Wednesday September 12, 2018
Preconference Events

8:00-4:00 Foundations of Leadership in Radiation Oncology - A joint ESTRO-CARO-RANZCR Course - Level 4 East Ballroom

Registration Fee $350

Target Group - The course is aimed at senior trainees or junior practitioners (approximately first five years after training) in the radiation oncology professions, including radiation- or clinical oncologists, radiation physicists, radiation therapists/technologists, nurses and scientists.

Course Aim/Rationale - This new course introduces foundation principles of effective leadership as they apply to senior trainees and junior practitioners in the radiation oncology professions. The course aims to equip participants with the knowledge, skills and attributes viewed as the building blocks for effective leadership. The course is directed at professionals interested in developing expertise in leading teams, advocacy and positively influencing the future of our discipline within both local and international settings. The course is grounded in the Leader domain (CanMEDS2015), and specifically to a radiation-oncology specific competency set defined through Delphi consensus (dx.doi.org/10.1016/j.radonc.2017.04.009).

Upon completion of the course, successful learners will be able to:
- Examine and reflect on their own behaviors, reactions and interactions with team members
- Describe basic leadership theory and styles as they might apply to practical situations
- Describe the foundations of effective change management and negotiation
- Explore strategies to establish and lead effective teams
- Apply basic quality improvement tools to approach an improvement process.

8:00-9:00 Registration

Introductions to Faculty and Participants
Sandra Turner, All

Recap Objectives
Sandra Turner

Basics of Leadership Theory & Styles
Sandra Turner

Self-awareness & Personality Emotional Intelligence
(based on self-assessment)
Barbara-Ann Millar

12:00-1:00 Lunch

Team Building and Engagement
Meredith Giuliani, Jesper Erikson

Leading and Managing Change
Alesandro Cortese

Creating a vision:
Sandra Turner, Lucinda Morris

Day 2 13th September
Lunchtime Session: (90 mins)
QI project and Step-back consultation Kim Benstead, BA Millar
8:00-4:00  CARO Resident Refresher Course
          Level 4 Centre Ballroom
          Facilitator: Jennifer Croke

Objectives:
Upon completion of this session, the learner will be able to:
1.
2.

Head and Neck

Palliative Radiotherapy

Refreshment Break

Breast Cancer: Post Neoadjuvant Chemotherapy/Locally Advanced?

12:00-1:00  Lunch

GI: Pancreas

Paediatrics: Primary CNS Tumours

Skin?

Plan Evaluation?

5:00  Resident Career Counselling Social Event
      TBA
11:30-5:00  Young Professional Workshop
Level 3 Drummond
Facilitator:

Objectives:
Upon completion of this session, the learner will be able to:

11:30-12:00
12:00-1:00  Lunch
1:00-2:15
2:15-3:00
3:00-3:30  Refreshment Break
3:30-4:14
4:15-5:00
Wednesday September 12, 2018

6:00-7:00 Opening Keynote
   Level 4 Centre Ballroom
   Charged Particle Radiation for Bone and Soft Tissue Sarcomas
   Thomas Bortfeld

   Objectives: Upon completion of this session, the learner will be able to:
   - To review the physical dosimetric differences between proton and heavier charged
     particles versus photons.
   - To discuss the potential clinical advantages for the use of charged particle radiation for
     treatment of bone and soft tissue sarcomas.
   - To review clinical results with the charged particle radiation for treatment of sarcomas

Thursday September 13, 2018

6:45-7:45 Breakfast and Registration
   Level 4

6:45-7:45 Meet and Greet
   Level 2 Salon 4/5

7:45-8:00 Welcome and Introductions
   Level 4 Centre/East Ballroom

8:00-9:30 Joint Theme Symposium
   Facilitators:
   Peer Review in Radiation Oncology
   Tino Piscione, CMPA
   TBA

   Objectives:
   Upon completion of this session, the learner will be able to:

9:30-10:00 Refreshment Break
   Level 4 West Ballroom

10:00-11:00 CARO Lecture
   Introduction:
   Charged Particle Radiation for Bone and Soft Tissue Sarcomas
   Thomas DeLaney

   Upon completion of this session, the learner will be able to:
   - Review the physical dosimetric differences between proton and heavier charged
     particles versus photons.
   - Discuss the potential clinical advantages for the use of charged particle radiation for
     treatment of bone and soft tissue sarcomas.
   - Review clinical results with the charged particle radiation for treatment of sarcomas
11:00-12:30 Resident and Young Investigator Competition

Moderators:

Objectives: Upon completion of this session, the learner will be able to:

- Discuss Resident and Young Investigator research projects in radiation oncology and physics across Canada.

1 NON-INVASIVE POSITRON DETECTOR FOR THE MONITORING OF THE ARTERIAL INPUT FUNCTION IN PET
Vincent Turgeon1, Gustavo Kertzschre2, Shirin A. Enger1
1McGill University, Montreal, QC
2Aarhus University Hospital, Aarhus, Denmark

2 INTRA-ARC BINARY COLLIMATION ALGORITHM FOR THE OPTIMIZATION OF STEREOTACTIC RADIOTHERAPY TREATMENT OF MULTIPLE METASTASES WITