker less Surface Guided Radiotherapy in a complex multi-stakeholder environment *PD - 0661*
F. Das Neves Horácio (Belgium), A. Sprangers, W. Wingerhoed, P. Brokken, K. Schaerlaeken, H. Van Dyck, I. Mollaert, D. Verellen
- 16:55 Impact of implementing an electronic radiation oncology-specific in-house incident learning system. *PD - 0662*
L. Adamson (Australia), K. Crouch, R. Beldham-Collins, J. Sykes, D. Thwaites

Track: Clinical

Poster Discussion: 16: Lung

Sunday, 8 May 2022 16:55 - 17:55

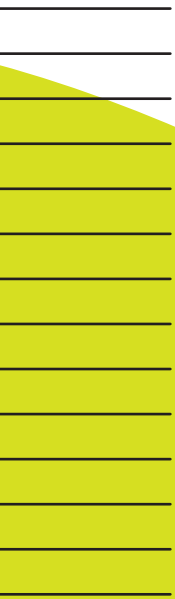
Poster Station 2

Chair: Ursula Nestle

- 16:55 Do structural parameters of the dose distribution improve the prediction of RP in NSCLC patients? *PD - 0663*
A. Weiß (Germany), S. Löck, T. Xu, Z. Liao, E. Troost
- 16:55 Risk factors of radiation pneumonitis in modern adaptive radiotherapy *PD - 0664*
C.M. Lutz (Denmark), D.S. Møller, A. Appelt, M. Alber, L. Hoffmann, A.A. Khalil, M.I. Holt, M. Kandi, H.H. Schmidt, M. Tvillum, M.M. Knap
- 16:55 Geriatric Stage III NSCLC: Which scoring systems could guide us better to predict treatment outcome? *PD - 0665*
F. Sert (Turkey), F. Farzam, D. Yalman, S. Ozkok
- 16:55 The role of Agatston score in stage III non small cell lung cancer patients *PD - 0666*
A. Angrisani (Italy), G. De Marco, V. Nardone, E. D'Ippolito, R. Grassi, A. Reginelli, C. Guida, S. Cappabianca
- 16:55 Introduction of IMPT for NSCLC patients: the learning curve in practice. *PD - 0667*
R. Wijsman (The Netherlands), O. Chouvalova, P. Klinker, A. Niezink, A. Van der Leest, F. Ubbels, M. Woltman-van Iersel, S. Both, E. Korevaar, J. Langendijk
- 16:55 Hypo- vs. standard fractionated radiotherapy in inoperable NSCLC not candidate for chemo-radiation *PD - 0668*
O. Hansen (Denmark), T. Schytte, L.H. Land, T.B. Nielsen, M. Nielsen
- 16:55 Feasibility and first results of the trials-within-cohorts design in patients with lung cancer. *PD - 0669*
M. Tomassen (The Netherlands), P. Damen, H. Verkooijen, M. Peters, J. van der Stap, A. van Lindert, J. Verhoeff, P. van Rossum
- 16:55 Minimising radical radiotherapy commencement time for lung cancer to improve clinical outcomes *PD - 0670*
M. Padden-Modi (United Kingdom), J. Cheng, R. Kirby, N. Twyman, S. Aslam, V.R. Bulusu, D. Gilligan, A. Martin, N. Pipalia, A.M. Shiarli, H. Yang, K. Thippu Jayaprakash
- 16:55 Impact of FDG PET in small-cell lung cancer patients treated with curative intent chemoradiotherapy *PD - 0671*
A. Salem (United Kingdom), A. Abravan, L. Sandhu, C. Faivre-Finn, M. Abutaleb, C. Crockett, G. Price

- 16:55 Cardiac toxicity predicts mortality in NSCLC patients: interim analysis of the LUNG-HEART Study PD - 0672
M. Cerrato (Italy), S. Badellino, F. Menegatti, I. Bonavero, C. Grossi, B. Lo Zito, E. Orlandi, A. Gastino, E.M. Cuffini, L. Blasi, C. Mantovani, R. Parise, U. Ricardi, M. Levis
- 16:55 Validation of the interaction between peritumour density and dose for local relapse in lung SABR PD - 0673
A. Davey (United Kingdom), M. Thor, M. van Herk, C. Faivre-Finn, J.O. Deasy, A. Rimner, A. McWilliam
- 16:55 Verification protocol of Fractionated Thoracic Radiation Treated with Deep Inspiratory Breath Hold PD - 0674
S. appel (Israel), Z. Symon, Y. Lawrence

Monday
9 May
2022



Track: Interdisciplinary

Teaching lecture: Rationale for microbiota-centered interventions in I-O and radiotherapy

Monday, 9 May 2022 08:00 - 08:40

Chair: Fernando Lopez Campos

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08:00 Rationale for microbiota-centered interventions in I-O and radiotherapy

SP - 0675

L. Derosa (France), D. ERIC

Track: Clinical

Teaching lecture: Modern imaging in radiation oncology

Monday, 9 May 2022 08:00 - 08:40

Chair: Esther Troost

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08:00 PET imaging

SP - 0676

U. Nestle (Germany)

08:20 MR imaging

SP - 0677

V. Plodeck (Germany)

Track: Clinical

Teaching lecture: Biomarkers guiding dose de-escalation in HNSCC

Monday, 9 May 2022 08:00 - 08:40

Chair: Joachim Widder

-

08:00 Biomarkers guiding dose de-escalation in HNSCC

SP - 0678

N. Riaz (USA)

Track: Physics

Teaching lecture: U-Net for dummies

Monday, 9 May 2022 08:00 - 08:40

Chair: Guillaume Landry

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08:00 U-Net for dummies

SP - 0679

F. Maes (Belgium)

Track: Physics

Teaching lecture: MRI: From basic to state-of-the-art acquisition protocols

Monday, 9 May 2022 08:00 - 08:40

Chair: Tufve Nyholm

-

08:00 MRI: From basic to state-of-the-art acquisition protocols

SP - 0680

R. Tijssen (The Netherlands)

Track: RTT

Teaching lecture: Immobilisation in the rapidly changing world of radiotherapy: Now and into the future

Monday, 9 May 2022 08:00 - 08:40

Chair: Nigel Anderson

08:00 Immobilisation in the rapidly changing world of radiotherapy: Now and into the future SP - 0681
D. Callens (Belgium)

Track: Young

Teaching lecture: Leadership is a journey, not a position

Monday, 9 May 2022 08:00 - 08:40

Chair: Steven Petit

08:00 Leadership is a journey, not a position SP - 0682
S. Turner (Australia)

Track: Interdisciplinary

Symposium: Automation in radiotherapy

Monday, 9 May 2022 08:45 - 10:00

Chair: Miguel A. Palacios

Co-Chair: Amanda Webster

08:45 For the clinician: Potential and ethical issues of fully automatic radiotherapy plan delivery and acceptance SP - 0683
D. Zips (Germany)

09:03 For the physicist: Current status of automatised contouring, planning and QA SP - 0684
D. Verellen (Belgium)

09:21 For the RTT: Impact of automation on RTT practice SP - 0685
L. Uwamahoro-Irakiza (The Netherlands)

09:39 For the radiologist: How AI has impacted radiology SP - 0686
V. Goh (United Kingdom)

Track: Clinical

Joint Debate: ESTRO-PROS: This house believes that proton therapy is the standard of care for paediatric patients, adolescents and young adults requiring radiotherapy

Monday, 9 May 2022 08:45 - 10:00

Chair: Marianne Aznar

Chair: Arnold Paulino

08:45 Introduction SP - 0687

08:47 For the motion SP - 0688
A. Mahajan (USA)

09:02	Against the motion <u>G. Janssens (The Netherlands)</u>	SP - 0689
09:17	For the motion (rebuttal) <u>B. Timmermann (Germany)</u>	SP - 0690
09:32	Against the motion (rebuttal) <u>H. Mandeville (United Kingdom)</u>	SP - 0691
09:47	Discussion	SP - 0692

Track: Clinical

Symposium: New era of personalised radiotherapy in soft tissue sarcomas

Monday, 9 May 2022 08:45 - 10:00

Chair: André Abrunhosa-Branquinho

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Chair: Dorota Gabrys

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08:45	Hypofractionated radiotherapy in soft tissue sarcomas: A new standard of care? <u>M. Spalek (Poland)</u>	SP - 0693
09:03	Hyperthermia and other radiosensitisers in sarcoma treatment <u>S. Semrau (Germany)</u>	SP - 0694
09:21	Spatially-fractionated radiotherapy: A new hope in locally advanced soft tissue sarcomas? <u>M. Mohiuddin (USA)</u>	SP - 0695
09:39	Radiation-associated soft tissue sarcomas - Incidence and treatment strategy <u>R. Haas (The Netherlands)</u>	SP - 0696

Track: Physics

Symposium: Deep learning for target auto-segmentation

Monday, 9 May 2022 08:45 - 10:00

Chair: Ben Heijmen

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Co-Chair: Laura Patricia Kaplan

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08:45	Deep learning GTV segmentation based on PET/CT <u>C. Futsaether (Norway)</u>	SP - 0697
09:10	Deep learning GTV segmentation based on multiparametric MRI <u>TBC</u>	SP - 0698
09:35	Uncertainties and out-of-distribution estimation in deep learning-based autosegmentation <u>C. van den Berg (The Netherlands)</u>	SP - 0699

Track: Physics

Symposium: Online management of target motion

Monday, 9 May 2022 08:45 - 10:00

Chair: Uulke van der Heide

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Co-Chair: Sara Abdollahi

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08:45 X-ray based real-time tracking

SP - 0700

D.T. Nguyen (Australia)

09:10 Optical and thermal surface tracking

SP - 0701

V. Batista (Germany)

09:35 A theoretical framework for treatment margins for online adaptive radiotherapy

SP - 0702

T. Janssen (The Netherlands), U. van der Heide, P. Remeijer, J. Sonke, E. van der Bijl

Track: RTT

Symposium: Online adaptive radiotherapy: The future is near!

Monday, 9 May 2022 08:45 - 10:00

Chair: Annette Schouboe

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Co-Chair: Elizabeth Joyce

-

08:45 Lessons learned in two years treating patients with CBCT guided online adaptive radiotherapy

SP - 0703

L. ten Asbroek (The Netherlands)

09:10 MR guided online adaptive RT (MRlinac)

SP - 0704

M. Chamberlain (Switzerland)

09:35 Preparing RTTs for online adaptive workflows: What do we need to know and learn?

SP - 0705

C. Eccles (United Kingdom)

Track: Young

Symposium: The positive impact of good leadership

Monday, 9 May 2022 08:45 - 10:00

Chair: Sophie Perryck

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Co-Chair: Emma Riis Skarsø

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08:45 Creating a 'successful' work environment

SP - 0706

S. Abbasinejad Enger (Canada)

09:03 Cognitive bias in the workplace

SP - 0707

S. Evans (USA)

09:21	The yESTRO mentoring program and a report from a mentee <i>J. Heukelom (The Netherlands), D. Portik, J. Bertholet, L. Dubois, K. Redalen, C. Chargari, M. Bittner, S. Perryck, A. Webster, D. Nevens, B. Tomasik, P. Franco, S. Petit</i>	SP - 0708
09:31	Report from a mentee <i>D. Portik (Romania)</i>	SP - 0709
09:39	How to get involved in ESTRO leadership <i>A. Kirby (United Kingdom)</i>	SP - 0710

Track: Clinical

Mini-Oral: 22: Mixed sites, palliation

Monday, 9 May 2022 08:45 - 09:45

Mini-Oral Theatre 1

Co-Chair: Nadia Bouzid

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Chair: TBC

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Impact of operability and total metastatic ablation on outcomes after SABR for oligometastases MO - 0711

S. Siva (Australia), M. Bressel, P. Sogono, M. Shaw, S. Chander, J. Chu, N. Plumridge, K. Byrne, G. Kothari, N. Bucknell, N. Hardcastle, T. Kron, G. Wheeler, M. MacManus, G.G. Hanna, D.L. Ball, S. David

Clinical outcomes of a large cohort of oligometastatic patients treated with SRT MO - 0712

D. Franceschini (Italy), L. Cozzi, L. Lo Faro, A. Marzo, L. Di Cristina, B. Marini, C. Franzese, C. Galdieri, M. Scorsetti

Stereotactic Body Radiotherapy for Long Bone Metastases: An International Multicenter Analysis MO - 0713

I. Madani (Switzerland), M. Guckenberger, D. Erler, B.J. Stish, K.R. Olivier, S.S. Park, W. Eppinga, E. Seravalli, K.J. Redmond, Y. Cao, S. Siva, D. Chang, T.K. Nguyen, M. O'Neil, A. Sahgal

MR-guided SBRT of infra-diaphragmatic metastases – the first 100 patients included in the SOFT trial MO - 0714

M. Felter (Denmark), P. Krause Møller, M. Josipovic, S. Nørring Bekke, U. Bernchou, E. Serup-Hansen, P. Parikh, K. Joshua, P. Geertsen, C. P. Behrens, I. R. Vogelius, M. Pøhl, T. Schytte, G. Persson

The LabPS score: inexpensive, fast and site-agnostic survival prediction MO - 0715

C. Nieder (Norway), E. Haukland, B. Mannsåker, A. Dalhaug

Radiotherapy exposure and association with observed cardiovascular toxicity in over 5000 patients MO - 0716

N. Forbes (Denmark), A. Smith, J. Petersen, C. Terrones-Campos, J. Reekie, S. Darkner, L. Specht, I. Vogelius

Radiation Therapy and Cardiovascular Implanted Electronic Devices: a single center years experience MO - 0717

S. Baroni (Italy), S. Gulletta, M. Pasetti, P. Vergara, S. Broggi, R. Tummineri, C.L. Deantoni, F. Zerbetto, A. Fodor, G. Mandurino, A. Sanchez Galvan, N. Fierro, I. Dell'Oca, S. Arcangeli, N.G. Di Muzio

An inpatient radiation oncology consult service is associated with shorter hospital length of stay MO - 0718

M. Freret (USA), D. Yerramilli, O. Cahlon, S. Powell, J. Yang, S. McBride, D. Gomez, A. Xu

Track: Clinical

Mini-Oral: 18: CNS

Monday, 9 May 2022 08:45 - 09:45

Mini-Oral Theatre 2

Chair: Barbara Diletto

Co-Chair: Safia Yahiaoui

- 08:45 Adult Intracranial Ependymal Tumors: Results of TROD Neurooncology Group 07-009 Study MO - 0719
S. Aytac Arslan (Turkey), Y. Guney, P. Erpolat, S. Kamer, E. Erciş, Y. Tezcan, Z. Akgun, B. Atalar, D. Karacetin, G. Guler
- 08:45 The Role of Radiotherapy in Intracranial Hemangiopericytoma: TROD CNS Group Study 07-008 MO - 0720
N. Kaydihan (Turkey), Y. Güney, G. Yazıcı, P. Erpolat, S. Kamer, B.M. Atasoy, D. Aslan, B. Atalar, F. Demircioğlu, F. Öner Dinçbaş, M. Kırılı Bölükbaş, R. Aksu, S. Tabak Dinçer, Y. Bölükbaş
- 08:45 Clinicogenomic predictors for the pattern of failure in high-grade glioma MO - 0721
B. Kang (Korea Republic of), J.H. Lee, T.M. Kim, J. Won, H. Yun, S.H. Choi, S. Lee, S. Park, C. Park
- 08:45 Radiation dose-escalation for glioblastoma: who may benefit? MO - 0722
A. Trip (Denmark), K. Møller Hochreuter, M. Høyer, J. Folsted Kallehauge, S. Lukacova
- 08:45 Outcomes and patterns of recurrence following stereotactic radiosurgery for brain metastases MO - 0723
S. Møller (Denmark), H. Roed, P. Geertsens, G. Persson
- 08:45 Impact of irradiation of the neurogenic niches on survival in patients with brain metastases MO - 0724
F. Cialdella (The Netherlands), S. David, D.E. Bruil, S.H. Nagtegaal, A.T. van der Boog, S. de Sonnaville, F. de Vos, J.J. Verhoeff
- 08:45 Hippocampal sparing wbrt: trade-off between tumor control and quality of life? MO - 0725
G. Corrao (Italy), L. Bergamaschi, V.E. Pierini, A. Ferrari, G. Piperno, G. Marvaso, F. Emiro, M. Pepa, S. Gandini, F. Cattani, R. Orecchia, B.A. Jereczek-Fossa
- 08:45 Volumetric change in gray matter after radiotherapy in glioma patients detected with MRI MO - 0726
H. Lee (Korea Republic of), M.K. Kang, K. Hwang, C. Kim, Y.J. Kim, K.J. Suh, B.S. Choi, I.A. Kim, B. Jang

Track: Physics

Poster Discussion: 17: Treatment planning

Monday, 9 May 2022 08:45 - 09:45

Poster Station 1

Chair: TBC

- 08:45 CyberKnife vs protons: What is the best approach to reduce complications in posterior ocular tumors? PD - 0727
E. Fleury (The Netherlands), P. Trnková, C. van Rij, N. Naus, E. Kiliç, W. den Toom, J. Pignol, M. Hoogeman

08:45	Knowledge-Based automatic plan optimization for whole breast Radiotherapy with Halcyon® <i>A. Mazzilli (Italy), G. Benecchi, M. Maddalo, R. Castriconi, C. Fiorino, N. D'Abbiero, C. Ghetti</i>	PD - 0728
08:45	Variable RBE for a proton therapy class solution in a randomised trial for high-risk prostate cancer <i>K. Lie Aas (Denmark), R. Klitgaard, A. Vestergaard, H. S. Rønde, S. Tilbæk, L. Stolarczyk, T. Stagaard Johansen, S. E. Petersen, L. Bentzen, L. P Muren</i>	PD - 0729
08:45	Automated beam angle selection in proton therapy for liver lesions using an AI approach <i>R. Kaderka (USA), K. Liu, L. Liu, R. Van der Straeten, T. Liu, K. Lee, E. Tu, I. MacEwan, D. Simpson, J. Urbanic, C. Chang</i>	PD - 0730
08:45	Integrated beam angle optimization in IMRT autoplanning for lung cancer <i>K. Fjellanger (Norway), L.B. Hysing, B.J.M. Heijmen, H.E.S. Pettersen, I.M. Sandvik, T.H. Sulen, S. Breedveld, L. Rossi</i>	PD - 0731
08:45	Dosimetric feature-based beam orientation selection in intensity-modulated radiation therapy <i>Y. Nomura (USA), C. Huang, L. Xing</i>	PD - 0732
08:45	Parameters influencing inter-Institute variability in KB plan prediction models for whole breast RT <i>A. tudda (Italy), R. Castriconi, G. Benecchi, E. Cagni, F. Dusi, P.G. Esposito, G. Rambaldi Guidasci, M. Guernieri, A. Ianiro, V. Landoni, A. Mazzilli, E. Moretti, C. Oliviero, L. Placidi, T. Rancati, V. Trojani, A. Scaggion, C. Fiorino</i>	PD - 0733
08:45	Artificial Intelligence and Multi-Criteria Optimization for automatic treatment plan generation <i>J. Mazurier (France), G. Sidorski, X. Franceries, I. Berry, B. Pichon, B. Pinel, I. Latorzeff, O. Gallocher, G. Jimenez, J. Camilleri, V. Connord, Y. Marty, N. Mathy, D. Zarate</i>	PD - 0734
08:45	Planning MV photons with dose-to-medium can be disruptive to traditional planning <i>D. Jurado-Bruggeman (Spain), C. Muñoz-Montplet</i>	PD - 0735
08:45	Evaluation of 3D dose distribution prediction for prostate VMAT based on deep learning <i>T. Fuangrod (Thailand), P. Kummanee</i>	PD - 0736
08:45	Reducing plan complexity using the Aperture Shape Controller in VMAT head and neck treatments <i>A. Swinnen (The Netherlands), C. Wolfs, M. Öllers, A. Vaniqui, F. Verhaegen</i>	PD - 0737
08:45	Assessing the extent of treatment delivery errors among IROC H&N and lung phantoms <i>S. Edward (USA), R. Howell, P. Balter, C. Peterson, J. Pollard-Larkin, S. Kry</i>	PD - 0738

Track: Clinical

Poster Discussion: 18: Breast

Monday, 9 May 2022 08:45 - 09:45

Poster Station 2

Chair: Indrani Bhattacharya

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08:45	Neoadjuvant chemo-radiotherapy in early breast cancer patients: long-term results of a phase II trial <i>J. Diane (France), P. Loap, J. Pierga, F. Laki, A. Salomon, Y. Kirova, A. Fourquet</i>	PD - 0739
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08:45	Danish Breast Cancer Group Skagen Trial 1: A report on annual trial participation <i>L. Bech Jellesmark Thorsen (Denmark), I. Mjaaland, M. Hjelstuen, E. Hugger Jakobsen, M. Berg, T. Lörincz, I. Jensen, U. Kasti, M. Hasler, M. Holck Nielsen, E. Laugaard Lorentzen, S. Aziz-Jowad Al-Rawi, M.M. Bruun Nielsen, M. Krause, A. Linge, C. Kamby, K. Boye, E. Svitzer Yates, B. Vrou Offersen</i>	PD - 0740
08:45	Tattoo-less Accelerated Partial Breast Irradiation (APBI) using Surface Imaging <i>B. Mueller (USA), Y. Song, W. Chia-Ko, H. Hsu, X. Zhai, P. Tamas, S. Powell, O. Cahlon, B. McCormick, A. Khan, E. Gillespie, L. Hong, L. Cervino-Arriba, B. Zhao, L. Braunstein</i>	PD - 0741
08:45	Implications of heart contractility on the dose to the LAD in DIBH radiotherapy for breast cancer <i>M.N. Duma (Germany), S. Völkel-Beltran, L. Pargmann, P. Schlattmann, A. Wittig</i>	PD - 0742
08:45	The role of timing of 3D boost in breast conservative treatment: concomitant versus sequential one. <i>L. Bardoscia (Italy), M.A. Gilio, R. Bagnoli, S. Saponaro, P. Cocuzza, M.G. Quattrocchi, M. Mignogna</i>	PD - 0743
08:45	Tangential fields in pN+ sentinel nodes breast cancer with or without axillary dissection. <i>M. Borgia (Italy), M. Nuzzo, L.A. Ursini, C. Rosa, F.C. Di Guglielmo, M. Lucarelli, D. Fasciolo, D. Genovesi</i>	PD - 0744
08:45	Radiation esophagitis in patients receiving hypofractionated post mastectomy radiotherapy <i>N. Vijayaraghavan (India), M.K. K, J. Mathew, A. Menon, V. Thovarayi, P. Vedaoundaram</i>	PD - 0745
08:45	Single Institution Experience of Adjuvant Partial Breast Radiotherapy on the Elekta 1.5T MR Linac <i>I.Z. Tan (United Kingdom), A. Mitchell, J. Chick, J. Sullivan, T. Morgan, R. Lawes, T. Herbert, H. McNair, A.M. Kirby</i>	PD - 0746
08:45	Determinants of health and survival on Brazilian patients with breast cancer: populational database <i>G. Marta (Brazil), R. Frederice, F. de Andrade, S. Hanna, H. Carvalho, A. Pereira</i>	PD - 0747
08:45	Local control and toxicity after hypofractionated accelerated palliative RT in breast cancer <i>K. Webb (United Kingdom), L. Gothard, K. Mohammed, A. Kirby, I. Locke, N. Somaiah</i>	PD - 0748
08:45	Systemic treatment and ablative therapies in oligometastatic breast cancer: a single center analysis <i>G. Glemarec (France), J.L. Lacaze, B. Cabarro, R. Aziza, E. Jouve, S. Zerdoud, E. De Maio, C. Massabeau, M. Loo, V. Esteyrie, M. Ung, F. Dalenc, F. Izar, C. Chira</i>	PD - 0749
08:45	Outcome after stereotactic body radiotherapy (SBRT) for oligometastatic breast cancer patients <i>D. Gräupner (Poland), T. Latusek, R. Kulik, D. Gabrys</i>	PD - 0750

Track: Interdisciplinary

Proffered Papers: Big data, AI

Monday, 9 May 2022 10:30 - 11:30

Chair: TBC

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Chair: TBC

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10:30	Collecting Complete Radiotherapy Plan Data of 11,000+ Patients in a National Database <i>S. Krogh (Denmark), E. Lorenzen, C.R. Hansen, E. Samsøe, I.R. Vogelius, R. Zukauskaitė, B.V. Offersen, J.G. Eriksen, O. Hansen, J. Johansen, A. Olloni, C.H. Ruhlmann, L. Hoffmann, H.D. Nissen, M.S. Nielsen, K. Andersen, C. Grau, C. Brink</i>	OC - 0751
10:40	SBRT for lung cancer and lung metastases: prospective national registration project in Belgium. <i>Y. Lievens (Belgium), M. Lambrecht, L. Boesmans, H. Engels, X. Geets, S. Janssens, L. Moretti, V. Remouchamps, S. Roosens, N. Van Damme</i>	OC - 0752
10:50	Robustness of spine SABR plans to delivery errors within machine tolerance: multicentre analysis <i>M. Hussein (United Kingdom), J. Lehmann, C. Clark</i>	OC - 0753
11:00	TRIPOD level-4 validation for a larynx cancer survival model using distributed learning <i>C.R. Hansen (Denmark), M. Field, G. Price, N. Sarup, R. Zukauskaitė, J. Johansen, J.G. Eriksen, F. Aly, A. McPartlin, L. Holloway, D.I. Thwaites, C. Brink</i>	OC - 0754
11:10	Big data prediction models to select head and neck patients for personalized dose prescription <i>L.V. van Dijk (The Netherlands), S. Ahmed, A.S.R. Mohammed, K. Wahid, N.M. Sijtsema, B. Gunn, A.S. Garden, J.A. Langendijk, C.D. Fuller</i>	OC - 0755
11:20	Development and implementation of a hybrid method for automatic cardiac substructure segmentation <i>R. Finnegan (Australia), V. Chin, P. Chlap, A. Haidar, J. Otton, J. Dowling, D. Thwaites, S. Vinod, G. Delaney, L. Holloway</i>	OC - 0756

Track: Clinical

Proffered Papers: Paediatrics

Monday, 9 May 2022 10:30 - 11:30

Chair: Carme Ares

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Co-Chair: Aleksandra Napieralska

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10:30	Proton pencil beam scanning and the brainstem in pediatric posterior fossa tumors: a European survey <i>L. Toussaint (Denmark), W. Matysiak, L.P. Muren, C. Alapetite, C. Ares, S. Bolle, F. Calvo, C. Demoor-Goldschmidt, J. Doyen, J. Engellau, S. Harrabi, I. Kristensen, F. Missohou, B. Ondrova, B. Rombi, M. Schwarz, K. Van Beek, S. Vennarini, A. Vestergaard, M. Vidal, V. Vondráček, D.C. Weber, G. Whitfield, J. Maduro, Y. Lassen-Ramshad</i>	OC - 0757
10:40	Factors predicting a replan in children treated with proton therapy for tumours of the head and neck <i>A. Pilar (United Kingdom), D. Saunders, S. Pan, S. Gaito, F. Charlwood, M. Lowe, E. Smith, A. Mcpartlin, N. Thorp</i>	OC - 0758
10:50	Permanent alopecia in pediatric patients with Medulloblastoma treated by CSI: a threshold dose. <i>C. satragno (Italy), A. Verrico, S. Barra, A. Ferrero, F. Giannelli, F. Cavagnetto, I. Schiavetti, M.L. Garrè, C. Milanaccio, L. Belgioia, R.G. Corvò</i>	OC - 0759
11:00	Active surveillance is safe for asymptomatic radiation-induced meningiomas in cancer survivors <i>M. Xu (Australia), A. Lasocki, M. Bressel, N. Goroncy, J. Seymour, G. Wheeler, M. Dwyer, K. Wiltshire, N. Haghighi, K. Mason, D. Tange, B. Campbell</i>	OC - 0760

11:10 Reirradiation of pediatric patients with diffuse midline glioma OC - 0761
D. Østergaard (Denmark), I.R. Vogelius, R. Mathiasen, K. Nysom, M. Jørgensen, A.M. Sehested, M. Maraldo

11:20 High-dose chemotherapy followed by whole lung irradiation in pulmonary relapse Ewing's sarcomas OC - 0762
L. Duvergé (France), C. Demoor-Goldschmidt, A. Laprie, M. Cervellera, M. Castex, N. Corradini, S. Supiot, L. Vaugier, P. Marec-Berard, L. Claude

Track: Clinical

Proffered Papers: Pelvic malignancies

Monday, 9 May 2022 10:30 - 11:30

Co-Chair: Gert De Meerleer -

Chair: Simon Spohn -

10:30 Time and severity weighted late toxicity (MOSES): Reanalysis of a phase III IG-IMRT trial (PARCER) OC - 0763
S. Chopra (India), N. Ranjan, M. Charnalia, S. Kannan, R. Engineer, T. Dora, L. Gurram, P. Mittal, S. Shrivastava, S. Gupta

10:40 Outcome of coverage probability boosting for pathological nodes in locally advanced cervical cancer OC - 0764
F.E.E. Granlund (Denmark), M.S. Assenholt, L.U. Fokdal, J.C. Lindegaard

10:50 Genitourinary hrQoL following Urethral sparing prostate SBRT compared with virtual HDR boost. OC - 0765
M. Richardson (Australia), M. Sidhom, P. Keal, J. Bucci, S. Gallagher, P. Greer, A. Hayden, A. Kneebone, D. Pryor, S. Siva, J. Martin

11:00 Response of local disease at magnetic resonance after salvage radiotherapy for prostate cancer OC - 0766
M. Bottero (Italy), A. Faiella, D. Giannarelli, A. Farneti, L. Bertini, V. Landoni, P. Vici, G. Sanguineti

11:10 Machine learning-based models for prediction of erectile dysfunction in localized prostate cancer OC - 0767
H. Hasannejadasl (The Netherlands), C. Roumen, H. van der Poel, B. Vanneste, J. van Roermund, K. Aben, P. Kalendralis, B. Osong, L. Kiemeney, I. Van Oort, R. Verwey, L. Hochstenbach, E. J. Bloemen-van Gurp, A. Dekker, R. Fijten

11:20 Stereotactic body radiotherapy for renal cell carcinoma: oncologic and renal function outcomes OC - 0768
R. Glicksman (Canada), M. Niglas, P. Cheung, R. Korol, D. Erler, D. Vesprini, H. Nusrat, M. Davidson, L. Zhang, W. Chu

Track: Physics

Proffered Papers: Deep learning for image analysis

Monday, 9 May 2022 10:30 - 11:30

Chair: Andre Dekker -

Co-Chair: Catarina Veiga -

10:30	Auto-segmentation of low contrast organs at risk improves with minimal prior delineation input <i>M.E. Rasmussen (Denmark), J.A. Nijkamp, J.G. Eriksen, S.S. Korreman</i>	OC - 0769
10:40	Deep Learning-based segmentation of prostatic urethra on CT scans for treatment planning <i>L. García-Elcano (Spain), E. Mylona, O. Acosta, T. Lizée, K. Gnep, R. de Crevoisier, J. Pascau</i>	OC - 0770
10:50	Uncertainty map for error prediction in deep learning-based head and neck tumor auto-segmentation <i>J. Ren (Denmark), J. Teuwen, J. Nijkamp, M. Rasmussen, J. Eriksen, J. Sonke, S. Korreman</i>	OC - 0771
11:00	Deep learning-based 4D synthetic CT for lung radiotherapy <i>M. Maspero (The Netherlands), K. Keijneemans, S.L. Hackett, B.W. Raaymakers, J.J.C. Verhoeff, M.F. Fast, C.A.T. van den Berg</i>	OC - 0772
11:10	CBCT-to-CT synthesis using weakly-paired cycle-consistent generative adversarial networks <i>A. Szmul (United Kingdom), S. Taylor, P. Lim, J. Cantwell, D. D'Souza, S. Moinuddin, M. Gaze, J. Gains, C. Veiga</i>	OC - 0773
11:20	Generalizability of deep-learning-based CBCT image enhancement with respect to anti-scatter grids. <i>X. Staal (The Netherlands), J. Sonke</i>	OC - 0774

Track: Physics

Proffered Papers: Novel approaches towards IGRT

Monday, 9 May 2022 10:30 - 11:30

Chair: Cristina Garibaldi

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Co-Chair: Lucie Calmels

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10:30	Dosimetric consistency between MR-only and deformed CT for MR-guided online adaptive radiotherapy <i>G. Valdes Santurio (Denmark), J. Edmund, K.I. Nousiainen</i>	OC - 0775
10:40	Preliminary report on Longitudinal Stability of MRI QA up to 2 years on 7 clinical 1.5 T MR-Linacs <i>A. Wetscherek (United Kingdom), E. v.d. Bijl, A.L.H. v. Lier, S. Jackson, S. Gibson, V.W.J. v. Pelt, S.W. Hasler, R.H. Tijssen</i>	OC - 0776
10:50	MR-guided lung SBRT: consultation, simulation and treatment delivery in a single day <i>M.A. Palacios (The Netherlands), S. Verheijen, C.J. Haasbeek, R. de Moes, O. Bohoudi, F.L. Schneiders, A.M. Bruynzeel, B.J. Slotman, F.J. Lagerwaard, S. Senan</i>	OC - 0777
11:00	Towards MR-guided particle radiotherapy: Compatibility of an open MR scanner with an ion beamline <i>K. Paul (Germany), S. Dorsch, J. Naumann, T. Hansmann, T. Haberer, J. Debus, S. Klüter</i>	OC - 0778
11:10	MRI-only radiotherapy of gliomas – a prospective clinical study <i>M. Lerner (Sweden), J. Medin, C. Jamtheim Gustafsson, S. Alkner, L.E. Olsson</i>	OC - 0779

- 11:20 Parametrization of artery delineation and nationwide implementation in the DBCG RT Nation cohort OC - 0780
E.R. Skarsø (Denmark), L. Hindhede Refsgaard, T. Ravkilde, H. Dahl Nissen, M. Berg, K. Boye, C. Kamby, K. Jakobsen, M. Olesen, B. Vrou Offersen, S.S. Korreman

Track: RTT

Proffered Papers: Adaptive radiotherapy

Monday, 9 May 2022 10:30 - 11:30

Chair: Wim Vingerhoed -

Co-Chair: Jessica Rashid -

- 10:30 Re-planning assessment in head and neck cancer radiotherapy: 3 years single institution experience OC - 0781
F. Sousa (Belgium), Y. Jourani, T. Dragan, S. Beauvois, M. Somoano, D. Van Gestel
- 10:40 Intrafraction motion of pulmonary tumors during sbrt and clinical consequences OC - 0782
S. van der Windt (The Netherlands), C. van Gijlswijk, B. Gobets, E. van Reij, A. Langeveld, M. Hol
- 10:50 Is full adaptation needed for prostate stereotactic body radiotherapy? A dosimetric comparison. OC - 0783
J. Dang (Canada), W. Li, I. Navarro, J.D. Winter, A. Berlin, P. Chung, R. Glicksman, J. Helou, V. Malkov, J. Padayachee, S. Raman, V. Kong
- 11:00 Assessment of intraprostatic tumour motion in prostate radiotherapy on the MR-Linac OC - 0784
V. Kong (Canada), J. Padayachee, J. Winter, J. Dang, W. Li, I. Navarro, R. Glicksman, V. Malkov, J. Helou, A. Berlin, P. Chung
- 11:10 A training needs analysis for online MRI guided adaptive radiotherapy: UK therapeutic radiographers OC - 0785
E. Joyce (United Kingdom), H.A. McNair, M.T. Jackson, J. Skok, B. Peet
- 11:20 Surface imaging to track inter-fractional anatomical variation in paediatric abdominal radiotherapy. OC - 0786
S. Taylor (United Kingdom), P. Lim, J. Cantwell, D. D'Souza, S. Moinuddin, Y. Ching-Chang, M. Gaze, J. Gains, C. Veiga

Track: Young

Speed dating: Grow your network

Monday, 9 May 2022 10:30 - 11:30

Chair: Anne Gasnier -

Chair: Laura Mullaney -

- 10:30 The role of yESTRO and how to get involved SP - 0787
P. Franco (Italy),
- 10:45 Speed dating SP - 0788

Track: Physics

Mini-Oral: 19: Applications of photon & ion beam therapy

Monday, 9 May 2022 10:30 - 11:30

Mini-Oral Theatre 1

	Co-Chair: Vania Batista	-
	Chair: TBC	-
10:30	Improving Knowledge-based planning for right-side whole-breast tangential field-like delivery <i>R. Castriconi (Italy), L. Marrazzo, S. Calusi, P.G. Esposito, A. Tudda, S. Broggi, P. Mangili, A. del Vecchio, S. Pallotta, C. Fiorino</i>	MO - 0789
10:30	Knowledge-Based automatic plan optimization for left-sided whole breast tomotherapy <i>P.G. Esposito (Italy), R. Castriconi, P. Mangili, S. Broggi, A. Fodor, M. Pasetti, A. Tudda, N.G. Di Muzio, A. del Vecchio, C. Fiorino</i>	MO - 0790
10:30	Towards a novel way to optimize the DLG using plan complexity metrics for SBRT/SRS using FFF beams <i>M. Oellers (The Netherlands), A. Swinnen, A. Vaniqui, F. Verhaegen</i>	MO - 0791
10:30	Altered breathing pattern can jeopardize PBS proton therapy of locally advanced NSCLC <i>L.B. Hysing (Norway), L. Bolstad Hysing, C. Grindeland Boer, K. Fjellanger, I.M. Sandvik, M. Ugland, G.M. Engeseth</i>	MO - 0792
10:30	Tissue-specific range uncertainty estimation in proton therapy <i>C. Olesen (Denmark), L.P. Muren, U.V. Elstrøm, V.T. Taasti</i>	MO - 0793
10:30	Plan library based online adaptive IMPT for head and neck cancer <i>M. Oud (The Netherlands), S. Breedveld, M. Giżyńska, M. Kroesen, S. Hutschemaekers, S. Habraken, S. Petit, Z. Perkó, B. Heijmen, M. Hoogeman</i>	MO - 0794
10:30	Systematic progression changes can assist robust IMPT plan selection for head and neck patients <i>Y. Zhang (United Kingdom), J. Alshaikhi, R.A. Amos, W. Tan, G. Royle, E. Bär</i>	MO - 0795
10:30	First clinical experience with an IGART protocol for patients with prostate and nodal radiotherapy <i>M. Buijs (The Netherlands), P. Remeijer, G. Lim</i>	MO - 0796
Track: Clinical		
Mini-Oral: 20: Breast		
Monday, 9 May 2022 10:30 - 11:30		Mini-Oral Theatre 2
	Chair: Wilfried Budach	-
	Co-Chair: Nienke Hoekstra	-
10:30	Ultrahypofractionation with simult.integrated boost in early breast cancer: clinical implementation. <i>G. Garcia, J. Fernandez, M. Dzhuhashvili (Spain), K. Matskov, A. Seradilla, A. Seral, P. Poortmans, E. Lopez</i>	MO - 0797
10:30	Re-irradiation and hyperthermia for locoregional recurrent breast cancer: Outcome of 23x2Gy vs 8x4Gy <i>A. Bakker (The Netherlands), C.P. Tello Valverde, G. van Tienhoven, M.W. Kolff, H.P. Kok, B.J. Slotman, I.R. Konings, A.L. Oei, H.S. Oldenburg, E.J. Rutgers, C.R. Rasch, H.D. van den Bongard, H. Crezee</i>	MO - 0798

10:30	ESTRO breast cancer CTV contouring guideline - does it work on MRI in prone position? <i>T. Kulms, T. Teichmann, D. Steinhilber-Wittig, A. Wittig, <u>M. Duma (Germany)</u></i>	MO - 0799
10:30	CANTO-RT: Skin toxicities evaluation of prospective cohort of irradiated patients for breast cancer <i>S. allali (France), M. Carton, T. Sarrade, S. Everhard, O. Querel, S. Rivera, K. Peignaux, P. Guilbert, C. Chara-Brunaud, J. Blanchecotte, A. Labib, D. Pasquier, S. Racadot, C. Bourcier, G. Julien, P. Cottu, I. Vaz-Luis, Y. Kirova</i>	MO - 0800
10:30	Machine learning based models of radiotherapy-induced skin induration for breast cancer patients <i>A. Cicchetti (Italy), E. La Rocca, M.C. De Santis, P. Seibold, D. Azria, D. De Ruysscher, R. Valdagni, A.M. Dunning, R. Elliot, S. Gutiérrez-Enríquez, M. Lambrecht, E. Sperk, T. Rancati, T. Rattay, B. Rosenstein, C. Talbot, A. Vega, L. Veldeman, A. Webb, J. Chang-Claude, C. West</i>	MO - 0801
10:30	Five-year oncological outcomes after two different APBI techniques; a prospective cohort study <i>M. Mast (The Netherlands), D. Jacobs, N. Horeweg, G. Speijer, A. Petoukhova, M. Straver, E. Coerkamp, H.M. Hazelbag, J. Merkus, E. Roeloffzen, L. Zwanenburg, J. van der Sijp, M. Fiocco, C. Marijnen, P. Koper</i>	MO - 0802
10:30	External Validation of NTCP-models for Acute Coronary Events after Breast Cancer Radiotherapy <i>D. Spoor, F. van Leeuwen, N. Russell, N. Boekel, S. Jacob, S. Combs, K. Borm, R. Vliegthart, G. Sikkema, M. Sijtsma, A. van der Schaaf, J. Maduro, H. Langendijk, E. Schuit, A. Crijns (The Netherlands)</i>	MO - 0803
10:30	Determinants of fatigue and longitudinal changes up to 2 years post-radiotherapy for breast cancer <i>C. Rosas (Germany), C. Rosas, T. Rattay, D. Azria, R.M. Elliott, S. Gutiérrez-Enríquez, T. Rancati, B.S. Rosenstein, D. De Ruysscher, E. Sperk, H. Stobart, R.P. Symonds, C.J. Talbot, M.C. De Santis, A. Vega, L. Veldeman, A. Webb, C.M. West, J. Chang-Claude, P. Seibold</i>	MO - 0804

Track: Physics

Poster Discussion: 19: Dosimetry

Monday, 9 May 2022 10:30 - 11:30

Poster Station 1

Chair: TBC

10:30	3D Portal Dosimetry for extreme hypofraction: pre-treatment and in vivo verification <i>M. Pereira (Portugal), J. Stroom, A. Rocha, C. Greco, S. Nijsten</i>	PD - 0805
10:30	SGRT impact on 2D transit in-vivo dosimetry for breast cancer patients <i>C. Anson (Spain), N. Jornet, P. Gallego, J. Pérez-Alija, A. Latorre-Musoll, N. García, H. Vivancos, M. Barceló, A. Ruiz, F. Leo, P. Carrasco</i>	PD - 0806
10:30	Clinical plan sensitivity to TPS parameters & complexity metrics that best capture this relationship <i>F. Brooks (USA), M. Glenn, J. Pollard-Larkin, R. Howell, C. Peterson, C.L. Nelson, C.H. Clark, S.F. Kry</i>	PD - 0807
10:30	Actual dose evaluation for establishing a quick assessment for adaptive radiotherapy in NPC cases <i>M.S. WONG (Hong Kong (SAR) China), W.K. Fung, C.L. Chiang, G. Chiu</i>	PD - 0808

10:30	Assessing the impact of adaptations to the clinical workflow using transit in vivo dosimetry <i>E. Bossuyt (Belgium), A. Taieb Mokaddem, R. Weytjens, D. Nevens, I. Joye, S. De Vos, D. Verellen</i>	PD - 0809
10:30	Monte Carlo calculated beam quality correction factors for photon reference dosimetry <i>D. Czarnecki (Germany), M. Alissa, A.A. Schoenfeld, K. Zink</i>	PD - 0810
10:30	Lateral dose response of an ionization chamber in an external magnetite field <i>M. Alissa (Germany), K. Zink, A. A. Schoenfeld, D. Czarneck</i>	PD - 0811
10:30	Validation of a high resolution solid state detector array for SBRT/SRS patient specific QA <i>J. Smeulders (Belgium), T. Gevaert, S. Robbe, T. Everaert, A. Gutierrez, A. Bom, M. Boussaer, M. De Ridder</i>	PD - 0812
10:30	In vivo dosimetry: Optical fibre characterisation for use in adaptive HDR pelvic brachytherapy <i>O. Houlihan (United Kingdom), E. Marlow, S. Esteve, G. Workman, M. Byrne, C. McGarry, M. Grattan, S. O'Keeffe, K. Prise, A. Hounsell, S. Jain</i>	PD - 0813
10:30	Quantification and correction of volume effect perturbations from detectors in small proton fields <i>J. Kretschmer (Germany), L. Brodbek, C. Behrends, F. Kugel, B. Koska, C. Bäumer, J. Wulff, B. Timmermann, H.K. Looe, B. Poppe</i>	PD - 0814
10:30	microdosimetry with tissue-equivalent proportional counters at an ion beam therapy facility <i>S. Barna (Austria), C. Meouchi, G. Magrin, V. Conte, M. Stock, A. Resch, D. Georg, H. Palmans</i>	PD - 0815
10:30	LET Quenching of EBT3 radiochromic films with low-energy protons <i>D. Sanchez-Parcerisa (Spain), I. Sanz-Garcia, P. Ibañez, S. España, A. Espinosa, C. Gutierrez-Neira, G. García, A. López, J.A. Vera, A. Mazal, L.M. Fraile, J.M. Udías</i>	PD - 0816

Track: Clinical

Poster Discussion: 20: Head and neck

Monday, 9 May 2022 10:30 - 11:30

Poster Station 2

Chair: Clifton Fuller

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10:30	IL-6 as surrogate marker for PET-detected tumor hypoxia dynamics in head-and-neck cancer patients <i>N.H. Nicolay (Germany), A. Rühle, N. Wiedenmann, J. Fennell, M. Mix, J. Ruf, R. Stoian, A.R. Thomsen, P. Vaupel, D. Baltas, A. Grosu</i>	PD - 0817
10:30	Association between plasma hypoxia markers and tumor hypoxia in head-and-neck cancer patients <i>A. Rühle (Germany), A. Grosu, N. Wiedenmann, J. Ruf, R. Stoian, A.R. Thomsen, E. Gkika, W. Weber, D. Baltas, M. Mix, N.H. Nicolay</i>	PD - 0818
10:30	Long term safety of further surveillance in HPV+ OPSCC with equivocal response on 12-week PET-CT <i>Withdrawn</i>	PD - 0819
10:30	Explainability of deep learning-based HPV status prediction in oropharyngeal cancer	PD - 0820

A. La Greca (Switzerland), C. Marchiori, M. Bogowicz, J. Barranco-García, E. Konukoglu, O. Riesterer, P. Balermipas, C. Malossi, M. Guckenberger, J.E. van Timmeren, S. Tanadini-Lang

10:30 Head & neck squamous cell carcinoma: Comparison of multimodal imaging with pathological specimens PD - 0821

E. Terzidis (Denmark), J. Friberg, A.B. Olin, I.R. Vogelius, G. Lelkaitis, C. Buchwald, H.H. Johannesen, B.M. Fischer, I. Wessel, J.H. Rasmussen

10:30 Impact of radiotherapy laterality on patient-reported outcomes in T1-2 HPV tonsillar carcinoma PD - 0822

L. McDowell (Australia), D. Rischin, M. King, L. Kenny, S. Porceddu, C. Wratten, A. Macann, J. Jackson, M. Bressel, T. Fua, C. Lin, C. Liu, J. Corry

10:30 Adjuvant Radiotherapy for Node-negative Parotid Gland Cancer Patients Undergoing Curative Resection PD - 0823

J.B. PARK (Korea Republic of), H. Wu, J.H. Kim, J.H. Lee, S. Ahn, E. Chung, K. Eom, W. Jeong, T. Kwon, S. Kim, C.W. Wee

10:30 Parotid gland volumetric change during IMRT and implications for stem cell sparing strategies PD - 0824

M. Gjini (USA), P. Brodin, S. Ahmed, W. Tomé, S. Kalnicki, C. Guha, R. Kabarriti, M. Garg

10:30 A transcriptomic biomarker predicts response to genotoxic cancer therapy PD - 0825

I. Guix (USA), A. Lazar, J. Mao, M.A. Pujana, M.H. Barcellos-Hoff

10:30 Hearing in cancer patients with skull base tumors undergoing pencil beam scanning proton therapy PD - 0826

B. Bachtary (Switzerland), D. Veraguth, N. Roos, S. von Felten, D. Weber

10:30 Dose volume correlates of mouth opening reduction after radiotherapy for HNC: comprehensive analysis PD - 0827

M. Massacesi (Italy), V. Fuga, N. Dinapoli, C. Rupe, M. Olivieri, F. Beghella Bartoli, C. Mazzarella, M. Panfili, R. Calandrelli, S. Settini, C. Lajolo, M.A. Gambacorta, F. Miccichè

10:30 Risk factors for the development of maxillary osteoradionecrosis in ACC patients treated with CIRT PD - 0828

B. Vischioni (Italy), S. Russo, M. Meuli, S. Ronchi, R. Ingargiola, A. Ferent, S. Imparato, L. Preda, M. Ciocca, M. Bonora, S. Molinelli, E. Orlandi

Track: Interdisciplinary

Proffered Papers: Highlights of Proffered Papers - Latest Clinical Trials

Monday, 9 May 2022 11:40 - 12:40

Chair: Anna Kirby

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Chair: Ben Slotman

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11:40 Acute toxicity after loco regional breast radiation therapy in the randomized DBCG SKAGEN trial 1 OC - 0829

M.L. Milo (Denmark), T. Lörinicz, M.H. Nielsen, C. Kamby, T. Bechmann, S. Al-Rawi, L.W. Matthiessen, M. Krause, A. Schreiber, I. Mjaaland, U. Kast, E.S. Brix, P. Kedzierawski, T. Marinko, C. Kirkove, J. Overgaard, B.V. Offersen

11:50 Systemic recurrence after primary chemoradiation in cervical cancer patients – an EMBRACE analysis OC - 0830

J. Knoth (Austria), R. Nout, U. Mahantshetty, I. Jürgenliemk-Schulz, C. Haie-Meder, L.U. Fokdal, A. Sturdza, P. Hoskin, B. Segedin, K. Bruheim, F. Huang, B. Rai, R. Cooper, E. van der Steen-Banasik, E. van Limbergen, B.R. Pieters, L.T. Tan, S. Kannan, A.A. de Leeuw, N. Nesvacil, K. Tanderup, C. Kirisits, J.C. Lindegaard, R. Pötter, M.P. Schmid

12:00 Results of ARTIX phase III study: adaptive radiotherapy versus standard IMRT in head and neck cancer OC - 0831

J. Castelli (France), K. Benezery, A. Hasbini, B. Gery, A. Berger, X. Liem, S. Guihard, S. Chapet, S. Thureau, P. Auberdiac, P. Pommier, J. Thariat, B. Campillo, R. de Crevoisier

12:10 DAHANCA 27, a national prospective non-inferiority study of surgery versus RT for T1a glottic cancer OC - 0832

N.M. Lyhne (Denmark), T. Kjærgaard, C. Godballe, J.F. Tvedskov, K. Hald, B. Ulhøj, T. Printz, J. Overgaard

12:20 Total neoadjuvant therapy for Organ Preservation in Rectal Cancer: The CAO/ARO/AIO-16 phase II trial OC - 0833

C. Gani (Germany), B. Polat, O. Ott, E. Germer, A. Königsrainer, A. Kirschniak, S. Clasen, U. Grosse, M. Diefenhardt, M. Bitzer, J. Reibetanz, P. Martus, M. Flentje, R. Fietkau, E. Fokas, D. Zips, C.M. Rödel

12:30 Radiotherapy for Ledderhose disease: a randomised, double-blind, phase III trial (NCT03507010) OC - 0834

A. de Haan (The Netherlands), J.G. van Nes, P. van der Toorn, A.H. Westenberg, M.W. Kolff, H.P. van der Laan, P.M. Werker, J.A. Langendijk, R.J. Steenbakkers

Track: Clinical

Multidisciplinary Tumour Board: Paediatric oncology: Sarcoma

Monday, 9 May 2022 11:40 - 12:40

Chair: Anita Mahajan

Track: Young

Young lunch symposium + networking: Increasing the impact of your research

Monday, 9 May 2022 12:45 - 14:15

Chair: Ludwig Dubois

Co-Chair: Daniel Portik

12:45 Preparing your elevator pitch SP - 0835

TBC

13:07 How do I get patients involved in my project? SP - 0836

H. McNair (United Kingdom)

13:29 Thinking inside out of the box: What could radiation oncology bring to other disciplines? SP - 0837

W. van Elmpt (The Netherlands)

13:40 Thinking outside of the box: What disciplines outside of radiation oncology could you bring to your project? SP - 0838

L. Muren (Denmark)

13:51 Acing that grant application SP - 0839
M. Bogowicz (The Netherlands)

Track: Interdisciplinary

Symposium: Lethal DNA double strand breaks production: Quality over quantity?

Monday, 9 May 2022 14:15 - 15:30

Chair: Martin Pruschy -

Co-Chair: Marta Capala -

14:15 Modelling the production of lethal DSBs SP - 0840
S. McMahon (United Kingdom)

14:33 DSB complexity: A key to cell lethality SP - 0841
G. Iliakis (Germany), E. Mladenov, V. Mladenova, A. Soni, M. Stuschke, M. Scholz

14:51 DSB repair systems: A radiation oncologist's friend or foe? SP - 0842
A. Chalmers (United Kingdom)

15:09 Boosting DSB production: Higher dose or alternate radiation type? SP - 0843
W. McBride (USA)

Track: Clinical

Joint Symposium: ESTRO-EANO: Twists and turns of brain irradiation

Monday, 9 May 2022 14:15 - 15:30

Chair: Giuseppe Minniti -

Chair: Maximilian Niyazi -

14:15 Quantifying and understanding radiological changes after brain irradiation SP - 0844
S. Lukacova (Denmark)

14:33 Neurocognitive function after brain irradiation SP - 0845
M. Klein (The Netherlands)

14:51 Twists and turns of brain reirradiation SP - 0846
L. Murray (United Kingdom)

15:09 Follow-up after irradiation of primary brain tumours SP - 0847
M. Lambrecht (Belgium)

Track: Clinical

Debate: This house believes that an intensive follow up for high-risk breast cancer patients should be considered

Monday, 9 May 2022 14:15 - 15:30

Chair: Philip Poortmans -

	Chair: Icro Meattini	-
14:15	Introduction	SP - 0848
14:17	For the motion	SP - 0849
	<u><i>D. van den Bongard (The Netherlands)</i></u>	
14:32	Against the motion	SP - 0850
	<u><i>I. Bhattacharya (United Kingdom)</i></u>	
14:47	For the motion (rebuttal)	SP - 0851
	<u><i>P. Franco (Italy)</i></u>	
15:02	Against the motion (rebuttal)	SP - 0852
	<u><i>O. Kaidar-Person (Israel)</i></u>	
15:17	Discussion	SP - 0853

Track: Physics

Symposium: Challenging the traditional margins for microscopic diseases

Monday, 9 May 2022 14:15 - 15:30

	Chair: Stine Korreman	-
	Co-Chair: Sara Pilskog	-
14:15	Biological paths for spread of microscopic disease	SP - 0854
	<u><i>E. Troost (Germany)</i></u>	
14:33	Deep learning and tumor growth modeling for identification of microscopic infiltration in GBM	SP - 0855
	<u><i>J.C. Peeken (Germany)</i></u>	
14:51	Linking CTV margin uncertainties to clinical outcome	SP - 0856
	<u><i>E. M. Vasquez Osorio (United Kingdom)</i></u>	
15:09	Selection of CTV volume and dose: How to include knowledge from patterns of failure	SP - 0857
	<u><i>R. Zukauskaitė (Denmark)</i></u>	

Track: Physics

Symposium: Adapting to changes on different time scales

Monday, 9 May 2022 14:15 - 15:30

	Co-Chair: Jasper Nijkamp	-
	Chair: TBC	-
14:15	Tracking, trailing and gating: How fast should "real-time" adaptation be?	SP - 0858
	<u><i>M. Fast (The Netherlands)</i></u>	
14:33	Slow intrafraction motion: MRI-based handling of non-periodic target deformations	SP - 0859
	<u><i>P. Bonomo (Italy)</i></u>	

14:51	Real-time dose-guided treatment adaptation <u>S. Skouboe (Denmark)</u>	SP - 0860
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15:09	Adapting to biological response based on quantitative imaging, peripheral blood, and tissue markers: Next-generation personalized radiation oncology <u>S. Bowen (USA)</u>	SP - 0861
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Track: RTT

Debate: This house believes that brachytherapy is a dying art

Monday, 9 May 2022 14:15 - 15:30

Chair: Ludwig Van den Berghe	-
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Chair: Maddalena Rossi	-
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14:15	Introduction	SP - 0862
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14:17	For the motion <u>S. Perryck (Switzerland)</u>	SP - 0863
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14:37	Against the motion <u>B. Wisgrill (Austria)</u>	SP - 0864
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14:57	For the motion (rebuttal) <u>S. Perryck (Switzerland)</u>	SP - 0865
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15:07	Against the motion (rebuttal) <u>B. Wisgrill (Austria)</u>	SP - 0866
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15:17	Discussion	SP - 0867
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Track: Young

Symposium: Mobility for radiation oncology professionals

Monday, 9 May 2022 14:15 - 15:30

Chair: Azadeh Abravan	-
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Co-Chair:	-
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14:15	Moving countries: How does it work? RTT <u>R. Simoes (United Kingdom)</u>	SP - 0868
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14:25	Moving countries: How does it work? Physicist <u>P. Trnkova (Austria)</u>	SP - 0869
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15:35	Moving countries: How does it work? Clinician <u>A. Trip (Denmark)</u>	SP - 0870
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14:45	Moving countries: How does it work? Radiobiologist <u>P. Montay-Gruel (Belgium)</u>	SP - 0871
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14:55	Short placements: Why and how? Clinician <u>L. Basson (France)</u>	SP - 0872
15:05	Short placements: Why and how? RTT <u>N. Weitkamp (Switzerland)</u>	SP - 0873
15:15	ESTRO initiatives to support mobility across the EU <u>J.G. Eriksen (Denmark)</u>	SP - 0874

Track: Physics

Mini-Oral: 21: Radiomics & modelling

Monday, 9 May 2022 14:15 - 15:15

Mini-Oral Theatre 1

Chair: TBC

14:15	Thoracic regions contributing to radiation induced lymphocyte depletion in lung cancer patients <u>S. Monti (Italy)</u> , L. Cella, T. Xu, R. Mohan, Z. Liao, G. Palma	MO - 0875
14:15	Assessing the generalisability of radiomics features for predicting sticky saliva and xerostomia <u>T. Berger (United Kingdom)</u> , D.J. Noble, L.E. Shelley, T. McMullan, A. Bates, S. Thomas, L.J. Carruthers, G. Beckett, A. Duffton, C. Paterson, R. Jena, D.B. McLaren, N.G. Burnet, W.H. Nailon	MO - 0876
14:15	Predicting bilateral involvement in head & neck cancer using an interpretable probabilistic model <u>R. Ludwig (Switzerland)</u> , B. Pouymayou, J. Hoffmann, P. Balermipas, J. Unkelbach	MO - 0877
14:15	Retraining of a Bayesian network for the detection of radiotherapy plan errors <u>P. Kalendralis (The Netherlands)</u> , S.M. Luk, A.M. Kalet, R. Fijten, A.A. Dekker, C.M. Zegers, I. Bermejo	MO - 0878
14:15	Automatic detection of delineation outliers at an MR linac <u>C. Brink (Denmark)</u> , U. Bernchou, I. Hazell, A. Bertelsen, E.L. Lorenzen, C.R. Hansen, R.L. Christiansen, N. Sarup, S.N. Agergaard, K.L. Gottlieb, H.R. Jensen, R. Bahij, L. Dysager, C.J. Nyborg, O. Hansen, T. Schytte	MO - 0879
14:15	Quantifying individual dose relationships for pCR in rectal cancer: potentials for a customized dose <u>A. Cicchetti (Italy)</u> , P. Passoni, S. Broggi, N. Slim, A. Del Vecchio, S. Cascinu, F. De Cobelli, R. Rosati, N. Di Muzio, C. Fiorino	MO - 0880
14:15	Dose patterns associated to radiation induced esophagitis in locally advanced NSCLC patients <u>G. Palma (Italy)</u> , S. Monti, T. Xu, R. Mohan, Z. Liao, L. Cella	MO - 0881
14:15	External validation of an NTCP model for patient reported xerostomia in a multicenter cohort <u>G.M. Engeseth (Norway)</u> , C.D. Amdal, L.B. Hysing, Å. Bratland, L.P. Muren, J.N. Moi, K. Søvde, M. Evensen, S.U. Thomassen, M. Brydøy	MO - 0882

Track: Interdisciplinary

Mini-Oral: 22: AI, big data, automation

Monday, 9 May 2022 14:15 - 15:15

Mini-Oral Theatre 2

Chair: Stephanie Tanadini-Lang	-
Co-Chair: Eugenia Vlaskou Badra	-
Proton Beam Therapy for Central Nervous System tumours: outcomes from the Proton Overseas Programme <i>S. Gaito (United Kingdom), E. Hwang, A. France, G. Whitfield, S. Pan, G. Price, M. Aznar, A. Crellin, D. Indelicato, E. Smith</i>	MO - 0883
Machine learning on clinical data for mortality risk-stratification after radiotherapy for NSCLC <i>S. Hindocha (United Kingdom), T. Charlton, K. Linton-Reid, B. Hunter, C. Chan, M. Ahmed, E. Robinson, M. Orton, S. Ahmad, F. McDonald, I. Locke, D. Power, M. Blackledge, R. Lee, E. Aboagye</i>	MO - 0884
Automatic segmentation of brain structures in longitudinal MR images of growing children <i>M. Aznar (United Kingdom), A. Bryce Atkinson, G. Whitfield, M. van Herk, E. Vasquez Osorio</i>	MO - 0885
Automatic delineation of head and neck gross tumor volume using multimodal information <i>H. Bollen (Belgium), S. Nuyts, S. Willems, F. Maes</i>	MO - 0886
Clinical value of ITV delineation method in cervical cancer patients receiving chemoradiotherapy <i>Y. Liang (China), S. Feng, W. Xie, Q. Jiang, Y. Yang, R. Luo, E.A. Kidd, T. Zhai, L. Xie</i>	MO - 0887
Automatic detection and segmentation of GTV for locally advanced cervical cancer in T2W MR images <i>R. Rouhi (France), S. Niyoteka, P. Laurent, S. Achkar, A. Carré, A. Leroy, S. Espenel, C. Chargari, E. Deutsch, C. Robert</i>	MO - 0888
Validation and clinical impact of a novel hybrid cardiac substructure automatic segmentation method <i>V. Chin (Australia), R.N. Finnegan, P. Chlap, J. Otton, A. Haidar, G.P. Delaney, L. Holloway, D.I. Thwaites, J. Dowling, J. Dowling, S.K. Vinod</i>	MO - 0889
Machine-learning based treatment couch parameter prediction for surface guided radiotherapy <i>G. De Kerf (Belgium), M. Claessens, I. Mollaert, W. Vingerhoed, A. Sprangers, D. Verellen</i>	MO - 0890

Track: Physics

Poster Discussion: 21: Implementation of new technology & techniques

Monday, 9 May 2022 14:15 - 15:15

Poster Station 1

Chair: TBC

14:15	Validation of EPID reference pixel for MLC and jaw calibration on a high-field MR linear accelerator <i>H.L. Riis (Denmark), A. Fietje, A.S. Bertelsen, U. Bernchou, C. Brink, B.C. Buthler</i>	PD - 0891
14:15	TomoTherapy QA prediction using a combination of complexity metrics and sinograms radiomics features <i>S. Cavinato (Italy), A. Bettinelli, F. Dusi, M. Fusella, A. Germani, F. Marturano, M. Pausco, N. Pivato, A. Roggio, M.A. Rossato, A. Scaggion</i>	PD - 0892

- 14:15 Enhancing patient safety with log file analysis : perFRACTION® optimal gamma criteria for VMAT QA PD - 0893
F. itta (Italy), G.M. Mistretta, P. Ceroni, V. Gutierrez, F. Campanaro, L. Morini, F. Marino, S. Koubegnery, E. D'Angelo, G. Guidi
- 14:15 atlas-based treatment planning models for magnetic resonance guided therapy PD - 0894
A. Khalifa (Canada), J. Winter, I. Navarro, I. Navarro, C. McIntosh, T.G. Purdie
- 14:15 Evaluating a method of treatment plan selection from daily plans on the MR-Linac PD - 0895
J. Stickley (United Kingdom), R. Chuter
- 14:15 Personalized MRI contrast for treatment guidance on an MRI-linac in patients with liver metastases PD - 0896
R. Navest (The Netherlands), V. van Pelt, T. van de Lindt, T. Janssen, M. Nowee, J. Sonke, U. van der Heide, P. van Houdt
- 14:15 In vivo verification by detection of charged fragments in carbon ion therapy treatments at CNAO PD - 0897
M. De Simoni (Italy), G. Baroni, G. Battistoni, M.G. Bisogni, P. Cerello, M. Ciocca, M. Donetti, Y. Dong, A. Embriaco, V. Ferrero, E. Fiorina, M. Fischetti, G. Franciosini, G. Giacchi, A. Kraan, C. Luongo, M. Maggi, C. Mancini Terracciano, M. Marafini, E. Malekzadeh, I. Mattei, E. Mazzoni, A. Mirandola, M. Morrocchi, S. Muraro, V. Patera, F. Pennazio, A. Schiavi, E. Solfaroli-Camillucci, G. Sportelli, S. Tampellini, M. Toppi, G. Traini, A. Trigilio, B. Vischioni, V. Vitolo, D. Carlotti, A. De Gregorio, A. Sarti
- 14:15 Clinical gains through log file based automated patient specific QA in Proton Therapy PD - 0898
G. Guterres Marmitt (The Netherlands), A. Pin, J. Free, J.A. Langendijk, S. Both
- 14:15 Magnetic field of a proton pencil beam as range verification method: The impact of secondaries PD - 0899
M. Rädler (Germany), G. Buizza, P. Palaniappan, C. Gianoli, G. Baroni, C. Paganelli, K. Parodi, M. Riboldi
- 14:15 Proton FLASH painting for improved target dose coverage and robustness near risk organs PD - 0900
P. Poulsen (Denmark), S. Nankali, J. Kallehauge, C. Grau, M. Høyer, B.S. Sørensen, J. Petersen, A. Vestergaard
- 14:15 Evaluation of a novel CBCT conversion method PD - 0901
W. Lechner (Austria), S. Haupt, D. Kanalas, L. Zimmermann, D. Georg
- 14:15 First commissioning tests of the BSD2000-3D Universal Arch MR-compatible hyperthermia device PD - 0902
C. Seabra (The Netherlands), I. VilasBoas-Ribeiro, K. Sumser, S. Curto, G.C. van Rhoon

Track: Clinical

Poster Discussion: 22: Gynaecological

Monday, 9 May 2022 14:15 - 15:15

Poster Station 2

Chair: TBC

- 14:15 Coverage probability planning is safe for simultaneously integrated boost of lymph nodes in c.vulva PD - 0903
S. Mohamed (Egypt), M.S. Assenholt, L. Fokdal, J. Kallehauge, J.C. Lindegaard, K. Tanderup
- 14:15 Clinical experiences with online adaptive radiotherapy of vulvar carcinoma PD - 0904

M. Bak (Denmark), N. Jensen, T. Jakobi Nøttrup, H. From Mathiesen, H. Roed, M.E.E. Sjölin, F. Kjær-Kristoffersen, V. Nordmark Hansen, I. Richter Vogelius

- 14:15 Bowel loop motion decreases during radiotherapy in gynaecological cancer patients using 3D cine-MRI PD - 0905
J. Laan (The Netherlands), L. Ewals, Z. van Kesteren, D. Barten, A. Bel, H. Westerveld
- 14:15 Functional MRI as an Assessment Tool in Carcinoma Cervix Patients Undergoing Chemoradiation PD - 0906
S. Pradhan (India), R. Ranjan, A. Verma, T. Singh, L.M. Aggarwal, R. Singh, U.P. Shahi
- 14:15 Are set-up corrections adequate enough to ensure an optimal dose delivery by IMRT in cancer cervix? PD - 0907
P. Kale, P. Kalbande (India), N. Shanmugam, B. Mahindrakar Jain, A. Singh, Z. Mathi, V. Hatekar, N.R. Datta
- 14:15 Anatomy- versus margin-based prophylactic para-aortic radiotherapy in cervical cancer PD - 0908
J. Lee (Taiwan), J. Lin, C. Chang, Y. Chen, M. Wu
- 14:15 Outcome of multiple high-risk factors on overall survival in adjuvant cervical cancer chemoradiation PD - 0909
Z. Horne (USA), S. Abel, S. Crafton, E. Miller, C. Morse, J. Nakayama, T. Krivak, S. Glaser, R. Wegner, A. Patel, S. Beriwal
- 14:15 Early outcomes of abbreviated brachytherapy schedule for cervix cancer during COVID pandemic. PD - 0910
S. Chopra (India), J. Mulani, M. Singh, A. Shinde, P. Mittal, L. Gurram, L. Scaria, D. A. S. Kohle, P. Rane, Y. Ghadi, S. Rath, J. Ghosh, S. Gulia, S. Gupta, R. Kinhikar, S. Laskar, J.P. Agarwal
- 14:15 Survival outcomes and patterns of failure from stage migration of FIGO staging in cervical cancer PD - 0911
W. Sittiwong (Thailand), P. Dankulchai, N. Chareonsiriwat, S. Manopetchkasem, T. Prasertseree
- 14:15 Molecular Resistance Mechanisms in the Treatment of Locally Advanced Cervical Cancer: HIF-1 α ? ERCC1? PD - 0912
F. Sert (Turkey), G. Serin, M. Ozturk, O. Zekioglu, S. Alanyali, Z. Ozsaran
- 14:15 Is substantial LVSI prognostic in patients with pathological lymph node-negative endometrial cancer? PD - 0913
P. Pifer (USA), S. Jaishankar, R. Bhargava, A. Keller, H.B. Musunuru, M. Cohen, P. Sukumvanich, M. Courtney-Brooks, M. Boisen, J. Berger, S. Taylor, A. Olawaiye, J. Lesnock, R. Edwards, J.A. Vargo, S. Beriwal
- 14:15 SBRT versus ENRT in oligometastatic gynaecologic tumors: techniques comparison. PD - 0914
S.L. Villa (Italy), A. Fodor, G. Mandurino, F. Zerbetto, C.L. Deantoni, A. Sanchez Galvan, R. Tummineri, S. Baroni, J. Saddi, P. Mangili, R. Castriconi, S. Arcangeli, N.G. Di Muzio

Track: Interdisciplinary

Award Lecture: K Breur Award

Monday, 9 May 2022 16:00 - 16:25

- 16:00 Introduction by Ben Slotman SP - 0915
- 16:05 Real-time MRI guided radiotherapy: The next generation standard? SP - 0916
J. Lagendijk (The Netherlands)

Track: Interdisciplinary

Award Lecture: Donal Hollywood Award

Monday, 9 May 2022 16:25 - 16:40

Chair: Anna Kirby

- 16:25 Patterns of failure in the phase III randomized controlled FLAME trial for localized prostate cancer OC - 0917
- V.H. Groen, K. Haustermans, F.J. Pos, C. Draulans, S. Isebaert, E.M. Monninkhof, R.J. Smeenk, M. Kunze-Busch, H.C. De Boer, J.R. Van der Voort van Zyp, L. Kerkmeijer (The Netherlands), U.A. Van der Heide*

Track: Interdisciplinary

Proffered Papers: Health economics

Monday, 9 May 2022 16:45 - 17:45

Chair: Yolande Lievens

Co-Chair: Noemie Defourny

- 16:45 Honorary Member Presentation - May Abdel-Wahab OC - 0918
- 16:55 National costs & resource requirements of radiotherapy: costing estimate from the ESTRO-HERO project OC - 0919
- T. Roques (United Kingdom), K. Spencer, N. Defourny, P. Diez, A. Francis, S. Griffin, K. Langmack, N. Kirkby, T. Mee, C. Roe*
- 17:05 Health-economics and evidence-based hypofractionation uptake in Europe: GIRO-HERO cluster analysis OC - 0920
- J. Corral (Spain), C. Oliveira, R. Clèries, D. Rodin, J.M. Borras, Y. Lievens*
- 17:15 Age- and Comorbidity- Adjusted Optimal Radiotherapy Utilisation Rate for Women with Breast Cancer OC - 0921
- P. Mackenzie (Australia), C. Vajdic, G. Delaney, T. Comans, M. Agar, G. Gabriel, M. Barton*
- 17:25 Socioeconomic inequality in survival after oropharyngeal cancer – a nationwide study from DAHANCA OC - 0922
- M.H. Olsen (Denmark), P. Lassen, C. Rotbøl, K. Frederiksen, T.K. Kjær, J. Overgaard, S.O. Dalton*
- 17:35 Use of value-based-healthcare to evaluate a novel treatment protocol for localized prostate cancer OC - 0923
- A. Gomez Iturriaga (Spain), D. Buchser, M. Marban, I. San Miguel, I. Raton, J. Cacicedo, F. Casquero*

Track: Clinical

Proffered Papers: CNS

Monday, 9 May 2022 16:45 - 17:45

Chair: Danielle Eekers

Co-Chair: Raphael Bodensohn

16:45	Pseudoprogression after radiotherapy for IDH mutated low grade glioma in a multicenter photon cohort <i>J. Jaspers (The Netherlands), W. Taal, J. Zindler, A. Swaak, S. Habraken, M. Hoogeman, R. Nout, M. van den Bent, A. Méndez Romero</i>	OC - 0924
16:55	Early adjuvant RT as a predictor of improved outcomes in patients with grade II and III meningiomas <i>E.M. Cuffini (Italy), C. Casale, C. Mantovani, A. Gastino, B. Lo Zito, L. Blasi, D. Bongiovanni, E. Orlandi, M. Cerrato, A. Vella, S. Leardi, V. Chiofalo, C. Cavallin, G.C. Iorio, U. Ricardi, M. Levis</i>	OC - 0925
17:05	Dose to the dorsal vagal complex is predictive of radiation induced nausea <i>C. Dupin (France), V. Caspar, T. Charleux, A. Beddok, N. Giraud, B. Bernard, M. Martin, R. Trouette, J. Thariat, A. Huchet, V. Vendrely</i>	OC - 0926
17:15	Impact of radiation doses to parahippocampal gyrus and amygdala on memory in pituitary adenomas <i>A. Dasgupta (India), A. Thomas Alex, A. Sahu, U. Agarwal, A. Chatterjee, S. Goswami, U. Gaikwad, N. Bano, V. Singh, P. Shetty, A. Moiyadi, A. Sahay, E. Sridhar, A. Choudhari, K. Bhattacharya, R. Kinkhikar, R. Jalali, T. Gupta, J.S. Goda</i>	OC - 0927
17:25	Dedicated SRS imaging improves brain metastases detection and reduces the intracranial relapse risk <i>R. Kotecha (USA), T. Kutuk, K.J. Abrams, M.C. Tom, H. Appel, M.D. Hall, R. Tolakanahalli, D.J.J. Wiczeorek, M.W. McDermott, M.S. Ahluwalia, M.P. Mehta</i>	OC - 0928
17:35	How to manage consolidative radiotherapy after HD methotrexate in PCNSL patients: a phase II study <i>S. Chiesa (Italy), F. Beghella Bartoli, C. Mazzarella, S. Hohaus, M.C. Cannatà, F. Catucci, F. D'Alò, S. Bracci, A. Nardangeli, A. Martino, N. Dinapoli, F. Marazzi, S. Manfreda, M.A. Gambacorta, C. Aristei, V. Valentini, M. Balducci</i>	OC - 0929

Track: Clinical

Proffered Papers: Breast

Monday, 9 May 2022 16:45 - 17:45

Chair: John Maduro

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Co-Chair: TBC

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16:45	Breast induration versus irradiated breast volume in the randomized phase III DBCG PBI trial <i>M.S. Thomsen (Denmark), J. Alsner, M. Berg, I. Jensen, M. Josipovic, E.L. Lorenzen, E. Yates, H.M. Nielsen, E.H. Jakobsen, L. Stenbygaard, A.N. Pedersen, M.H. Nielsen, M.R. Jensen, J. Overgaard, B.V. Offersen</i>	OC - 0930
16:55	Inter-center variations in contouring and planning compromises in the DBCG Skagen trial <i>E.L. Lorenzen (Denmark), M.S. Thomsen, T. Bechmann, M. Berg, M.H. Nielsen, H.V. Hansen, K. Boye, T. Lörincz, I. Jensen, S.A. Al-Rawi, M.M.B. Nielsen, L.W. Matthiessen, K. Andersen, M.R. Jensen, J. Overgaard, B.V. Offersen</i>	OC - 0931
17:05	Preoperative radiation therapy in early breast cancer: phase II ROCK trial (NCT03520894) <i>L. Visani (Italy), I. Meattini, G. Francolini, V. Di Cataldo, C. Becherini, J. Nori, M. Bernini, L. Orzalesi, L. Sanchez, E. Scoccimarro, S. Lucidi, C. Bellini, I. Desideri, V. Scotti, R. Doro, L. Masi, M. Loi, S. Bianchi, M. Mangoni, L. Livi</i>	OC - 0932

17:15	Breast conservation with partial or whole breast irradiation: 20-year results of a randomized study <i>C. Polgar (Hungary), T. Major, Z. Takacs-Nagy, J. Fodor</i>	OC - 0933
17:25	Outcomes of the EORTC 22922/10925 randomised trial according to the technique for nodal irradiation <i>O. Kaidar-Person (Israel), C. Fortpied, S. Hol, C. Weltens, C. Kirkove, V. Budach, K. Peignaux-Casasnovas, F. van der Leij, E. Vonk, M. Valli, N. Weidner, M. Guckenberger, E. Koiter, A. Fourquet, H. Bartelink, H. Struikmans, P. Poortmans</i>	OC - 0934
17:35	Radiotherapy in patients receiving anthracyclines: phase 3 SAFE trial (NCT2236806) interim analysis <i>I. Meattini (Italy), C. Becherini, L. Visani, I. Desideri, G. Simontacchi, V. Scotti, B. Detti, G. Francolini, M. Loi, D. Greto, P. Bonomo, M. Mangoni, G. Barletta, L. Livi</i>	OC - 0935
Track: Physics		
Proffered Papers: Multicentre validation studies		
Monday, 9 May 2022 16:45 - 17:45		
	Chair: Ditte Sloth Møller	-
	Co-Chair: Patricia Diez	-
16:45	The value of measurement-based proton peer review <i>P. Taylor (USA), S. Kry, J. Lowenstein</i>	OC - 0936
16:55	Optimising tissue-equivalent materials for proton therapy <i>H. Cook (United Kingdom), M. Simard, N. Niemann, C. Gillies, H. Palmans, M. Hussein, H. Bouchard, G. Royle, A. Lourenço</i>	OC - 0937
17:05	MLC complexity metrics in clinical online adapted IMRT plans delivered with a double-stacked MLC <i>P. Sibolt (Denmark), N.C. Momsen, L.M. Åström, U. Bjelkengren, D. Sjöström, C.P. Behrens</i>	OC - 0938
17:15	Development and validation of a population-based colorectal model for radiation therapy dosimetry <i>C. Owens (USA), B. Rigaud, E. Ludmir, A. Gupta, S. Shrestha, A. de la Cruz Paulino, C. Peterson, S. Kry, S. Smith, K. Brock, T. Henderson, R. Howell</i>	OC - 0939
17:25	Independent Dosimetry Audits for Tomotherapy Machines in Korea <i>K.B. Kim (Korea Republic of), K. Kim, G. Cho, S.H. Choi</i>	OC - 0940
17:35	Impact of guidelines on nationwide breast cancer treatment planning practices (DBCG RT Nation study) <i>L. Refsgaard (Denmark), E.R. Skarsø, T. Ravkilde, H.D. Nissen, M. Berg, M. Olsen, K.L. Jakobsen, K. Boye, C. Kamby, K. Lind Laursen, I. Jensen, S.N. Bekke, L.W. Matthiessen, E. Laugaard Lorenzen, L.B.J. Thorsen, B.V. Offersen, S.S. Korreman</i>	OC - 0941

Track: Physics

Proffered Papers: Inter-fraction motion and adaptive radiotherapy

Monday, 9 May 2022 16:45 - 17:45

Chair: Dirk Verellen

Co-Chair: Enrico Clementel

16:45	A deformation model for the rectum which combines population and patient-specific motion patterns <i>Ø. Rørtveit (Norway), L.B. Hysing, A. Stordal, S. Pilskog</i>	OC - 0942
16:55	Deep learning-based internal target volume adaption in SBRT <i>L. Wimmert (Germany), T. Sentker, T. Dassow, F. Madesta, R. Werner, T. Gauer</i>	OC - 0943
17:05	Adaptive fractionation at the MR-Linac based on a dynamic programming approach <i>Y.S. Pérez Haas (Switzerland), R. Ludwig, R. Dal Bello, L. Wenhong, S. Tanadini-Lang, J. Unkelbach</i>	OC - 0944
17:15	Treatment verification with prompt-gamma imaging: Detection sensitivity of anatomical changes in HNC <i>J. Berthold (Germany), L. Hübinger, N. Piplack, J. Pietsch, C. Khamfongkhruea, J. Thiele, S. Appold, E. Traneus, G. Janssens, J. Smeets, K. Stützer, C. Richter</i>	OC - 0945
17:25	Rapid IGRT-based proton dose estimation <i>S. Flampouri (USA), M. McDonald, W. LePain</i>	OC - 0946
17:35	First clinical experiences in treating oesophageal cancer with intensity-modulated proton therapy <i>S. Visser (The Netherlands), C. O.Ribeiro, M. Dieters, V.E. Mul, A. Niezink, A. Knopf, J.A. Langendijk, E.W. Korevaar, S. Both, C.T. Muijs</i>	OC - 0947

Track: RTT

Proffered Papers: Dosimetry & treatment planning

Monday, 9 May 2022 16:45 - 17:45

Chair: Liselotte ten Asbroek-Zwolsman

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Co-Chair: James Iddenden

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16:45	Prognostic value of 18F-FDG PET/CT performed before reirradiation of head and neck squamous cell carcinoma recurrence <i>F. Lucia (France), A. Vu, V. Bourbonne, C. Clodic, J. Leclerc, O. Pradier, R. Abgral, U. Schick</i>	OC - 0948
16:55	Improved sparing of liver and lung tissue: DIBH for right breast irradiation <i>R. Pace (Switzerland), R.T. Boucas da Silva, L.E.J. Adam, G. Näf, C. Winter, M.M. Aspradakis, S. Hayoz, B.G. Baumert</i>	OC - 0949
17:05	Dosimetric comparisons of wide tangent and VMAT techniques in breast IMC radiotherapy <i>J. Varsani (United Kingdom), Y. Tsang, S. Nunes, S. Ahmed, V. Newton, C. Westbury</i>	OC - 0950
17:15	heart sparing in treatment planning for esophageal cancer VMAT: at what cost for lung dose? <i>M. de Boer (The Netherlands), A. Arents-Huls, R.G.J. Kierkels, P.M. Jeene, K. Muller</i>	OC - 0951
17:25	Dosimetry & toxicity comparison between CBCT-Guided and MR-Guided Prostate Ultra-hypofractionated RT <i>V. Kong (Canada), J. Padayachee, J. Dang, W. Li, V. Malkov, J. Winter, I. Navarro, A. Berlin, J. Helou, S. Raman, P. Chung</i>	OC - 0952
17:35	Dosimetric validation of a hybrid DIR algorithm for MR-Linac dose accumulation <i>V. Malkov (Canada), J.D. Winter, V. Kong, W. Li, J. Dang, I. Navarro, J. Padayachee, P. Chung, T. Tadic</i>	OC - 0953

Track: Young

Networking Session: Young Networking Event + Quiz

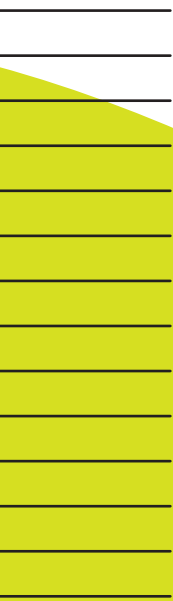
Monday, 9 May 2022 16:45 - 17:45

Chair: Ludwig Dubois

-

-

Tuesday
10 May
2022



Track: Interdisciplinary

Teaching lecture: Toxicity vs tumour control: What makes a good plan?

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Peter Hoskin

-

08:30 Above the diaphragm

SP - 0954

K. Tanderup (Denmark)

Track: Interdisciplinary

Teaching lecture: How can omics lead to personalised radiation oncology?

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Wouter van Elmp

-

08:30 How can omics lead to personalised radiation oncology?

SP - 0956

H. Lyng (Norway)

Track: Clinical

Teaching lecture: Is endometrial cancer ready for treatment individualisation based on molecular risk factors?

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Remi Nout

-

08:30 Is endometrial cancer ready for treatment individualisation based on molecular risk factors?

SP - 0957

C. Creutzberg (The Netherlands)

Track: Clinical

Teaching lecture: Hypofractionation for the management of postoperative PCa

Tuesday, 10 May 2022 08:30 - 09:10

Chair: TBC

-

08:30 Hypofractionation for the management of postoperative PCa

SP - 0958

S. Aluwini (The Netherlands), F. Staal, H. Langendijk

Track: Physics

Teaching lecture: Deformable registration for dose accumulation: Current status and future challenges

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Jamie McClelland

-

08:30 Deformable registration for dose accumulation: Current status and future challenges

SP - 0959

K. Brock (USA)

Track: Physics

Teaching lecture: Immunotherapy and radiotherapy: Basics for physicists

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Daniela Thorwarth

-

08:30 Immunotherapy and radiotherapy: Basics for physicists

SP - 0960

F. Eckert (Austria)

Track: RTT

Teaching lecture: Calculating margins correctly: Abracadabra with numbers?

Tuesday, 10 May 2022 08:30 - 09:10

Chair: Monica Buijs

-

08:30 Investigating and reporting geometrical uncertainties – a complete and clear overview for RTTs involved in research

SP - 0961

R. de Jong (The Netherlands)

08:30 Calculating margins correctly: Abracadabra with numbers?

SP - 0962

M. van Herk (United Kingdom)

Track: Interdisciplinary

Symposium: Anal cancer

Tuesday, 10 May 2022 09:15 - 10:30

Chair: Jens Overgaard

-

Co-Chair: Daniel Portik

-

09:15 Introduction

SP - 0963

09:20 State of the art and future directions in primary therapy for anal cancer

SP - 0964

D. Sebad-Montefiore (United Kingdom)

09:35 Definitive therapy for locally-advanced and localised metastatic anal cancer: Using the toolbox

SP - 0965

M. Hawkins (United Kingdom)

09:50 Treating elderly and frail patients with anal cancers: What are the alternative options?

SP - 0966

M. Guren (Norway)

10:05 Biology in squamous cell carcinoma of the anus: An anal cancer or squamous cell disease?

SP - 0967

K-L. Spindler (Denmark)

10:20 Discussion

SP - 0968

Track: Interdisciplinary

Joint Symposium: ESTRO-ESR: Imaging biomarkers for personalised radiotherapy

Tuesday, 10 May 2022 09:15 - 10:30

Chair: Uulke van der Heide

-

	Chair: Regina Beets-Tan	-
09:15	The Physicist <u>K.R. Redalen (Norway)</u>	SP - 0969
09:33	The Radiation Oncologist <u>C. Fuller (USA)</u>	SP - 0970
09:51	The RTT <u>V. van Pelt (The Netherlands)</u>	SP - 0971
10:09	The imaging expert: The use of (imaging) biomarkers in AI prediction models of outcome <u>Á. Alberich Bayarri (Spain)</u>	SP - 0972
Track: Clinical Joint Symposium: ESTRO-ESGO: Joint guidelines on the management of vaginal cancer Tuesday, 10 May 2022 09:15 - 10:30		
	Chair: Remi Nout	-
	Chair: Christina Fotopoulou	-
09:15	Diagnosis, staging and role of surgery <u>C. Fotopoulou (United Kingdom)</u>	SP - 0973
09:33	Role of external beam radiotherapy <u>R. Nout (The Netherlands)</u>	SP - 0974
09:51	Role of brachytherapy <u>C. Chargari (France)</u>	SP - 0975
10:09	Management in children and adolescents <u>D. Orbach (France)</u>	SP - 0976
Track: Clinical Symposium: Fractionation for external beam radiation therapy in early breast cancer: State-of-the-art Tuesday, 10 May 2022 09:15 - 10:30		
	Chair: Orit Kaidar-Person	-
	Co-Chair: Femke van der Leij	-
09:15	Whole breast irradiation: How fast can we go? <u>P. Poortmans (Belgium)</u>	SP - 0977
09:40	Nodal irradiation <u>C. Coles (United Kingdom)</u>	SP - 0978

10:05 Chest wall irradiation with or without breast reconstruction SP - 0979
I. Meattini (Italy)

Track: Physics

Symposium: Medical physicists should be directly involved in the design, execution and interpretation of clinical trials

Tuesday, 10 May 2022 09:15 - 10:30

Chair: Ane Appelt -

Co-Chair: Sara Pilskog -

09:15 NTCP modelling: A tool for designing clinical trials SP - 0980
I.R. Vogelius (Denmark)

09:33 How to design clinical trials which assess the advantage of new technologies SP - 0981
G. Price (United Kingdom)

09:51 Benchmarking for contouring and treatment planning for accreditation of clinical trials SP - 0982
E. Clementel (Belgium)

10:09 Accreditation for clinical trials: Dosimetry and audits SP - 0983
C. Clark (United Kingdom)

Track: Physics

Symposium: Modelling of complex systems and interactions

Tuesday, 10 May 2022 09:15 - 10:30

Chair: Charlotte Robert -

Co-Chair: René Mario Winter -

09:15 Prediction of radiotherapy-induced lymphopenia SP - 0984
R. Mohan (USA)

09:40 Mathematical Modeling of Combined Treatments for Sequencing and Scheduling SP - 0985
 Optimisation
C. Grassberger (USA)

10:05 Modelling (re) oxygenation SP - 0986
I. Toma-Dasu (Sweden)

Track: RTT

Panel Discussion: Artificial intelligence: Friend or foe of the RTT?

Tuesday, 10 May 2022 09:15 - 10:30

Chair: Michelle Leech, Co-Chair: Anja Nielsen -

09:15 Introduction SP - 0987

09:22	K. Thompson (Australia)	SP - 0988
09:27	C. Dickie (Canada)	SP - 0989
09:32	M. Buijs (The Netherlands)	SP - 0990
09:37	S. Alexander (United Kingdom)	SP - 0991
09:42	Discussion	SP - 0992
10:15	Summaries	SP - 0993
10:23	Closing remarks	SP - 0994

Track: Interdisciplinary

Symposium: Changes in disease pattern after the pandemic

Tuesday, 10 May 2022 11:00 - 12:15

Chair: Hans Langendijk, Co-Chair: Morten Horsholt Kristensen

-

11:00	The economic impact of avoidable cancer deaths caused by diagnostic delay during the COVID-19 pandemic	SP - 0995
11:18	How did Italian radiotherapy centres deal with the COVID-19 pandemic? <i>A.R. Filippi (Italy)</i>	SP - 0996
11:36	The impact of the COVID-19 pandemic on radiotherapy services in England <i>K. Spencer (United Kingdom)</i>	SP - 0997
11:54	Impact of COVID-19 on cancer care in India <i>P. Ranganathan (India)</i>	SP - 0998

Track: Interdisciplinary

Symposium: Adaptation and automation: The new frontier in radiotherapy

Tuesday, 10 May 2022 11:00 - 12:15

Chair: Matthias Guckenberger

-

Co-Chair: Patrik Sibolt

-

11:00	Adapting and automating our professional roles: Challenges and opportunities <i>M. Velec (Canada)</i>	SP - 0999
11:25	Adaptation to tumour response during radiotherapy: Lessons learned in brachytherapy and how to transfer to EBRT <i>P. Petric (Switzerland)</i>	SP - 1000
11:50	CBCT and MRI-based workflows for online adaptive radiotherapy <i>C.P. Behrens (Denmark)</i>	SP - 1001

Track: Clinical

Symposium: HPV-related squamous cell carcinoma: Is it time for de-intensification?

Tuesday, 10 May 2022 11:00 - 12:15

Chair: Florence Huguet

-

Co-Chair: Joris Elbers

-

11:00 Radiosensitivity of HPV-related SCC

SP - 1002

T. Rieckmann (Germany)

11:18 HPV+ HNSCC: Is it time for deintensification?

SP - 1003

P. Blanchard (Germany)

11:36 HPV+ anal SCC: Is it a question of dose?

SP - 1004

D. Gilbert (United Kingdom)

11:54 HPV+ cervix SCC

SP - 1005

S. Chopra (India)

Track: Clinical

Debate: This house believes that short-course radiotherapy is the ideal schedule as part of total neoadjuvant therapy programs for rectal cancer

Tuesday, 10 May 2022 11:00 - 12:15

Chair: Mateusz Spalek

-

Chair: Karin Haustermans

-

11:00 Introduction

SP - 1006

11:02 For the motion

SP - 1007

R. Suwinski (Poland)

11:17 This house believes that short-course radiotherapy is the ideal schedule as part of total neoadjuvant therapy programs for rectal cancer Against the motion

SP - 1008

M.A. Gambacorta (Italy)

11:32 For the motion (rebuttal)

SP - 1009

C. Marijnen (The Netherlands)

11:47 Against the motion (rebuttal)

SP - 1010

C. Rödel (Germany)

12:02 Discussion

SP - 1011

Track: Physics

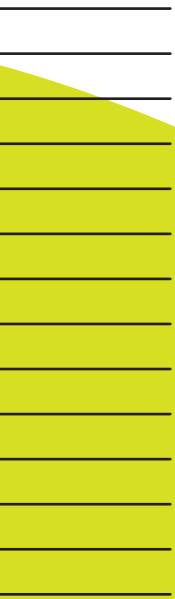
Symposium: Spatial and spatio-temporal fractionation

Tuesday, 10 May 2022 11:00 - 12:15

	Chair: Núria Jornet	-
11:00	Biology of spatial and spatiotemporal fractionation <i>J. Scott (USA)</i>	SP - 1012
11:25	Clinical implementation of spatial-fractionated radiotherapy <i>V. Gonzalez Perez (Spain), M.C. Banos-Capilla, J.D. Lago-Martin</i>	SP - 1013
11:50	Spatiotemporal fractionation <i>J. Unkelbach (Switzerland), N. Torelli, I. Telarovic, I. Vetrugno, D. Papp, M. Pruschy</i>	SP - 1014
Track: Physics Symposium: Modelling at the voxel level: Dose and image-data mining Tuesday, 10 May 2022 11:00 - 12:15 Chair: Wouter van Elmpt		
11:00	Mining the radiotherapy dose: Report from the physics workshop <i>L. Cella (Italy), A. McWilliam, G. Palma</i>	SP - 1015
11:18	Voxel-based RBE studies in proton therapy <i>A. Lühr (Germany)</i>	SP - 1016
11:36	What have we learnt and translation to the clinic? <i>O. Acosta (France)</i>	SP - 1017
11:54	Voxel-level analysis of normal tissue response: Are there really any advantages compared to traditional NTCP modelling? <i>A. Appelt (UK)</i>	SP - 1018
Track: RTT Symposium: Changing the radiation medicine paradigm Tuesday, 10 May 2022 11:00 - 12:15 Chair: Colleen Dickie Co-Chair: Vivian van Pelt		
11:00	Capitalising on research to transform clinical workflows and mindsets: our journey with patient-reported measures from siloed to system-wide <i>A. Berlin (Canada)</i>	SP - 1019
11:25	Wearable technology for continuous remote patient monitoring for cancer patients <i>D. Blum (Switzerland)</i>	SP - 1020
11:50	Reimagining on-treatment radiation review clinics: Bringing the patient voice to the forefront and delivering the right care at the right time <i>M. Campbell (Canada), D. Erler</i>	SP - 1021
Track: Interdisciplinary Pitch Session: Closing Session: Which innovations will have the greatest impact in radiotherapy by 2030? Tuesday, 10 May 2022 12:20 - 13:20		

	Chair: Ben Slotman	-
	Chair: Anna Kirby	-
12:20	Introduction	SP - 1022
12:22	I-ROBOT: Automation will have replaced humans in most aspects of the radiotherapy pathway <u>Y. Tsang (United Kingdom)</u>	SP - 1023
12:32	Inter(fraction)stellar: Every target, every plan and every fraction will be adapted to individual risk and response models <u>S. Korreman (Denmark)</u>	SP - 1024
12:42	Rogue One (to Five): All radiotherapy will be delivered in a maximum of five fractions <u>A. Tree (United Kingdom)</u>	SP - 1025
12:52	FLASH: He'll save everyone of us <u>P. Montay-Gruel (Belgium)</u>	SP - 1026
13:02	The Matrix: Treatment decisions and optimal steering of radiotherapy will be based on big data cloud-computing <u>J. Bibault (France)</u>	SP - 1027
13:12	Results	SP - 1028
13:15	Closing Remarks	SP - 1029

Digital Posters



Track: Interdisciplinary

Poster (digital): Education in Radiation Oncology

-

- Quantitative benefit of centralised quality assurance for the implementation of Lung SABR PO - 1030
M. Kroiss (United Kingdom), R. Patel, P. Diez
- Canadian Radiation Oncology 2020 Work Engagement and Burnout Survey PO - 1031
M. Keyes (Canada), P. Ingledew, S. Loewen, M. Dosani, S. Tyldesley, M. Brundage, M. Leiter
- Developing an AHP Support Programme for Implementing Recruitment, Retention and Engagement (ASPIRRE) PO - 1032
M. Tuckey (United Kingdom), N. Hutton, S. Goodman
- Learning curve of residents of a radiation oncology service in a training program. PO - 1033
C. De La Pinta (Spain), M. Valero, E. Pinto, V. Duque, L. Pelari, F. López Mesa, E. Centelles, M.E. Hernando, B. Iñigo, E. Fernández-Lizarbe, E. Canales, R. García-LaTorre, M. Garvía, V. Pino, S. Sancho García
- A national program for the implementation of lung Stereotactic Ablative Body Radiotherapy (SABR) PO - 1034
P. Diez (United Kingdom), A. Haridass, J. Lilley, R. Patel, E. Miles, A. Tree, C. Clark, C. Dean, K. Fell, F. McDonald

Track: Interdisciplinary

Poster (digital): Health economics / health services research

-

- Quantifying societal burden of radiation-induced cardiovascular events in breast cancer survivors PO - 1035
E. Kimpe (Belgium), A. Werbrueck, M. De Ridder, K. Putman
- Resource Requirements in Low- and Middle-Income Countries without Radiotherapy Facilities PO - 1036
J. Willmann (Switzerland), S.M. Christ
- Patterns of care and acute toxicity of MR-Linac: Initial results from the first 1000 fractions PO - 1037
V. Batumalai (Australia), M. Jameson, D. Crawford, L. Hogan, C. Loo, M. Picton, L. Geddes, S. Alvares, J. Lynch, A. Woods, R. Rosario, C. Pagulayan, U. Jelen, N. Dunkerley, S. Sampaio, M. Heinke, T. Twentymann, J. de Leon
- Do clinical pathways facilitate contouring guideline use among radiation oncologists? PO - 1038
D. Lin (USA), S. Beriwal, J. Murphy, E. Gillespie
- Assessment of Surface Guided Radiation therapy in Breast cancer: An Indian Experience PO - 1039
M. Barthwal (India), V. Pareek, J. Yadav, S. MS, R.K. Bisht, P. Patil, A. Sharma, D.N. Sharma, S. V, S. Mallick
- Robust scheduling for a One Stop Shop palliative radiotherapy clinic using genetic algorithms PO - 1040
N. Hoffmans-Holtzer (The Netherlands), L. Smolenaers, R. Peeters, N. Swart, O. Tims, I. De Pree, C. Slagter, M. Olofsen - van Acht, M. Hoogeman, M. Balvert, S. Petit

Towards the definition of a minimum set of RT-specific Quality Indicators: an ESTRO NSC initiative	PO - 1041
<u>A. Vaandering (Belgium)</u> , N. Jornet, P. Franco, L.T. Tan, L. Van Den Berghe, S. Curcean, E. Gheară, M. Iljovska, J. Jaal, T. Kirsch, F. Kraja, M. Marius, B.A. Jereczek, C. Garibaldi	
Early cost-effectiveness analysis of MR guided radiotherapy for colorectal liver metastases	PO - 1042
<u>J. Kleerebezem (The Netherlands)</u> , E. Brunenberg, K. Muller, J. Grutters	
Factors affecting the implementation of technological and treatment innovations in radiotherapy	PO - 1043
<u>R. Swart (The Netherlands)</u> , L. Boersma, R. Fijten, S. Raj, S. Thijssen, C. Roumen, M. Jacobs	
MRI-only from an economic perspective: Can new techniques in prostate radiotherapy be cost-saving?	PO - 1044
E. Persson, N. Svanberg, J. Scherman, C. Jamtheim Gustafsson, A. Fridhammar, F. Hjalte, S. Bäck, P. Nilsson, A. Gunnlaugsson, <u>L.E. Olsson (Sweden)</u>	
The impact of COVID-19 restrictions on radiotherapy referral pathways in Victoria, Australia	PO - 1045
<u>N. Anderson (Australia)</u> , C. Hornby, K. Karanika	
Socioeconomic status and treatment prolongation in radiation therapy for lung cancer	PO - 1046
<u>M. Warrender-Sparkes (Australia)</u> , K. Woodford, J. Millar, J. Ruben, S. Senthil, W.L. Ong	
Architecture of radiotherapy departments: Comparative floorplan-analysis to identify typologies	PO - 1047
<u>C. Kolodziej (Germany)</u> , G. Marquardt, E.G. Troost	
Practitioners' views on shared decision-making implementation: A qualitative study	PO - 1048
<u>A. Ankolekar (The Netherlands)</u> , K. Dahl Steffensen, K. Olling, A. Dekker, L. Wee, C. Roumen, H. Hasannejadasl, R. Fijten	
COVID-19 pandemic impact on psychological state and care of cancer patients undergoing radiotherapy	PO - 1049
<u>L. Gasparini (Italy)</u> , L. Caravatta, M. Taraborrelli, M. Borgia, D. Genovesi	
Cost-effectiveness analysis of 1.5T MRI-guided radiotherapy: A survey in the MR-Linac Consortium	PO - 1050
<u>C. Hehakaya (The Netherlands)</u> , J.R. van der Voort van Zijp, D.E. Grobbee, H.M. Verkooijen, G.F. Frederix	
Analysis Of A Mono-Institutional Internal Procedure Protocol During Covid-19 Second Wave	PO - 1051
<u>M. Lucarelli (Italy)</u> , L. Caravatta, A. Augurio, A. Vinciguerra, M. Di Tommaso, D. Genovesi	
QuADRANT-a Multidisciplinary EU Project Aiming to Increase Uptake and Utilisation of Clinical Audit	PO - 1052
<u>N. Jornet (Spain)</u> , F. Giammarile, P. Stojan, M. Coffey, A. Brady, J. Clark, M. Hierath, D. Howlett	
cost-effectiveness of prophylactic cranial irradiation in stage III non-small cell lung cancer	PO - 1053
<u>W. Witlox (The Netherlands)</u> , B. Ramaekers, B. Lacas, C. Le Pechoux, A. Sun, S. Wang, C. Hu, M. Redman, V. van der Noort, N. Li, M. Guckenberger, H. van Tinteren, L. Hendriks, H. Groen, M. Joore, D. de Ruyscher	

Cancer community perceptions and knowledge of Radiation Therapy as a cancer treatment PO - 1054

C. Poole (Ireland), A. McKiernan, S. Gallagher, L. Marignol, M. Leech

Track: Interdisciplinary

Poster (digital): Other

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Atrial fibrillation: worldwide preliminary data of LINAC-based STAR prospective phase II trial PO - 1055

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Clinical and pathological prognostic factors in postoperative locally advanced head and neck cancer PO - 1117

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<i>M. Rodriguez Pla (Spain), D. Dualde Beltrán, A. Aliaga Chueca, M. Soler Rodríguez, R. García Gómez, E. Jordá Sorolla, M. Maroñas Martín, E. Ferrer Albiach</i>	
"Radiotherapy for Thymic Epithelial Tumors: What Is The Optimal Dose? A Systematic Review."	PO - 1240
<i>A. Angrisani (The Netherlands), R. Houben, F. Marcuse, M. Hochstenbag, J. Maessen, D. De Ruysscher, S. Peeters</i>	
Role of Prognostic Nutritional Index in Postoperative Radiotherapy for Non-Small Cell Lung Cancer	PO - 1241
<i>H. Ryu (Korea Republic of), C. Song, J.S. Kim, J.H. Jeon, S. Cho, K. Kim, S. Jheon, S.H. Kim, Y.J. Kim, J.S. Lee</i>	
Clinical, pathological and dosimetric factors influencing outcomes in NSCLC treated with SABR	PO - 1242
<i>M. Padden-Modi (United Kingdom), Y. Spivak, I. Gleeson, A. Robinson, K. Thippu Jayaprakash</i>	
SABR to primary tumor in oligo-m nsclc patients: good news for a new standard of care!	PO - 1243
<i>F. Arcidiacono (Italy), P. Anselmo, M. Casale, M. Italiani, S. Terenzi, A. Di Marzo, S. Fabiani, L. Draghini, M. Muti, E. Maranzano, F. Trippa</i>	
Stereotactic ablative radiotherapy in locally-advanced non-small-cell lung cancer: a phase ii trial	PO - 1244
<i>F. Arcidiacono (Italy), P. Anselmo, M. Casale, M. Italiani, A. Di Marzo, S. Terenzi, L. Draghini, M. Muti, S. Fabiani, E. Maranzano, F. Trippa</i>	
Radiomics features and functional radiosensitivity enhances prediction of acute pulmonary toxicity.	PO - 1245
<i>V. Bourbonne (France), F. Lucia, V. Jaouen, J. Bert, M. Rehn, M. Hatt, O. Pradier, D. Visvikis, U. Schick</i>	
Lung SBRT after pneumonectomy	PO - 1246
<i>A. Botticella (France), A. Levy, O. Mercier, G. Auzac, A. Traore-Diallo, M. Frelaut, P. Pradere, C. Caramella, I. Kasraoui, B. Besse, D. Planchard, C. Le Pechoux</i>	
Predictive factors for 90 day mortality in stage III NSCLC patients treated with chemo-radiotherapy	PO - 1247
<i>M. Lambrecht, A. Van de Velde (Belgium), S. Verfaillie, G. Defraene, P. Berkovic, C. Doms, J. Vansteenkiste, E. Wauters</i>	
Efficacy of Concurrent Neoadjuvant Chemoradiotherapy in Patients with LA-Non-small-Cell Lung Cancer	PO - 1248
<i>C. Greco (Italy), A. Iurato, M. Fiore, E. Onorati, E. Molfese, S. Gentile, P. Crucitti, E. Ippolito, S. Ramella</i>	
The impact of COVID-19 pandemic in the lung cancer treatment in a radiotherapy service	PO - 1249
<i>S. Costa (Portugal), A.M. Pires, T. Figueiredo, J. Cardia</i>	
Exploring published acute esophagitis models to support improved clinical management in thoracic RT	PO - 1250
<i>M. Thor (USA), E. Yorke, J.M. Moran, B. Daly, D.R. Gomez, J.O. Deasy</i>	

Perceived-health status in lung cancer survivors presenting long-term radiotherapy-related fatigue.	PO - 1251
<u>P. Blasco Valls (Spain)</u> , V.C. Hernández Uribe, A. Heredia Ciuró, L. López López, M. Granados Santiago, M.C. Valenza	
Treatment patterns and prognosis in inoperable stage III NSCLC treated with concurrent CRT +/- ICI	PO - 1252
<u>B. Flörsch (Germany)</u> , J. Taugner, L. Käsmann, S. Kenndoff, J. Guggenberger, A. Tufman, N. Reinmuth, T. Duell, C. Belka, C. Eze, F. Manapov	
Lung metastases from different primary tumors treated with Stereotactic ablative radiotherapy	PO - 1253
<u>J.V. Rojas Cordero (Spain)</u> , G. Sancho Pardo, K. Majercakova, P. Gallego Franco, P. Carrasco de Fez, A.M. Soto Cambres, J. Balart Serra, N. Farré Bernadó	
SBRT vs 3D-CRT FOR OLIGOMETASTATIC BONE NSCLC	PO - 1254
<u>G. Marvaso (Italy)</u> , E. Milovanova, R. Santamaria, S. Volpe, G. Corrao, M. Zaffaroni, M. Pepa, M.G. Vincini, O. D'Ecclesiis, S. Gandini, G. Piperno, A. Ferrari, R. Orecchia, B.A. Jereczek-Fossa	
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<u>D. Jornet (France)</u> , A. Botticella, B. Besse, P. Lavaud, S. Mussot, C. Roux, P. Pradère, D. Planchard, A. Levy, C. Le Péchoux	
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<u>A. Hope (Canada)</u> , C. McIntosh, M. Welch, S. Kandel, T. Purdie, T. Tadic, T. Patel	
Impact of modern RT in advanced NSCLC: an exploratory real-life investigation from Lombardy	PO - 1257
<u>G. Corrao (Italy)</u> , M. Franchi, G. Marvaso, M. Zaffaroni, M. Pepa, S. Volpe, M.G. Vincini, G. Piperno, A. Ferrari, B.A. Jereczek-Fossa	
Patient-reported symptoms in lung cancer survivors after radiotherapy treatment	PO - 1258
<u>A. Lazo Prados (Spain)</u> , J.C. Villén Villén, A. Heredia Ciuró, L. López López, M. Granados Santiago, M.C. Valenza	
Practical results of salvage treatment for regional recurrences after primary SABR for lung cancer	PO - 1259
<u>C. Lee (Korea Republic of)</u> , H.J. Kim, H. Wu, B.H. Kim	
Adaptive Radiotherapy in Lung Cancer – Is it Worthwhile??	PO - 1260
<u>J.P. Agarwal (India)</u> , A. Tibdewal, K. Prabhas, N. Mummudi, R. Mhatre, R. Kinthikar	
Is SBRT an effective treatment in metastatic lung cancer with oligoprogressive disease?	PO - 1261
<u>M. Aquilano (Italy)</u> , M. Loi, L. Livi, J. Nuytens	
Early response to chemotherapy as predictor of locoregional and distant failure in NSCLC	PO - 1262
<u>M. Tvilum (Denmark)</u> , M.M. Knap, C.M. Lutz, L. Hoffmann, A.A. Khalil, A. Haraldsen, M. Alber, C. Grau, H.H. Schmidt, M. Kandi, L.S. Mortensen, M.I. Holt, A. Appelt, D.S. Moeller	
Measurement of tumor hypoxia in patients with non-small cell lung cancer using PET with 18F-FAZA	PO - 1263
<u>A. DAS (Canada)</u> , A. Sun, B. Driscoll, D. Vines, J. Weiss, Z. Liu	
SCORE/SCORE2-OP cardiovascular risk and lung stereotactic body radiation therapy	PO - 1264

<u>M. Rodríguez Pla (Spain), A. Aliaga Chueca, M. Soler Rodríguez, R. García Gómez, E. Jordá Sorolla, M. Maroñas Martín, D. Dualde Beltrán, E. Ferrer Albiach</u>	
Title: DLCO decrease in a prospective cohort of VMAT-treated lung cancer patients (NCT03931356)	PO - 1265
<u>R. Martin (France), B. Vincent, P. Olivier, G. Marie-Agnès, S. Ulricke, L. François</u>	
Evaluation of acute cardiac toxicity in locally advanced lung cancer patients	PO - 1266
<u>M. Cerrolaza (Spain), M.D.M. Puertas, C. Escuin, V. Alonso, D. De las Cuevas, A. Lanuza, B. García, E. Moreno, M. Tejedor</u>	
Pulmonary toxicities after chemoradiation followed by durvalumab for stage III NSCLC: a real setting	PO - 1267
<u>C. Nicolet (France), N. Briot, C. Amoyal, C. Chevalier, C. Jeandidier, C. Kaderbhai, P. Foucher, V. Westeel, E. Martin</u>	
SABR in la-nsclc elderly patients unfit to concurrent ChT-RT: few fractions for a great outcome!	PO - 1268
<u>F. Arcidiacono (Italy), P. Anselmo, M. Casale, M. Italiani, A. Di Marzo, S. Terenzi, S. Fabiani, L. Draghini, M. Muti, E. Maranzano, F. Trippa</u>	
SABR in locally-advanced non-small-cell lung cancer elderly patients: little palliation or big cure?	PO - 1269
<u>F. ARCIDIACONO (Italy), P. ANSELMO, M. CASALE, M. ITALIANI, S. TERENCE, A. DI MARZO, S. FABIANI, L. DRAGHINI, M. MUTI, F. TRIPPA, E. MARANZANO</u>	
Reduction of the acute pulmonary toxicity with a VMAT adaptive radiotherapy in lung cancer patients	PO - 1270
<u>V. Bourbonne (France), F. Lucia, V. Jaouen, J. Bert, M. Rehn, O. Pradier, D. Visvikis, U. Schick</u>	
Redetermination Of Pd-L1 Expression After Chemo-Radiation In Locally Advanced Pd-L1 Negative Nsclc (Recal Trial)	PO - 1271
<u>S. Cozzi (Italy), G. Timon, E. Tagliavini, R. Piro, E. Borghi, M. Tiseo, C. Iotti, P. ciammella</u>	
SBRT for oligoprogressive/oligorecurrent SCLC: is it worth it?	PO - 1272
<u>A. Levy (France), A. Botticella, E. Cohen-Jonathan Moyal, C. Massabeau, C. Le Péchoux, J. Khalifa</u>	
Identifying the target: An audit of radiology reports for appropriate use of slice reference numbers	PO - 1273
<u>R. Wooder (United Kingdom), N. Bayman, C. Chan, J. Coote, C. Faivre-Finn, M. Harris, S. O'Hare, L. Pemberton, A. Salem, H. Sheikh, M. Sumner, S. Tenant, D. Woolf</u>	
Is a once-daily RT dose optimal for patients with underlying lung disease in limited-stage SCLC?	PO - 1274
<u>B.H. Kim (Korea Republic of), J. Chung, S. Kim, H. Wu, H.J. Kim</u>	
Acute toxicity associated to hypofractionation vs. standard fractionation in lung cancer treatment	PO - 1275
<u>M.M. Teja Ubach (Spain), M. González Cantero, M.I. Garrido Botella, M. Rodríguez Roldán, Á. Manso de Lema, R. Matute Martín, I. Rodríguez Rodríguez, E. González del Portillo, R. Morera López</u>	
A review into the radiological features predicting local recurrence post-SABR in patients with NSCLC	PO - 1276
<u>K. LEE (Australia), T. Le, R. Lim, G. Hanna, H. Gee, S. Vinod, S. Dammak, D. Palma, A. Ong, R. Yeghiaian-Alvandi, J. Buck, E. Hau</u>	

Re-irradiation in NSCLC High-dose RT: Control, Survival and Toxicity. Single institution experience	PO - 1277
<u>J. Germain (Spain)</u> , O. Prato, I. Solero, M. Borrás, A. Ciafre, N. Tejedor, J. Gimeno, C. Francisco	
Time to local failure and prognosis in lung cancer treated with stereotactic body radiotherapy	PO - 1278
<u>Y. Hamamoto (Japan)</u> , H. Kanzaki, K. Nagasaki, K. Makita	
PFS and recurrence patterns after CCRT with durvalumab for stage III and recurrent NSCLC	PO - 1279
<u>N. Kishi (Japan)</u> , Y. Matsuo, T. Shintani, M. Ogura, T. Mitsuyoshi, N. Araki, K. Fujii, S. Okumura, K. Nakamatsu, T. Kishi, T. Atsuta, T. Sakamoto, S. Otsu, T. Katagiri, M. Narabayashi, S. Fujishiro, Y. Iizuka, H. Ozasa, T. Mizowaki	
Clinical benefits of proton therapy in thymic epithelial tumors using a model-based approach	PO - 1280
<u>S. Peeters (The Netherlands)</u> , E. Kneepkens, F. Marcuse, M. Hochstenbag, J. Maessen, D. De Ruyscher	
Hypofractionation in locally advanced NSCLC: outcome, toxicity and predictive factors	PO - 1281
<u>D. Franceschini (Italy)</u> , A. Marzo, L. Lo Faro, B. Marini, L. Di Cristina, C. Franzese, C. Galdieri, M. Massaro, R. Spoto, L. Dominici, M. Scorsetti	

Track: Clinical

Poster (digital): Upper GI

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Local control still a challenge in post-SBRT advanced Pancreatic cancer - A single institute series	PO - 1282
<u>R. Krishnatry (India)</u> , A. ANUP, A. Ramaswamy, V. Chaudhari, M. Bhandare, S. Srinivas, P. Bhargava, V. OTSWAL, A. Baheti, S. Shrikhande, R. Engineer	
Stereotactic Body Radiotherapy (SBRT) for liver tumors – An analysis of Dose volume effects	PO - 1283
<u>J. Selvarajan (India)</u> , A.K. Anand, D. Mittal, A.K. Bansal, N. Kumawat	
Factors predicting benefits of proton therapy in liver tumors of ≤5cm based on the hepatic toxicity	PO - 1284
<u>Y. Uchinami (Japan)</u> , N. Katoh, R. Suzuki, T. Kanehira, S. Takao, H. Taguchi, K. Kobashi, I. Yokota, H. Aoyama	
Clinical impact of carbon ion radiotherapy for hepatocellular carcinoma with Child-Pugh B cirrhosis	PO - 1285
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Skeletal muscle measured at T12 is a prognostic biomarker in oesophageal cancer patients	PO - 1286
<u>D. McSweeney (United Kingdom)</u> , G. Radhakrishna, A. Green, P.A. Bromiley, M. van Herk, A. McWilliam	
Fdg Pet/Ct As Predictive And Prognostic Factor In Esophageal Cancer Treated With Multimodal Therapy	PO - 1287
<u>E. Ferrara (Italy)</u> , E. Puta, R. Guaschino, L. Turri, P. Franco, S. Gentili, G.M. Sacchetti, M. Brambilla, M. Krengli	
Dose-Painting Sbrt On Tumor-Vessel And Duodenal Interface For Pancreatic Cancer: Dosimetric Analysis	PO - 1288

L. Caravatta (Italy), M. Lucarelli, A. Augurio, C. Rosa, M. Trighani, D. Genovesi

Toxicity and treatment outcomes in dose escalated radiotherapy for upper third oesophageal carcinoma PO - 1289

M.M.N. Win (United Kingdom), C. Barker, L. Bhatt, H. Sheikh, G. Radhakrishna

Does setup and internal margin differ on verification modality and location in carcinoma oesophagus? PO - 1290

N. Aggarwal (India), S. Misra, S. Singh, K.J.M. Das, S.K.S. Kumar, S. Kumar

Acute toxicity and clinical outcome in carcinoma middle oesophagus treated with definitive CRTT PO - 1291

S. Jalota (India), R. Khurana, A.K. Gandhi, M. Rastogi, R. Hadi, S.P. Mishra, A.K. Srivastava, A. Bharati

Stereotactic radiotherapy after chemotherapy in patients with locally advanced pancreatic cancer PO - 1292

C. LE ROY (France), R. Barbe, R. Sun, P. Burtin, M. Gelli, E. Deutsch, J. Durand-Labrunie

A dosimetric evaluation of 4D-CT vs 3D-CT in mid and lower third upper GI Patients PO - 1293

B. Stewart-Thomson (United Kingdom)

clinical prognostic factors for esophageal cancer treated with definitive chemo-radiotherapy PO - 1294

S. Favareto, C. Sousa, P. Pinto, H. Ramos, E. Neto, C. Abrahao, M. Chen, A.C. Pellizzon, M.L. Silva, G. Gondim, D. Castro (Brazil), R. Fogaroli

Prognostic role of ALBI-T in locoregional advanced hepatocellular carcinoma (BCLC-C) undergoing SBRT PO - 1295

D. Sharma (India), D. Thapar, R. Kamal, H.P. Yadav

Hemostatic Radiotherapy for Gastric Cancer: Relationship Between MR Images and Tumor Markers PO - 1296

O. Tanaka (Japan), N. Yagi, M. Tawada, T. Taniguchi, K. Adachi, S. Nakaya, C. Makita, M. Matsuo

Neoadjuvant chemoradiotherapy for esophageal cancer – a single institution experience PO - 1297

A. Secerov Ermenc (Slovenia), F. Anderluh, A. Jeromen Peressutti, V. Velenik, I. Oblak, P. Korosec, J. But Hadzic, N. Pulko

Hematological & Biochemical Changes During And Post Sbrr For Hcc : An Institutional Study PO - 1298

S. GUPTA (India), H. Yadav, S. Sarin, A. Gupta, R. Sahansi, R. Kamal, D. Thaper

Charlson Comorbidity Index for patients selection in definitive chemoradiation for anal carcinoma PO - 1299

S. Lucidi (Italy), A. Romei, N. Bertini, M. Loi, P. Bonomo, I. Desideri, V. Di Cataldo, B. Detti, M. Casati, M. Zani, C. Arilli, V. Salvestrini, M. Roghi, M. Aquilano, M. Ganovelli, M. Banini, M. Valzano, C. Bellini, I. Meattini, L. Livi

Stereotactic body radiotherapy in the treatment of Pancreatic carcinoma PO - 1300

A. Gawish (Germany), M. Walke, S. El-Arayed, T.B. Brunner

The efficacy of the stereotactic body radiation in the management of the cholangiocarcinoma PO - 1301

A. Gawish (Germany), B. Röllich, S. Senz, T.B. Brunner

Toxicity of the gallbladder with stereotactic body radiotherapy for liver tumors <i>A. Gawish (Germany), M. Walke, T. Brunner</i>	PO - 1302
Prospective phase 2 study of induction FOLFIRINOX followed by chemoradiation in LA-Pancreatic Cancer <i>G.M. Petrianni (Italy), M. Fiore, P. Trecca, G. D'Ercole, L.E. Trodella, C. Greco, E. Ippolito, D. Caputo, R. Coppola, S. Ramella</i>	PO - 1303
Impact of blood parameters and normal tissue dose on overall survival in esophageal cancer patients <i>E. Troost (Germany), L. Häberlein, R. Bütof, C. Jentsch, F. Lohaus, S. Makocki, C. Valentini, S. Löck</i>	PO - 1304
Muscle Loss After Stereotactic Body Radiotherapy Predicts Worse Survival in Hepatocellular Carcinoma <i>J. Yang (Taiwan), C. Lo, M. Lee, C. Lin, P. Shen, Y. Dai, Y. Wang, W. Huang</i>	PO - 1305
Impacts and consequences of spleen irradiation after adjuvant chemoradiation for stomach cancer <i>S.F. Lee (Hong Kong (SAR) China), P.L. Yip, A. Wong, F. Ng, V. Koh, L.C. Wong, F.A.S. Lee, H. Mamon</i>	PO - 1306
High-dose stereotactic ablative body radiotherapy for locally advanced pancreatic cancer <i>H.I. Lee (Korea Republic of), H. Kang, E.K. Chie</i>	PO - 1307
Feasibility of endoscopic fiducial marker implantation in the stomach for use in image-guided RT <i>M. Bleeker (The Netherlands), R. Pouw, A. Bel, J. Sonke, M. Hulshof, A. van der Horst</i>	PO - 1308
Safety and efficacy of neoadjuvant stereotactic ablative radiotherapy (SABR) in pancreatic cancer <i>J.Y. Song, E.K. Chie, Y. Kim, J.K. Ryu, S.H. Lee, W.H. Paik, I.R. Cho, H. Kim, J. Jang, H. Kang (Korea Republic of)</i>	PO - 1309
Frail and Elderly Patients with Oesophageal Cancer: the challenge of hypofractionated radiotherapy. <i>L. Deantonio (Switzerland), S. Leva, A. Richetti, M. Valli</i>	PO - 1310

Track: Clinical

Poster (digital): Lower GI

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Rectal cancer with LPLN - T and node characteristics analysis: impact of SIB on oncological outcomes <i>E. Meldolesi (Italy), R. Giannini, G. Chiloiro, B. Corvari, S. Manfrida, V. De Luca, A. Romano, N. Dinapoli, V. Valentini, M.A. Gambacorta</i>	PO - 1311
CoDMI algorithm and survival analysis: first clinical application in rectal cancer <i>F. De Felice (Italy), L. Mazzoni, D. Musio, V. Tombolini, F. Moriconi</i>	PO - 1312
Laparoscopic uterus transposition to preserve fertility in young patients with pelvic radiation <i>S. Marnitz (Germany), M. Püsken, A. Plaikner, R. Fouassi, A.S. Bereuter, C. Köhler</i>	PO - 1313
Clinical Outcomes In Anal Cancer. Impact Of Radiation Technic <i>M. Valero (Spain), M. Valero Perena, M. Martín Martín, L. Pelari-Mici, V. Duque Santana, M.E. Centelles Hidalgo, F.L. Mesa López, S. Sancho García</i>	PO - 1314

CT radiomic predictors of local relapse after SBRT for lung oligometastases from colorectal cancer	PO - 1315
<u>M. Mori (Italy)</u> , R. Tummineri, S. Baroni, M. Olivieri, S. Broggi, C.L. Deantoni, P. Mangili, A. Fodor, A. Del Vecchio, C.A. Fiorino, N.G. Di Muzio	
Low regrowth after cCR in non-operative TNT management of locally advanced rectal cancer patients	PO - 1316
<u>U. Selek (Turkey)</u> , F. Selçukbiricik, E. Ozoran, E. Balik, Y. Bolukbasi, N. Molinas Mandel, D. Bugra	
Chemoradiotherapy-treated anal cancer patients radiomics-based stratification to predict DSS.	PO - 1317
<u>V. De Luca (Italy)</u> , L. Boldrini, S. Manfredi, S. Reina, D. Carano, R. Gatta, C. Votta, L. Tagliaferri, F. Marazzi, S. Mariani, B. Barbaro, V. Valentini, M.A. Gambacorta	
MRI based radiomics as imaging biomarker for response to Neoadjuvant Chemoradiation in Rectal Cancer	PO - 1318
<u>A. Puppawar (India)</u> , R. Engineer, S. Kumar, J.S. Goda, P. Nayak, J. Agarwal	
Neoadjuvant RT dose escalation for LARC in the new era of radiotherapy; a review of literature	PO - 1319
<u>D. Delishaj (Italy)</u> , S. Ursino, I.C. Fumagalli, A. Cristaudo, A. Cocchi, A. Stefanelli, C.P. Soatti	
Pelvic chemoradiation after chemotherapy in patients with advanced anal squamous cell carcinoma	PO - 1320
<u>J. Boustani (France)</u> , A. Grave, B. De Bari, P. Mandy, F. Boulbair, S. Benhmida, M. Noirclerc, P. Monasterolo, S. Kim, C. Borg	
Prognostic factors for anal cancer treated with conformal radiotherapy – a systematic review	PO - 1321
<u>S. Theophanous (United Kingdom)</u> , R. Samuel, J. Lilley, A. Henry, D. Sebag-Montefiore, A. Gilbert, A. Appelt	
NAR Score validation in TNT (Total Neoadjuvant treatment) for locally advanced rectal cancer	PO - 1322
<u>I.D. Perrot Rosenberg (Chile)</u> , J.A. Solís Campos, G. Lazcano Alvarez, G. Veillon Contreras, B. Tudela Staub, J. Olivares Gonzalez	
Narrowing the difference in dose delivery for IOERT and IOBT for rectal cancer	PO - 1323
<u>A. Verrijssen (The Netherlands)</u> , C. Huibregtse Bimmel-Nagel, J. Cnossen, J. Theuws, H. Peulen, H. van den Berg, D. Rijkaart, E. Voogt, P. Burger, H. Rutten, W. Dries	
Accelerated hypofractionation with SIB-IMRT in Anal Cancer : assessment of efficacy and toxicity	PO - 1324
<u>S. Lucidi (Italy)</u> , N. Bertini, M. Loi, P. Bonomo, G. Francolini, D. Greto, G. Simontacchi, A. Galardi, L. Marrazzo, A. Allegra, B. Guerrieri, E. Scoccimarro, M. Mariotti, M.G. Carnevale, G. Stocchi, L.P. Ciccone, A. Peruzzi, V. Lorenzetti, C. Talamonti, S. Pallotta, M. Mangoni, L. Livi	
Automated rectal tumor segmentation with inter-observer variability-based uncertainty estimates	PO - 1325
<u>L. Weishaupt (Canada)</u> , T. Vuong, A. Thibodeau-Antonacci, A. Garant, K. Singh, C. Miller, A. Martin, F. Schmitt-Ulms, S.A. Enger	
PET/CT parameters to predict survival and recurrence in patients with locally advanced anal cancer	PO - 1326
<u>M. PERAZZI (France)</u> , J. Castelli, R. De Crevoisier, A. Lievre, X. Palard-Novello, A. Devillers, V. Guimas, R. Le Scodan, K. Gnep	

Fractal-based radiomic approach to tailor the chemotherapy treatment in rectal cancer PO - 1327

G. Chiloio (Italy), C. Di Dio, D. Cusumano, F. Catucci, L. Boldrini, A. Romano, E. Meldolesi, F. Marazzi, B. Corvari, B. Barbaro, R. Manfredi, V. Valentini, M.A. Gambacorta

Prospective assesment of quality of life before, during and after CRT in patients with anal cancer PO - 1328

F. Fuchs (Germany), M. Hoffmann, M. Rottler, G. Goesmann, F. Roeder, S. Gerum, M. Niyazi, C. Belka, F. Walter

Predictive factors for pathologic good response after the neoadjuvant CRT of rectal cancer PO - 1329

Y. Lin (Taiwan), J. Lin, T. Chang, T. Chou, L. Hung, C. Huang

Track: Clinical

Poster (digital): Gynaecological

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Radical chemoradiotherapy for cervical cancer: current practice and avenues for future investment PO - 1330

O. Houlihan (United Kingdom), M. Byrne, G. Workman, S. Esteve, U. McGivern, A. Drake, E. Baird

Uncertainty of Inter-application D2cc locations Represented in DIR of 4-fraction HDR IGABT of Cervix PO - 1331

T. Prasartseree (Thailand), T. Jaikuna, P. Dankulchai

Early menopause induced by oncological treatments in breast and cervical cancer PO - 1332

R. Ching-López (Spain), P. Vargas, S. Rodríguez, L. Cámara, P. Galván, A.M. Ruiz, M. Zurita

Hypofractionated Radiochemotherapy In Cervical Cancer: A Preliminar Experience PO - 1333

B. SANTO (Italy), D. Russo, M.C. Barba, E. Cavallera, E. Ciurlia, P. De Franco, G. Di Paola, A. Leone, A. Papaleo, D. Musio

Atlas Based Autosegmentation Of Organs At Risk In Gynaecological Cancer PO - 1334

P. Caricato (Italy), S. Trivellato, E. Bonetto, V. Faccenda, D. Panizza, S. Arcangeli, S. Meregalli

Clinical outcomes of uterine body cancers treated in a tertiary cancer centre in South India PO - 1335

M. K (India), J. Pandjatcharam, L. Chaturvedula, P. Sagar

Clinical outcome of carcinoma endometrium and impact of histopathological review on management PO - 1336

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<i>R. Lucchini (Italy), D. Panizza, R.R. Colciago, P. Caricato, V. Faccenda, S. Arcangeli</i>	
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IMRT of the prostate following focal treatment: Analysis of Toxicity. PO - 1426

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Track: Clinical

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V. Soyfer (Israel), R. Kollender, A. Sternheim, Y. Gortzak, S. Dadia, A. Doron, I. Novikov, Y. Kollender, O. Merimsky

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X. Chen-Zhao (Spain), Á. Montero, J. de las Heras, B. Álvarez, I. Barrientos, A. Prado, R. Ciérvide, M. López, M. García-Aranda, E. Ortiz, M. Gutiérrez, E. Sánchez, O. Hernando, M.Á. De la Casa, J. Valero, R. Alonso, P. Fernández-Letón, C. Rubio

First results of the Leiden-Holland Proton Therapy Center collaboration for uveal melanoma treatment PO - 1429

N. Horeweg (The Netherlands), E. Verbeek, K. Vu, M. Marinkovic, J. Bleeker, M. Rodrigues, Y. Klaver, Y. Klaver, J. Beenakker, G. Luyten, C. Rasch

A Retrospective study of outcomes with stereotactic radiosurgery for melanoma brain metastasis. PO - 1430

M. Burke (Ireland), G. Rangaswamy, M. Dunne, J. Armstrong, C. Faul, D. Fitzpatrick

Integrated therapies for soft tissue sarcomas: a single institution experience from Italy using hyperthermia in association with radiotherapy and chemotherapy. PO - 1431

P. trecca (Italy), M. Fiore, G. D'Ercole, G.M. Petrianni, C. Greco, E. Ippolito, L. Marinelli, S. Valeri, B. Vincenzi, S. Ramella

Chronic pain after postoperative radiation therapy in extremity sarcoma patients PO - 1432

N. Aggerholm-Pedersen (Denmark), B. Elisabeth Engelmänn, I. Sojat Tarp, S. Mohamed Ismail Mohamed, F. Sundbye, A. Safwat

Preoperative chemoradiotherapy in advanced soft tissue sarcomas. PO - 1433

A.M. Burqueño Caballero (Spain), Ó. Muñoz Muñoz, J. Peinado Serrano, I. Rincón Pérez

Innovative radiotherapy technique for the treatment of in-transit or metastatic lower limb melanoma PO - 1434

J. velasco jiménez (Spain), J. Velasco Jiménez, M. López Valcárcel, P. Sánchez Rubio, M. Hernández Miguel, A. Valcárcel Díaz, L. Paisan Palacio, S. Santana Jimenez, B. Gil Haro, O. Engel, C.A. Regueiro Otero, J. Romero Fernández

Risk stratification based on whole body tumor burden can refine the role of combining RT and ICIs PO - 1435

J. Kim (Korea Republic of), J.S. Kim, H. Ko, T.H. Kim, S.H. Choi, W. Sung, S.J. Shin, J.S. Chang

Radical radiotherapy for non-melanoma skin cancer: orthovoltage vs. electronic brachytherapy PO - 1436

M. Cerrolaza (Spain), P. Sanagustin, V. Navarro, C. Escuin, A. Lanuza, S. Flamarique, A. Campos, M. Lanzuela, R. Ibañez, M. Tejedor

Clinical outcomes in adult primitive neuro-ectodermal tumor of kidney: A single institute experience PO - 1437

D.V.S. Praveen (India), G. Shyam, V. Pareek, S. Shishak, M. Barthwal, S. Pandey, S. Nirala, S. Sanyal, J. Pattanaik, S.K. Samala, M.S. Tanwar, S. Mandal, A. A, D. Bora, A. Ravi, V. Ghosh, A.P. Solanki, R. Sisodiya, E. Dhamija, S. Rastogi, A. Barwad, D.N. Sharma, R. Pandey

Adjuvant radiotherapy after salvage surgery for recurrent nodal melanoma PO - 1438

L.H. Holtkamp (Australia), S.N. Lo, J.F. Thompson, O.E. Nieweg, A.M. Hong

Track: Clinical

Poster (digital): Paediatric tumours

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Renal toxicity in paediatric patients with high-risk neuroblastoma treated with radiotherapy PO - 1439

E. Gomis Selles (Spain), A.M. Burgueño Caballero, O. Muñoz Muñoz, B.D. Delgado Leon, P. Cabrera Roldan

Track: Clinical

Poster (digital): Mixed sites/palliation

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Multi-institutional review of SBRT for adrenal metastasis: Turkish Radiation Oncology Society Study PO - 1440

A. Elmali (Turkey), B. Akkus Yildirim, M. Cengiz, S. Yuce Sari, H.C. Onal, T. Berber, A. Arslantas Erken, T. Zoto Mustafayev, B. Atalar, I. Unal, N. Kaydihan, F. Oner Dincbas

Remote monitoring during radiotherapy – recruitment for an eHealth study under the Covid19 pandemic PO - 1441

H. Pappot, C. Holländer-Mieritz (Denmark), E.B. Steen-Olsen, A. Green, C.A. Kristensen, I.R. Vogelius

Low-dose RT for benign musculoskeletal disorders: clap your hands, stomp your feet, return to be fit! PO - 1442

B. Álvarez (Spain), Á. Montero, R.M. Alonso, J.J. Valero, R. Ciérvide, M. López, L. Alonso, E. Sánchez, M. García-Aranda, X. Chen, O. Hernando, C. Rubio

Dosimetric evaluation of esophagus segmentation for esophagus-sparing palliative spine irradiation. PO - 1443

A. Mann Nielsen (Denmark), C. P. Behrens, M. Riise Pedersen, L. Möller Andersson, M. Hiul Suppli, I. Vogelius, P. Sibolt, G. Persson

The efficacy of keloid excision and adjuvant CT-based conformal electron beam radiation therapy PO - 1444

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Radiotherapy - a safe and successful treatment for plantar fasciitis. PO - 1445

T. Latusek (Poland), D. Gabrys, G. Wozniak, D. Graupner, A. Krzywón, A.J. Cortez

PD-L1 and histopathological subtype have no impact on survival after whole brain irradiation PO - 1446

F. Sundbye, K. Skougaard, M. Pøhl, A. Mann Nielsen, G. Persson (Denmark)

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<u>L. Gasparini (Italy)</u> , F.C. Di Guglielmo, M. Borgia, M. Nuzzo, L.A. Ursini, A. Di Pilla, L. Caravatta, D. Genovesi	
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<u>L. Caravatta (Italy)</u> , L. Gasparini, M. Taraborrelli, M. Borgia, M. Candeloro, I. Bottone, E. Porreca, D. Genovesi	
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Factors influencing hyperthermia in vivo thermal dosimetry, a systematic review	PO - 1465
<u>C. Seabra (The Netherlands)</u> , S. Curto, G.C. van Rhoon	
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<u>E.M. AMBROA REY (Spain)</u> , T. Valdivielso, J. García-Miguel, M. Lizondo, T. Ramírez, Á. Infestas, D. Navarro, Á. Lorenzo, M. Parcerisa, R. Pujol, Ú. Gallardo, A. Peralta, A. López, D. Amat, G. Frontera, M. Colomer	
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Y. Ishkinin (Kazakhstan), R. Ibrayev, R. Raimbekov, K. Rayimzhanov, T. Antropova, K. Datbayev, R. Akhunova

Pain as the evaluation criterion for bone metastasis radiosensitivity. PO - 1471

N. Bychkova (Russian Federation), E. Khmelevsky

The Dosimetric Analysis & Clinical Outcomes of Contiguous Vertebrae SBRT in Oligometastatic Patients PO - 1472

O.C. Guler (Turkey), E. Oymak, C. Onal

Effectiveness and tolerability of SARS-CoV-2 vaccination in patients undergoing radiotherapy PO - 1473

H. Geinitz (Austria), E. Silberberger, K. Spiegl, J. Feichtinger, C. Track, E. Weis, C. Venhoda, R. Huppert, E. Bräutigam, B. Aschacher, L. Kocik, N. Karasek, B. Fischerlehner, G. Gruber, D.V. Bihary, M. Erdei, K. Kirchner, G. Zauner-Barbor, M. Ecker, B. Spindelbaker-Renner, R. Adler, P. Thöne, B. Dieplinger

Lower FDG PET/CT SUV max shows better response to SBRT of adrenals in oligometastatic disease PO - 1474

K. Zhelev (Bulgaria), D. Katsarov, N. Velikova, Z. Zahariev, I. Mihaylova, N. Nedev, R. Krasteva, R. Hadgiev, N. Conev, I. Donev

Definitions and treatment of oligometastatic esophagogastric cancer according to tumor boards PO - 1475

Withdrawn

Early antiarrhythmic efficacy of noninvasive cardiac radioablation for ventricular tachycardia PO - 1476

W.I. Chang (Korea Republic of), H. Jo, M. Cha, J.H. Chang

Track: Physics

Poster (digital): Inter-fraction motion management and offline adaptive radiotherapy

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Evaluation of two generic algorithms for CBCT based dose calculation PO - 1477

R. Thing (Denmark), R. Nilsson, S. Andersson, M. Berg, M. Lund

Convolutional recurrent neural networks for future anatomy prediction PO - 1478

D. Page (United Kingdom), A. McWilliam, R. Chuter, A. Green

SGRT setup patient accuracy in breast cancer patients compared to two different IGRT workflows PO - 1479

C. Anson (Spain), N. Jornet, N. Ventosa, S. Bermejo, J. Pérez-Alija, P. Gallego, A. Latorre-Musoll, N. García, H. Vivancos, M. Barceló, A. Ruiz, F. Leo, P. Carrasco

Heart dose variability in RT of left breast cancer patients treated in deep inspiration breath hold PO - 1480

G. Johansson (Sweden), E. Fredén, J. Knutsson, M. Olin, L. Dagertun, A. Siegbahn

Radiological measurements to predict dose variation due to inter-fraction variability in H&N PO - 1481

F. Catucci (Italy), D. Cusumano, S. Menna, A. D'Aviero, C. Di Dio, A. Re, M. Iezzi, D. Piccari, F. Quaranta, A. Boschetti, M. Marras, D. Piro, C. Votta, E. Sanna, C. Flore, G.C. Mattiucci, V. Valentini

Estimation of inter-fraction motion of pelvic organs in SBRT treatments of prostate oligometastases PO - 1482

- M. Pepa (Italy), G. Corrao, G. Morigi, F.M. La Fauci, M. Zaffaroni, M.G. Vincini, M. Augugliaro, G.C. Mazzola, S. Comi, F.A. Mistretta, S. Luzzago, S. Gandini, G. Musi, G. Petralia, O. De Cobelli, R. Orecchia, F. Cattani, G. Marvaso, B.A. Jereczek-Fossa
- A predictive model to quantify the dosimetric impact of inter-fraction variability in breast cancer PO - 1483
- M. Iezzi, D. Cusumano (Italy), D. Piccari, S. Menna, F. Catucci, A. D'Aviero, A. Re, C. Di Dio, F. Quaranta, A. Boschetti, M. Marras, D. Piro, C. Votta, E. Sanna, C. Flore, G.C. Mattiucci, V. Valentini
- Accuracy of inter-fraction patient positioning in Ocular Proton Therapy (OPT). PO - 1484
- M. Hol (The Netherlands), M. Rodrigues, Y. Klaver, K. Spruijt, J. Kouwenberg, E. Astreinidou, C. Rasch
- Contour guided deformable image registration for adaptive radiotherapy PO - 1485
- L. Bosma (The Netherlands), M. Ries, B. Denis de Senneville, B. Raaymakers, C. Zachiu
- Refinement of treatment setup accuracy using stereotactic system for paediatric immobilization PO - 1486
- S. Velázquez (Spain), J. León-García, F. Derecho-Torres, D. Muñoz-Carmona, F. Luis-Simón
- Inter-fraction prostate bed motion during salvage radiation therapy within the PERYTON-trial PO - 1487
- F. Staal (The Netherlands), C.L. Brouwer, J. Janssen, S. Krishnapillai, J.A. Langendijk, J.F. Verzijlbergen, I.J. de Jong, R.J. Smeenk
- Brachytherapy plan reproducibility in gynecological cancer patients PO - 1488
- E. Placidi (Italy), L. Breschi, G. Meffe, V. Lancellotta, F. Greco, C. Casà, G. Stimato, B. Fionda, S. Teodoli, M.A. Gambacorta, L. Tagliaferri, L. Indovina
- Residual setup error of the pelvic lymph nodes after prostate based IGRT of prostate cancer patients PO - 1489
- E. Fredén (Sweden), J. Knutsson, G. Johansson
- SBRT Patient Specific QA: Adaptive dose accumulation from deformable CBCT image registration PO - 1490
- S.B. Vestergaard (Denmark), M.S. Nielsen, R. Kjeldsen
- Dosimetric impact of bladder changes in prostate VMAT based on dose deformable image registration PO - 1491
- A. Gonzalez Pose (Spain), B. Vázquez Barreiro, J.S. Vázquez Rodríguez, B. Andrade Álvarez, A. Teijeiro García, A.B. Blanco Ledo, M. Riveira Martin, R. Dorado Dorado, A. López Medina, M. Salgado Fernández
- Characterising anatomical changes of head and neck cancer patients during radiotherapy treatment PO - 1492
- P. Nikou (United Kingdom), A. Nisbet, A. Thompson, S. Gulliford, J. McClelland
- Comparison of CBCT Hounsfield Unit to density conversion methods for treatment plan evaluation PO - 1493
- B. Vanderstraeten (Belgium), N. Johnston, J. Ketelaars

Track: Physics

Poster (digital): Applications of ion beam treatment planning

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A-priori beam energy selection for heavy ion arc therapy <i>L. Volz (Germany), M. Durante, C. Graeff</i>	PO - 1494
Protons versus photons for oligometastatic prostate cancer: a planning comparison <i>K. Rans (Belgium), G. De Meerleer, C. Berghen, K. Poels</i>	PO - 1495
Comparing standard proton planning strategy for sinonasal cancer with pseudo-arc multifield approach <i>R. Argota Perez (Denmark), U. Elstroem, K. Jensen, S. Korreman</i>	PO - 1496
Identifying an optimal proton planning strategy for varying bowel density in complex neuroblastomas <i>A. Toltz (United Kingdom), S. Court, V. Rompokos, J. Gains, M. Gaze, A. Poynter, Y. Chang, P. Lim</i>	PO - 1497
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Pediatric proton whole lung irradiation <i>S. Flampouri (USA), J. Janopaul-Naylor, R. Slopesma, N. Esiashvili, B. Eaton</i>	PO - 1499
Robustness evaluation of ultra hypo-fractionated IMPT for PCa on target and OAR dose-constraints <i>S. Feng (Netherlands Antilles), C. Brouwer, E. Korevaar, N. Vapiwala, K. Wang, C. Deville, J. Langendijk, S. Both, S. Aluwini</i>	PO - 1500
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The clinical benefit of range uncertainty reduction in robust optimization for proton therapy <i>I. Sojat Tarp (Denmark), V.T. Taasti, M.F. Jensen, A. Vestergaard, K. Jensen</i>	PO - 1502
MRI-based Synthetic CT images for IMPT Treatment Planning of Nasopharyngeal Carcinoma Patients <i>S. Chen (USA), Y. Peng, Y. Liu, C. Zhao, X. Deng, A. Qin, D. Yan, C. Stevens, R. Deraniyagala, X. Ding</i>	PO - 1503
Comparison of single and dual-energy CT based proton treatment planning for neuro patients <i>T. van der Maas (The Netherlands), V.T. Taasti, I. Rinaldi, F. Verhaegen, G. Fonseca, W. van Elmpt</i>	PO - 1504
Feasibility of acute hematologic toxicity model-based patient selection for proton beam therapy <i>P. Liu (China), X. Cao, X. Gao, S. Shang, J. Liu, Z. Wang, X. Ding</i>	PO - 1505
Healthy tissue sparing in proton therapy of lung tumors using statistically sound robust planning <i>V. Badiu (Belgium), K. Souris, G. Buti, E. Borderías Villarroel, M. Lambrecht, E. Sterpin</i>	PO - 1506
Dose comparison of clinical robust intensity modulated proton therapy plans for testicular seminoma <i>H.S. Rønde (Denmark), C. Kronborg, M. Høyer, A.B. Als, M. Agerbæk, J. Lauritsen, P.M. Petersen, L. Dysager, J.F. Kallehauge</i>	PO - 1507

Bone versus soft tissue setup in proton therapy for patients with oesophageal cancer PO - 1508

M. Shamshad (Denmark), D. Sloth Møller, H. Mortensen, M. Lykkegaard Ehmsen, M. Fuglsang Jensen, L. Hoffmann

Proton therapy for nasopharyngeal cancer: dosimetric and NTCP analysis supporting clinical decision PO - 1509

A. Vai (Italy), S. Molinelli, E. Rossi, N.A. Iacovelli, G. Magro, A. Cavallo, E. Pignoli, T. Rancati, A. Mirandola, R. Ingargiola, B. Vischioni, M. Bonora, S. Ronchi, M. Ciocca, E. Orlandi

Track: Physics

Poster (digital): Applications of photon and electron treatment planning

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A robust method for determining backlash of a multileaf collimator PO - 1510

A. Kulmala, A. Rintala (Finland), L. Koivula, V. Petäjä, M. Tenhunen

Simplified models for radiotherapy-induced lung cancer risk evaluation in breast treatment PO - 1511

A. D'Anna (Italy), G. Stella, E. Bonanno, G. Borzì, N. Cavalli, A. Girlando, A.M. Gueli, M. Pace, L. Zirone, C. Marino

Dosimetric comparison between VMAT and electron treatments for skin cancers of the head and neck PO - 1512

J. Ashman (United Kingdom)

Radiobiological corrections of dose-volume histograms for treatment gap calculations PO - 1513

K. O'Shea (Ireland), M. Moore, L. Coleman

Dosimetric Study of Total Marrow-Lymphatic Irradiation and Total Body Irradiation with Tomotherapy PO - 1514

F. Ertan (Turkey), G. Kavak Eren, S. Sahin, E. Karakaya

Dose distribution comparison for WBRT with hippocampal sparing using HyperArc and non-coplanar VMAT PO - 1515

V. Tolstoukhova (Russian Federation)

Change in spinal cord dose of treatment plan using CT myelography image in spine SBRT PO - 1516

H. Shimizu (Japan), Y. Koide, K. Sasaki, Y. Watanabe, T. Aoyama, H. Tachibana, T. Iwata, T. Kitagawa, T. Kodaira

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M.A. Vicedo González (Spain), M.T. García Hernández, D. Planes Meseguer, R. García Molla, B. Bordería Navarro, P. Calatayud Cuesta, M.L. Alcaraz Lozano

Reduction of second cancer risks with proton therapy vs photon VMAT in seminoma patients PO - 1518

W. Heemsbergen (The Netherlands), M. Dirkx, D. De Regt, M. Franckena, Y. Klaver, S. Habraken, R. Nout

Reassessment of neutron contamination during breast treatment for different configurations PO - 1519

A. Dabach (Belgium), P. Steven, A. Taieb Mokaddem, M. De Saint-Hubert, O. Van Hoey, I. Chiari, M. Machiels, P. Poortmans, D. Verellen

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Influence of combination of photon beam with single and dual isocenter bilateral breast VMAT plan	PO - 1521
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<u>J. Calvo-Ortega (Spain)</u> , S. MORAGUES-FEMENÍA, C. LAOSA-BELLO	

Track: Physics

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Track: Physics

Poster (digital): Intra-fraction motion management and real-time adaptive radiotherapy

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Track: Physics

Poster (digital): Optimisation and algorithms for ion beam treatment planning

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Dose-averaged LET may not be the best RBE-descriptor for proton therapy PO - 1724

F. Kalholm (Sweden), I. Toma-Dasu, L. Grzanka, N. Bassler

An approach for obtaining Monte Carlo computed variable proton RBE from a treatment planning system PO - 1725

J. tjelta (Norway), L.F. Fjæra, K.S. Ytre-Hauge, C. Boer, C.H. Stokkevåg

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H. Henjum (Norway), S. Pilskog, C. H. Stokkevåg, J. Tjelta, K. S. Ytre-Hauge

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U.V. Elstroem (Denmark), O. Noerrevang, K. Jensen

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P. Stammer (Germany), L. Burigo, O. Jäkel, M. Frank, N. Wahl

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C. Hahn (Germany), L. Heuchel, J. Öden, J. Wulff, S. Plaude, B. Timmermann, C. Bäumer, E. Traneus, A. Lühr

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R. Ahmad (United Kingdom), E. Baer, K. Pile, C. Collins-Fekete, S. Gulliford, S. Wickers, M. Hawkins

Track: Physics

Poster (digital): Optimisation and algorithms for photon and electron treatment planning

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Advantages of low tesla MR-Linac advanced cost function for online adaptive dose optimization PO - 1732

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<u>M. Jaccard (Switzerland)</u> , N. Perichon, M. Fargier-Voiron, O. Matzinger, S. Bulling	
A dosimetric study of dose algorithm impact and number of VMAT arcs in single fraction lung SBRT.	PO - 1741
<u>W.Y.C. Koh (Singapore)</u> , H.Q. Tan, Y.Y. Ng, K.W. Ang, K.S. Lew, Y.H. Lin, G.A.C. Chua, H.H.J. Yap, J.H. Phua, Y.M. Wong, S.Y. Park, J.C.L. Lee	
Feasibility of using a process control framework to simplify treatment planning decisions	PO - 1742
<u>T. Orovwighose (Germany)</u> , V. Batista, B. Rhein, O. Jäkel	
Dosimetric evaluation of off-axis fields and angular transmission for the 1.5T MR-Linac	PO - 1743
<u>M. van den Dobbelsteen (The Netherlands)</u> , W. de Vries, B. van Asselen, B. Raaymakers, S. Woodings, S. Oolbekkink, S. Hackett	
Feasibility-guided automation of prostate SBRT planning: the power of DVHs a-priori knowledge	PO - 1744
<u>C. Romano (Italy)</u> , P. Viola, M. Craus, G. Macchia, M. Ferro, P. Bonome, L. Indovina, M. Buwenge, S. Cammelli, V. Valentini, A.G. Morganti, F. Deodato, S. Cilla	
Meta-optimization of Radiation Therapy Treatment Plans	PO - 1745
<u>C. Huang (USA)</u> , Y. Nomura, Y. Yang, L. Xing	
Semi-automated treatment planning for low-dose total body irradiation (TBI)	PO - 1746
<u>R. van Leeuwen (The Netherlands)</u> , M. Barseganyan, D. Verwegen, E. van der Bijl, R. Monshouwer	
Linear approximation of variable RBE models using only LET	PO - 1747
<u>D. Wagenaar (The Netherlands)</u> , J. Langendijk, S. Both	

Track: Physics

Poster (digital): Physical aspects of quantitative functional and biological imaging

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A DECT framework to measure the effect of radiation dose on lung function after radiotherapy	PO - 1748	
<u>M. Simard (Canada)</u> , A. Lapointe, H. Bahig, J. Carrier, S. Zhang, M. Campeau, É. Filion, D. Roberge, H. Bouchard, S. Bedwani		
Evaluating diffusion weighted signal change on the MR-Linac during bladder cancer radiotherapy	PO - 1749	
<u>M. Ingle (United Kingdom)</u> , M. Blackledge, A. Wetscherek, R. Huddart, S. Lalondrelle, S. Bhide, S. Hafeez		
Reproducibility of diffusion-weighted magnetic resonance imaging in head and neck cancer	PO - 1750	
<u>J. Habrich (Germany)</u> , V. Fritz, S. Böke, M. Nachbar, K. Nikolaou, F. Schick, D. Zips, D. Thorwarth		
Integration of R2* mapping in daily prostate MR-Linac workflow for hypoxia characterisation	PO - 1751	
<u>W. Bano (United Kingdom)</u> , K. Sriharan, J. Chick, G. Smith, A. Tree, U. Oelfke, A. Wetscherek		
Daily prostate ADC in patients having SABR and conventional prostate cancer treatment on an MR-Linac	PO - 1752	
<u>C. Moore (United Kingdom)</u> , S. Jackson, J. Stickley, A. Clough, C. Nelder, R. Chuter, A. Choudhury, D. McHugh, M. Dubec		
Comparison of low distortion methods to calculate ADC in metastatic brain tumours and normal tissue	PO - 1753	
<u>M. Riveira (Spain)</u> , A. Lopez Medina, A. Gonzalez Pose, A. Fernandez Gonzalez, F. Salvador Gomez, O.M. Vila Nieto, I. Nieto Regueira, V. Ochagavia Galilea, V.M. Muñoz Garzon		
Delineation-related ADC variation between centres in the Elekta Unity MR linac Consortium	PO - 1754	
<u>A. Bisgaard (Denmark)</u> , A. van Lier, C. Coolens, R. Keesman, A. Tree, A. Wetscherek, P. Romesser, N. Tyagi, M. Lo Russo, J. Habrich, D. Vespirini, A. Lau, S. Mook, P. Chung, L. Kerkmeijer, M. Nowee, T. Schytte, E. Lorenzen, C. Brink, U. Van der Heide, F. Mahmood		
Track: Physics		
Poster (digital): Radiomics, modelling and statistical methods		
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Machine Learning in NTCP prediction --- A superior alternative to the Lyman-Burman-Kutcher model	PO - 1755	
<u>P. Samant (United Kingdom)</u> , T. Maughan, F. Van Den Heuvel, R. Canters, F. Hoebbers, E. Hall, C. Nutting, D. de Ruysscher		
Spatial Pyramid Pooling Survival Networks: Learning survival outcomes from whole slide images	PO - 1756	
<u>S. Chen (The Netherlands)</u> , L. Wee, A. Dekker		
A framework for in-vivo, voxel-based assessment of radiation response through multimodal imaging	PO - 1757	
<u>M. Skaarup (Denmark)</u> , M.J. Lundemann, S. Darkner, M. Jørgensen, L. Marner, D. Mirkovic, D. Grosshans, C. Peeler, R. Mohan, I.R. Vogelius, A. Appelt		

Performance assessment of radiogenomics machine learning models for stratifying prostate cancer risk	PO - 1758
<i><u>N. Payan (United Kingdom), R.G. Murphy, S. Jain, A.R. Hounsell, S. Osman, J.M. O'Sullivan, K.M. Prise, C.K. McGarry</u></i>	
Delta Radiomics can predict complete pathological response in rectal cancer patients	PO - 1759
<i><u>A. Angrisani (Italy), T. Di Pietro, E. D'Ippolito, V. Nardone, A. Sangiovanni, A. Reginelli, C. Guida, S. Cappabianca</u></i>	
Independent validation of a PET radiomic model predicting outcome after Radiotherapy for HN cancer	PO - 1760
<i><u>M. Mori (Italy), C. Deantoni, M. Olivieri, E. Spezi, A. Chiara, S. Baroni, M. Picchio, A. Del Vecchio, N. Di Muzio, C. Fiorino, I. Dell'Oca</u></i>	
Isotoxic temporal modulation of fraction size in conventional radiotherapy	PO - 1761
<i><u>J. Sonke (The Netherlands), J.O. Deasy, J. Belderbos, M. de Jong</u></i>	
Early detection of brain metastases using diffusion weighted imaging radiomics and machine learning	PO - 1762
<i><u>J. Madamesila (Canada), E. Tchistiakova, N. Ploquin</u></i>	
Radiomics and Deep Learning for the 2-Year Overall Survival Prediction in Lung Cancer	PO - 1763
<i><u>A. Braghetto (Italy), A. Bettinelli, F. Marturano, M. Paiusco, M. Baiesi</u></i>	
Impact of dose errors on dose-response modelling	PO - 1764
<i><u>L. Mövik (Sweden), A. Bäck, N. Pettersson</u></i>	
Pre-processing and feature/volume correlation in CT radiomics in non-small cell lung cancer	PO - 1765
<i><u>S. Volpe (Italy), L.J. Isaksson, M. Pepa, M. Zaffaroni, S. Raimondi, G. Lo Presti, C. Garibaldi, C. Rampinelli, G. Marvaso, S. Gandini, M. Cremonesi, B.A. Jereczek-Fossa</u></i>	
Deep learning classifier for MGMT promoter methylation status in glioblastoma cancer	PO - 1766
<i><u>J. Barranco Garcia (Switzerland), D. Abler, M. Reyes, D. Young, M. Guckenberger, S. Tanadini-Lang, A. Depeursinge</u></i>	
Development of a MRI radiomic-based ML model to predict aggressiveness of prostate cancer	PO - 1767
<i><u>O. Rios Ibacache (Chile), P. Caprile, J. Domínguez, C. Besa</u></i>	
Regularized distributed Cox regression: a model for federated feature selection in survival analysis	PO - 1768
<i><u>B. Gottardelli (Italy), C. Masciocchi, A. Martino, L. Boldrini, C. Mazzarella, G. Grassi, M. Massaccesi, V. Valentini, A. Damiani</u></i>	
Prostate cancer radiogenomics machine learning classification for predicting disease progression	PO - 1769
<i><u>R. Murphy (United Kingdom), N. Payan, S. Osman, K. Prise, A. Hounsell, J. O'Sullivan, C. McGarry, S. Jain</u></i>	
Prediction of mandibular ORN with DL-based classification of 3D radiation dose distribution maps	PO - 1770
<i><u>L. Humbert-Vidan (United Kingdom), V. Patel, R. Andlauer, A.P. King, T. Guerrero Urbano</u></i>	
Prediction of recurrence from post-operative MRI in GBM: Are we reaching limits of Deep-Learning?	PO - 1771
<i><u>A. CARRÉ (France), G. Klausner, S. Achkar, T. Estienne, T. Henry, A. Rouyar, R. Sun, G. Fournier, F. Dhermain, E. Deutsch, C. Robert</u></i>	

Radiomic feature relevance in the prediction of pathological features of prostate cancer <i>L.J. Isaksson (Italy), P.E. Summers, M. Pepa, M. Zaffaroni, M.G. Vincini, G. Corrao, G.C. Mazzola, M. Rotondi, S. Raimondi, S. Gandini, S. Volpe, Z. Haron, S. Alessi, P. Pricolo, F.A. Mistretta, S. Luzzago, F. Cattani, G. Musi, O. De Cobelli, M. Cremonesi, R. Orecchia, G. Marvaso, G. Petralia, B.A. Jereczek-Fossa</i>	PO - 1772
Feasibility of a novel harmonization method for NSCLC multi-centric radiomic studies <i>A. Botti (Italy), M. Bertolini, V. Trojani, N. Cucurachi, M. Iori, M. Galaverni, C. Iotti, P. Borghetti, S. La Mattina, N. Giaj Levra, M. Sepulcri, F. Iori, P. Ciammella</i>	PO - 1773
Oxygen distribution in the microenvironment and RT treatment outcome: a modeling study on metastasis <i>L. Possenti (Italy), A. Gallo, A. Cicchetti, T. Rancati, P. Zunino</i>	PO - 1774
Associations of CT-based radiomics data with disease recurrence in early stage Lung cancer patients <i>A. Giraldo Marin (Spain), M. Ligerio, A. Seoane, M. Ramos, M. Simo, J. Glralt, M. Escobar, P. Raquel</i>	PO - 1775
Evaluation of two commercial deep learning OAR segmentation models for prostate cancer treatment <i>J. Gorgisyan (Sweden), I. Bengtsson, M. Lempart, M. Lerner, E. Wieslander, S. Alkner, C. Jamtheim Gustafsson</i>	PO - 1776
Self-supervised image feature extraction for outcomes prediction in oropharyngeal cancer <i>B. Ma (The Netherlands), J. Guo, H. Chu, A. De Biase, N. Sourlos, W. Tang, J. A. Langendijk, P. M.A. van Ooijen, S. Both, N. M. Sijtsema</i>	PO - 1777
MRI Radiomics in prostate cancer: a reliability study <i>A. Angrisani (Italy), L. Mastrandrea, A. Sangiovanni, V. Nardone, R. Grassi, A. Reginelli, C. Guida, S. Cappabianca</i>	PO - 1778
Detection of mandibular osteoradionecrosis using novel imaging biomarkers for head and neck cancer <i>A. Mohamed (USA), A. Abusaif, A. Moawad, L. van Dijk, D. Fuentes, K. Elsayes, C. Fuller, S. Lai</i>	PO - 1779
Image-based data mining for radiation outcomes research applies to data from children <i>L.J. Wilson, A. Bryce-Atkinson (United Kingdom), A. Green, T.E. Merchant, M. van Herk, E. Vasquez Osorio, A.M. Faught, M.C. Aznar</i>	PO - 1780
Radiomic features are minimally repeatable in test-retest MR images of cervical cancer <i>C. Thiong'o (United Kingdom), A. McWilliam, G. Price, A. Davey, A. Green</i>	PO - 1781
Methodological Quality of Machine Learning Quantitative Image Analysis Studies in Esophageal Cancer <i>Z. Zhang (The Netherlands), L. Wee, Z. Shi, A. Dekker</i>	PO - 1782
Leverage radiomic and clinical data in predicting SRS treatment outcomes in patients with brain mets <i>G. Carloni (Italy), G. Marvaso, C. Garibaldi, M. Zaffaroni, S. Volpe, M. Pepa, S. Raimondi, G. Lo Presti, V. Positano, R. Orecchia, B.A. Jereczek-Fossa</i>	PO - 1783
predicting radiation pneumonitis based on retraining a deep learning feature extraction model	PO - 1784

Z. Wang (The Netherlands), Z. Zhang, A. Traverso, A. Dekker

Secondary cancer risk estimates from proton arc plans in pediatric craniopharyngioma. PO - 1785

L. Toussaint (Denmark), D.J. Indelicato, J.B. Petersen, C.H. Stokkevåg, Y. Lassen-Ramshad, A. Vestergaard, L.P. Muren

Exploratory analysis of anatomical regions associated with Dysphagia measured with the MDADI PO - 1786

A. Carver (United Kingdom), A. Hartley, D. McNulty, H. Mehanna

Impact of deep learning segmentation methods on the robustness of MR glioblastoma radiomics PO - 1787

D. Vuong (Switzerland), K. Daetwyler, M. Bogowicz, P. Radojewski, R. Meier, M. Reyes, N. Saltybaeva, A. Depeursinge, M. Bach, M. Piccirelli, M. Guckenberger, S. Tanadini-Lang, R. Wies

Radiomic and dosiomic prediction of biochemical failure after Iodine-125 prostate brachytherapy PO - 1788

M. Nakano (Japan), H. Ishiyama, S. Kawakami, A. Sekiguchi, T. Kainuma, H. Tsumura, M. Hashimoto, T. Hasegawa, Y. Tanaka, T. Katakura, Y. Murakami

Quantitative evaluation of whole-body spatial normalisation in paediatric patients PO - 1789

C. Veiga (United Kingdom), J. Cantwell, R. Ahmad, P. Lim, D. D'Souza, M. Gaze, S. Moinuddin, J. Gains

Track: Brachytherapy

Poster (digital): Brachytherapy: Breast

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Minimizing adverse effects of Cerenkov radiation induced photodynamic therapy with transformable photosensitizer-loaded nanovesicles PO - 1790

Withdrawn

Track: Brachytherapy

Poster (digital): Brachytherapy: Gynaecology

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Lumbosacral plexus dose with CT pelvimetry correlation in cervical cancer HDR brachytherapy PO - 1791

C.C. Yu (Philippines), J.V. Gan

Implementation of IGABT evidence-based planning aims, whilst changing brachytherapy systems PO - 1792

E. Flower (Australia), G. Busuttil, S. Zanjani, D. Thwaites, N. Thiru, J. Chard

Clinical outcomes after interstitial HDR brachytherapy for locally advanced cervical cancer PO - 1793

P. Vicente Ruiz (Spain), B. Vazquez Barreiro, L. Rodriguez Ruiz, J.L. Guinot Rodriguez, M. Tortajada Azcutia, M.A. Santos Olias, V. Gonzalez Perez, A. de la Rosa de los Rios, L. Arribas Alpuente

Adjuvant HDR brachytherapy for endometrial cancer: to replan or not to replan? PO - 1794

S. Durante (Italy), A. Vavassori, F. Colombo, J. Franzetti, S. Comi, R. Cambria, R. Orecchia, B.A. Jereczek Fossa, B.A. Jereczek Fossa

Implementation of intracavitary/interstitial brachytherapy in the treatment of cervical cancer PO - 1795

C.T. Delle Curti (Italy), F. Piccolo, B. Pappalardi, R.M. Mancuso, C. Tenconi, T. Giandini, S. Meroni, S. De Biaso, A. Cerrotta

Dosimetric comparison of rectal dose reduction methods in brachytherapy for cervical cancer PO - 1796

M. Sawada (Japan), Y. Shiraishi, T. Nemoto, T. Tanaka, R. Kota, N. Koike, N. Shigematsu

Impact of Ovoid size in Intra-cavitary Brachytherapy upon target dose in patients with Cancer Cervix PO - 1797

N. Radhakrishna, T. Pasha C R (India), R.R. Bucchapudi, H. R S, S. Sunny Pullan, E. Jerod, S. Palled, T. B, N. Thimmaiah, V. Patil, L. Viswanath

Reporting of inter fraction dose variations of OARs in CT guided HDR ICBT in carcinoma cervix. PO - 1798

M. Nandi (India), V. Perumareddy, S. Sarkar, N. Pokala, V. S, S. Chanda

Cervical cancer treated with HDR-brachytherapy MRI-based according to the recommendations GEC-ESTRO PO - 1799

M.F. Roper Carmona (Spain), J. Quirós Rivero, J.L. Muñoz García, J.J. Cabrera Rodríguez, Y. Ríos Kavadoy, V. Vera Barragán, P. Simón Silva, B. Baños Pérez, C. Corral Fernandez, M. Gonzalez de Dueñas

Experiences of women receiving brachytherapy for cervical cancer: a prospective qualitative study. PO - 1800

K. BENALI (Morocco), H. Benmessaoud, H. Ahmut, S. Elmajjaoui, T. Kebdani, H. El Kacemi, K. Hassouni, N. Benjaafar

Track: Brachytherapy

Poster (digital): Brachytherapy: Physics

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Primary standards and measurement methods for X-ray emitting electronic BT devices PRISM-eBT PO - 1801

T. Schneider (Germany), R. Behrens, F. Garcia-Yip, K. Tanderup, G. Kertzscher, J. Johanson, P. Georgi, V. Blideanu, C. Stien, J. Plagnard, J. Solc, V. Sochor, M. Pinto, T. Sander, A. Subiel, C. Gouldstone, L. de Prez, F. Verhaegen, B. Reniers, P. Avilés Lucas, Z. Msimang, D.J. Eaton, F. Weigand, M.J. Rivard

PSD (plastic scintillation detector) in vivo dosimetry in post-operative endometrial brachytherapy PO - 1802

A. Herreros (Spain), J. Melo, L. Moutinho

Simulated liver implantation (SLIM): Towards fully robotic LDR brachytherapy for liver tumors PO - 1803

P. Aumüller (Germany), A. Rothfuss, M. Ehmann, F.A. Giordano, S. Clausen

Brachytherapy HDR afterloader examination for measurement source position lagging effect PO - 1804

V. Stserbakov (Estonia)

Dwell positions of the source in Ring Applicator ("z-coordinate") in HDR brachytherapy commissioning PO - 1805

V. Stserbakov (Estonia), A. Tsizik, N. Saveljev

Autoradiography method for determination of actual source dwell positions in Elekta ring applicators PO - 1806

A. Tšizik (Estonia), N. Saveljev

Track: Brachytherapy

Poster (digital): Brachytherapy: Head and neck, skin, eye

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Long-term outcome of high-dose-rate brachytherapy in early stage non-melanoma skin cancer. PO - 1807

J. Quirós Rivero (Spain), M. Gonzalez de Dueñas, C. Corral Fernandez, F. Ropero Carmona, B. Baños Perez, F. Garcia Urra, V. Vera Barragan, P. Simon Silva, J.L. Muñoz Garcia, J. Cabrera Rodriguez, Y. Rios Kavadoy

High rate brachytherapy in the treatment of non-melanoma skin cancer. PO - 1808

M.A. González Ruiz (Spain), J. Saavedra Bejarano, J. Quirós Rivero

Skin high dose rate brachytherapy : safety and survival data PO - 1809

A. Bordron (France), P. Clavère

Postoperative Management of Keloids with High-Dose-Rate Brachytherapy PO - 1810

S. Durante (Italy), A. Vavassori, J. Franzetti, M. Rotondi, S. Comi, R. Cambria, F. Cattani, F. De Lorenzi, M. Rietjens, R. Lazzari, R. Orecchia, B.A. Jereczek Fossa, B.A. Jereczek Fossa

Efficacy of Episcleral Brachytherapy in Choroidal Melanoma PO - 1811

O.A. Prato Carreño (Spain), F.J. Celada Álvarez, J.A. Germain Vandewijngaerden, A.C. Ciafre, I. Solero Martín, E. Martín García, M. Borrás Calbo, N. Tejedor Aguilar, J. Gimeno Olmos, M.Á. Berenguer Fránces, S. Roldán Ortega, A.J. Conde Moreno

Therapeutic possibilities in the radiation treatment of NMSC: brachytherapy vs. electrons therapy PO - 1812

C. Camacho Fuentes (Spain), C. Sánchez Cortés, M. Calderó Torra, M.L. Ferrández Millán, M. Gascón Ferrer, L. Sopeña Sanz

Track: Brachytherapy

Poster (digital): Brachytherapy: Urology (prostate, bladder, penile)

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Developing a High-Volume, High-Efficiency CT-Based High Dose Rate Prostate Brachytherapy Workflow PO - 1813

B. Barney (USA), R. Manigold, I. Gordon, M. Cornia, R. Hecox

mpMRI-guided transperineal prostate biopsy: analysis of PIRADS and Gleason result PO - 1814

M. Herrera Román (Spain), M. Sánchez Belda, P. Valencia Nieto, D. Miguel Pérez, P. Alonso Martínez, J.M. de Frutos Baraja, I. Solís Navarro, L. Cardoso Rubio, A. Casado Camacho, R. Jaraiz Díaz, L. Rodríguez Mínguez, M.G. Morgade Yllera, D. Rodríguez Domínguez, P. Diezhandino García

I-125 brachytherapy in low/intermediate risk prostate cancer according with NCCN and EAU guidelines PO - 1815

M.L. trigo (Portugal), P. fernandes, S. garcia

Dosimetric comparison of intra-operative hyaluronic acid spacer insertion in prostate brachytherapy PO - 1816

S. Brown (United Kingdom), S. Worster, V. Currie, J. Nobes

HDR brachytherapy effectiveness in local relapse prostate cancer: 10-year experience PO - 1817

L.O. Rosas Gutierrez (Spain), A. Barco Gomez, E. Burillo Nuin, I. Visus Fernandez de Manzanos, M. Barrado Los Arcos, A. Sola Galarza, M. Martinez Fernandez, A.E. Villafranca Iturre

Prospective study of tadalafil treatment in patients treated with prostate brachytherapy in Japan. PO - 1818

N. Hayakawa (Japan), R. Mizuno, Y. Shiraishi, T. Tanaka, K. Matsumoto, T. Kosaka, T. Ohashi, E. Kikuchi, N. Shigematsu, M. Oya

partial brachytherapy in prostate cancer phantoms with and without rectum spacer PO - 1819

B. Vanneste (The Netherlands), V. Skouteris, L. Campos Pinheiro, N. Stone

Track: Radiobiology

Poster (digital): Normal tissue radiobiology

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A 3D-organoid drug screening method for the elimination of radiation-induced senescent cells PO - 1820

A. Soto Gamez (The Netherlands), Y. Wu, X. Peng, S. Pringle, A. Vissink, L. Barazzuol, R.P. Coppes

Synergistic efficacy by combination of AUTOTAC and low dose radiation in Alzheimer's disease PO - 1821

J.S. Kim (Korea Republic of), S.H. Lee, E. Ko, S.H. Kim, K.W. Sung, C.H. Ji, M. Moon, Y.T. Kwon, W.K. Chung

Ultra-high dose rate FLASH effect on head and neck cancer cells and normal salivary gland in mice PO - 1822

E. Kim (Korea Republic of), K. Yang, M. Kim, W.I. Jang, H. Kim, M. Park, J. Kim

XRCC3 Thr241Met gene polymorphism and acute radiotherapy induced toxicity for prostate cancer PO - 1823

E. Mališić (Serbia), N. Petrović, M. Nikitović

Track: Radiobiology

Poster (digital): Tumour radiobiology

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Regression and deep learning for transcriptome-based HPV-status prediction in head and neck cancer PO - 1824

K. Unger (Germany), E. Lombardo, J. Hess, C. Kurz, M. Riboldi, S. Marschner, P. Baumeister, K. Lauber, U. Pflugradt, A. Walch, M. Canis, F. Klauschen, H. Zitzelsberger, C. Belka, G. Landry

Metabolic background affects radiation response more than metabolic therapy, in GBM models. PO - 1825

O. Furman (Israel), K. Porper, Y. Shpatz, Y. Lawrence, L. Zach

Track: Radiobiology

Poster (digital): Immuno-radiobiology

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Radiation-induced changes of immune cell profiles relevant to PD-1/PD-L1 in murine colon cancer PO - 1826

Y.J. Lim (Korea Republic of), Y.N. Yoon, M.H. Choe, J. Kim

M1 microglia polarization induced by radiotherapy and dendritic cell immunotherapy combination. PO - 1827

V. Pinzi (Italy), V. Pinzi, N. Di Ianni, M.L. Fumagalli, M. Maffezzini, L. Fariselli, S. Pellegatta

Predictive biomarkers, side effects and tumor control in radiotherapy-treated male cancer patients PO - 1828

Z. Juranyi (Hungary), Z.S. Kocsis, K. Lumniczky, K. Balázs, P. Ágoston, G. Farkas, V. Tölgyesi, G. Székely, T. Major, C. Pesznyák, G. Stelczer, K. Jorgo, L. Gesztes, C. Polgár, G. Sáfrány

Track: RTT

Poster (digital): Patient preparation, positioning and immobilisation

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Development of a pseudo TPUS probe to improve consistency of patient positioning during MRI. PO - 1829

E.P.P. Pang (Singapore), Y.K. Lim, K.S.K. Heng, C.H. Tan, Y.A. Lin, J.W.S. Chan, G.K. Low, J.K.L. Tuan

Reproducibility of the bite block during radiotherapy of head-and-neck cancer patients PO - 1830

V. Leijser-Kersten (The Netherlands), M. Heldens-van Rooy

Different ROIs in CBCT Verification for Evaluation of Anatomic and Dosimetric Impacts in Prostate RT PO - 1831

H. Pang (Hong Kong (SAR) China)

Quantification of fat on MRI and impact on effectiveness of abdominal compression for radiotherapy PO - 1832

M. Daly (United Kingdom), R. Benson, R. Chuter, A. Clough, L. McDaid, A. McWilliam, C. Nelder, E. Pitt, G. Radhakrishna, A. Choudhury, C. Eccles

Use of immobilization bra for daily setup of patients with pendulous breast undergoing radiotherapy. PO - 1833

J.Z. Chua (Singapore), E.P.P. Pang, L.H. Lim, G. Kusumawidjaja

Cone beam CT verification of mask based immobilization of stereotactic radiotherapy treatments PO - 1834

J. Papp (Hungary), M. Simon, E. Csiki, Á. Kovács

A glimpse at breast internal mammary chain radiotherapy practice in the United Kingdom PO - 1835

Z. Nabi (United Kingdom), R. Butt, R. Mir, J. Hills, Y. Tsang, D. Wheatley, I.S. Bhattacharya, A. Ranger, S. Cramp, N. Hammonds, A. Goyal

The Clinical Effectiveness of SGRT on Extremities Patients: Accuracy and Potential Margins Reduction PO - 1836

Y. zhang (China), F. Huan, X. Feng, F. Lu, Z. Li, G. Wei, W. Li, H. Li

Overwhelmed by information PO - 1837

G. Samsøe (Denmark), L. Gerberg, M. Bruvo

The Comparison between DIBH and Abdominal Compression Treatment Technique in Liver SBRT PO - 1838

Y. Zhang (China), B. Deng

Evaluate the Efficacy of Breathing Coaching in Left Breast Surface Guided DIBH Patients PO - 1839

Y. Zhang (China), S. Ye

The Feasibility of SGRT on Locally Advanced Cervical Cancer Patients with Bladder Protocol PO - 1840

Q. liu (China), L. Su, D. Tang, Z. Wu, Z. Yang, H. Peng

Influences of Interfractional changes of rectum/bladder on vagina motion in endometrium radiotherapy	PO - 1841
<u>Y. Tsang (United Kingdom)</u> , A. Abdulllah, A. Stewart-Lord, D. Megias, H. Tharmalingam, P. Hoskin	
Reliability of roll rotations estimated with paired kV imaging in thoracic treatments	PO - 1842
<u>M. Cuenca Cano (Spain)</u> , D. Jurado Bruggeman, I. Romera Martinez, R. Grebol Canal	
The stability of breast cancer patients when using the 6DoF couch	PO - 1843
<u>J. van der Himst (The Netherlands)</u> , A. de la Fuente, S. Hoek	
Evaluation on Bra usage for breast cancer radiotherapy: OARs sparing and acute skin reaction	PO - 1844
<u>S.T. Chiu (Hong Kong (SAR) China)</u> , S.M. Wong, S.W. Kong, W.Y. Lee, K.F. Cheng, G. Chiu	
Surface Guided Adjuvant Radiotherapy Tattoo-Free For Breast Cancer	PO - 1845
<u>R. Cuscito (Italy)</u> , F. Fragnoli, C. Indelicati, G. Sanfrancesco, C. De Pascali, M. De Masi, R. Parabita, A. Aga, F. Berloco, L. Brana', A. Ciocia, D. Curci, G. Ladisa, M. Nardiello, D. Nardelli, V. De Candia, F. Gregucci, A. Surgo, R. Carbonara, M.P. Ciliberti, M. Caliandro, I. Bonaparte, A. Fiorentino	
Implementation of a Surface Guide Radiotherapy (SGRT) system a Spain Multicenter Experience.	PO - 1846
<u>D. gonsalves (Spain)</u> , E. Lopez, P. Garcia, L. Fernandez, A. Carreras, M. Perez, L. Diaz, F. Gongora	
Comparative study of two patient immobilisation devices for lung stereotactic body radiation therapy	PO - 1847
<u>S. Boissbouvier (France)</u> , I. Martel Lafay, M. Zahra Ayadi	
Exploring uterus motion with full and empty bladder in preparation for adaptive cervix radiotherapy	PO - 1848
<u>S. Goldsworthy (United Kingdom)</u> , E. Barker, L. Durrant, J. Morrison, S. McGrail, A. Eve, P. Jankowska, J. Mason	
Estimating the dose delivered to rectum and bowel in plan of the day adaptive bladder radiotherapy	PO - 1849
<u>S. Goldsworthy (United Kingdom)</u> , S. McGrail, A. Eve, A. Webster, E. Gray	
From children to superheroes in protontherapy, the RTT as sidekick	PO - 1850
<u>J. Claes (Belgium)</u> , H. Sels, D. Callens	
Impact in setup accuracy of two different immobilization devices in prostate cancer radiotherapy.	PO - 1851
<u>V. Pisoni (Italy)</u> , D. Panizza, P. Caricato, V. Faccenda, S. Trivellato, S. Arcangeli	
SGRT for pre-positioning in SBRT lung treatments: accuracy and efficiency evaluation.	PO - 1852
<u>F. Cavallo (Italy)</u> , S. Caponigro, D. Di Minico, G. Danaro, L. Maida, L. Capone, L. Nicolini, S.A. Allegretta, F.M. Aquilanti, P. Gentile	
Assessing the inter and intra-fraction changes utilising MR Linac for cervical cancer	PO - 1853
<u>A. Alshamrani (United Kingdom)</u> , R. Chuter, C. Nelder, A. Choudhury, L. Barraclough, C. Eccles, M. Aznar, P. Hoskin	

Track: RTT

Poster (digital): RTT education, training, advanced practice and role developments

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Assessing implementation of interventions to recruit & retain the Therapeutic Radiographer workforce PO - 1854

N. Hutton, M. Tuckey, S. Goodman (United Kingdom)

application of advanced mri techniques in patients affected by meningioma treated with protontherapy PO - 1855

L. Anemoni (Italy), I.E. Mascayano, L. Preda, E. Orlandi, M.S. Cadeo, A. Mancin, M.E. Piazzolla, S. Tampellini

Artificial intelligence: the opinions of radiation therapists in Ireland. PO - 1856

T. O' Donovan (Ireland), J. McNulty, M. Ryan

A feasibility study on RayPilot® real-time motion management for margin reduction in prostate SBRT. PO - 1857

S. Adamson, D. McLaren, W. Nailon (United Kingdom)

Patient recruitment by RTTs yields high accrual in a randomized trial of palliative radiotherapy. PO - 1858

A.C. Lund (Denmark), A.M. Nielsen, A. Caranovic, J. Friberg, V.N. Hansen, T.S. Johansen, B.S. Kristensen, R. Marseguerra, K.N. Matthiesen, L. Prenter, D.A. Schut, S.E. Tvile, A. Munk, D. Sørensen, A. Green, M. Langballe, T.R.B. Jensen, A.F. Fastø, L. Aalund, G.F. Persson, I.R. Vogelius, M.H. Suppli

Assessment of proton beam radiotherapy radiographer's knowledge, skills and training needs in SGRT PO - 1859

A. Webster (United Kingdom), A. Dodd, C. Lakhani, K. Osborn

Implementation of RTT-led workflow for CBCT-guided online adaptive radiotherapy in head and neck PO - 1860

P. Darby, J. Fox, A. Bromiley, C. Burnett, N. Munn, N. Redgwell, J. McLellan, R. Moleron (United Kingdom)

Pulmonary SBRT for primary or metastatic lesions: a monocentric Swiss study. PO - 1861

S. Slimani (Switzerland), O. Santa Cruz, D. Dragusanu, G. Guibert, B. De Bari

Track: RTT

Poster (digital): RTT service evaluation, quality assurance and risk management

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E-learning module effect on knowledge and confidence of clerical staff regarding radiotherapy PO - 1862

J. Cohen (United Kingdom), K. Benstead

Impact of the COVID-19 pandemic lockdown on radiotherapy patients : a retrospective cohort study. PO - 1863

K. BENALI (Morocco), H. Benmessaoud, H. Ahmut, S. Elmajjaoui, T. Kebdani, K. Hassouni, H. El Kacemi, N. Benjaafar

A Comparison of Patient Positioning Approaches on Prone Rectum Radiotherapy Patients PO - 1864

X. Geng (China), J. Zheng, J. Zhao, C. Liu, L. Sun

A review of the image quality (IQ) of dose optimised pelvic CBCT protocols. PO - 1865

R. Crouch (United Kingdom)

10-minute treatment appointments. RTT's initial perceptions of treating on a Varian Halcyon™.	PO - 1866
<u>S. Ruane (United Kingdom), T. Rees, S. Varghese, E. Olawale, L. Drummond</u>	
Measured door to door vs. estimated treatment times on CyberKnife M6 system	PO - 1867
<u>M. Vekas (Hungary), G. Stelczer, T. Major, Z. Takacsi-Nagy, C. Polgar</u>	
A National Survey of the barriers and facilitators to conducting Clinical Trials in Radiotherapy	PO - 1868
<u>D. ROBERTS (United Kingdom), D. Hutton, A. Taylor</u>	
Work interruptions and their consequences among radiotherapy co-workers	PO - 1869
<u>Á. Miovicz (Hungary), D. Sipos, F. Lakosi</u>	
Safe use of the AQUIRE – the new mobile accelerator for IOERT based on air kerma measurement	PO - 1870
<u>A. Misiarz (Poland), J. Walkiewicz, B. Malesa, J. Trzuskowski, M. Kruszyna-Mochalska, B. Pawałowski, B. Urbański, B. Adamczyk, A. Ryczkowski, A. Ryczkowski, W. Suchorska, P. Mantaj, E. Konstanty, T. Krzymański, J. Malicki</u>	

Track: RTT

Poster (digital): RTT treatment planning, OAR and target definitions

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Viscous Aqueous Gel Illustrating Natural Anatomy; the VAGINA method in gynaecological MRI simulation	PO - 1871
<u>K. Skehan, M. Richardson (Australia), K. Martin, S. Dickson, G. Govindarajulu, S. Sridharan</u>	
Tomotherapy replanning for Head and Neck patients : When? How? Why?	PO - 1872
<u>J. Rodrigues (Switzerland)</u>	
Is auto-segmentation in prostate radiotherapy efficient and accurate?	PO - 1873
<u>V. Chapman (United Kingdom)</u>	
Evaluating the use of SGRT in supraclavicular fossa positioning of mastectomy patients.	PO - 1874
<u>X. Feng (China), F. Huan, H. Chen, F. Lu, Z. Li, H. Li, W. Li, G. Wei, B. Wan, Y. Zhang, H. Jing, S. Wang</u>	
Dosimetric plan evaluation of different size of tumour volumes in Stereotactic radio surgery	PO - 1875
<u>A. Raj (India), D. Khanna, H. VT, S. P, A. Malik, P. Mohandass</u>	
The robustness planning of SBRT for centrally-located non-small cell lung cancer	PO - 1876
<u>H.M. Hung, W.S. Leung (Hong Kong (SAR) China)</u>	
Initial experience delivering stereotactic radiotherapy to a gluteal metastasis on a 1.5T MR Linac	PO - 1877
<u>P. Teles Amaro (United Kingdom), L. McDaid, L. Davies, L. Whiteside, A. Clough, C. Faivre-Finn, J. Parker, R. Bailey, R. Benson, C. Nelder, E. Pitt, C. Eccles, C. Crockett, A. Salem, A. Choudhury</u>	
Dosimetric importance of Jaw tracking in Intensity modulated Radiotherapy	PO - 1878
<u>H. V T (India), H. VT, D. Khanna, A. Raj, S. P</u>	

Trade-off in lung and heart dose and the impact on target robustness in VMAT of oesophageal cancer	PO - 1879
<u>S. Visser (The Netherlands)</u> , M. Schol, P. Klinker, M. Dieters, V.E. Mul, J.A. Langendijk, E.W. Korevaar, S. Both, C.T. Muijs	
Determining treatment margins in hypo-fractionated (Fast Forward) breast treatment.	PO - 1880
<u>L. van der Heijden, P. Brouwers, B. Jones, B. Wachters, F. Van den Heuvel (The Netherlands)</u>	
Axillary lymph node boost: simultaneously integrated on CBCT-Linac or sequential on MR-Linac?	PO - 1881
<u>R. Bouwmans (The Netherlands)</u> , M. Groot Koerkamp, F. Van der Leij, G. Bol, A. Kotte, A. Houweling	
Impact of PTV margin reduction on organ at risk dose in short course radiotherapy of rectal cancer.	PO - 1882
<u>L. Devlin (United Kingdom)</u> , S. O'Cathail, L. Grocutt, A. Duffton	
Imaged-guided brachytherapy in cervical cancer: treatment planning before each fraction	PO - 1883
<u>B.M. Clara (Spain)</u> , R.A. José Pascual, H.M. Antonio, A.D. Pablo, R.C. Àngels	
Automated elective lymph level segmentation for head and neck cancer radiotherapy treatment planning	PO - 1884
<u>V. Strijbis (The Netherlands)</u> , M. Dahele, O. Gurney-Champion, B. Slotman, W. Verbakel	
Analysis Of Vascular And Circular Blood In Radiation Treatment Planning: Technological Options	PO - 1885
<u>R.M. MEIRIÑO (Spain)</u> , F. Calvo Manuel, J. Burguete, J. Serrano Andreu, J. Aristu, D. Azcona, M. Cambeiro, M. Vidorreta, J. Pascau, J.M. Delgado, A. Alonso	
Dosimetric verification of treatment plans for TBI/TMI on helical tomotherapy.	PO - 1886
<u>S. Dubiel (Poland)</u>	
Validation of deep learning auto-segmentation in pelvic organs at risk: a preliminary analysis	PO - 1887
<u>D. Piro (Italy)</u> , M. Marras, A. D'Aviero, A. Boschetti, C. Votta, A. Re, F. Catucci, D. Cusumano, C. Di Dio, S. Menna, M. Iezzi, F. Quaranta, C. Flore, E. Sanna, D. Piccari, G.C. Mattiucci, V. Valentini	
Dose received by axillary lymph nodes in breast cancer adjuvant radiotherapy	PO - 1888
<u>N. Attia (Tunisia)</u> , S. Tbessi, A. Oualha, F. Bouguerra, B. Amri, R. Hammouda, O. Kallala, R. Saidi, S. Belajouza, N. Bouzid, S. Tebra	
Coronary arteries exposure in bilateral breast cancer radiotherapy: More caution is needed!	PO - 1889
<u>Z. Naimi (Tunisia)</u> , M. El Bessi, M. Bohli, R. Ben Amor, J. Yahyaoui, A. Hamdoun, L. Kochbati	
AI-based OAR delineation in brain T1w-MRI: Overcoming Inter- and Intra-observer variability	PO - 1890
<u>G. Gungor (Turkey)</u> , G. Klausner, G. Gur, I. Serbez, B. Temur, A. Caffaro, L. Hardy, S. Kandiban, A. Oumani, B. Bertrand, K. Shreshtha, T. Roque, B. Atalar, N. Paragios, E. Ozyar	
Impact of internal mammary chain irradiation on heart subvolumes doses in breast cancer radiotherapy	PO - 1891
<u>Z. Naimi (Tunisia)</u> , E. Bennour, H. Neji, M. El Bessi, R. Ben Amor, M. Bohli, J. Yahyaoui, L. Kochbati	

Dosimetric comparison of conventionally and ultra-hypofractionated RT boost in prostate cancer PO - 1892

J. Krawczyk (Poland), A. Ginter

could we consider the Pancreas as an organ at risk during gastric cancer radiotherapy? PO - 1893

G.E.F. Noubbigh (Tunisia), M. Frikha, S. EL Alami , S. Yahyaoui , S. Zaraa, A. Yousfi, A. Mousli, R. Abidi , I. Saidani, M. Mahdhouani , K. Mahjoubi, C. Nasr

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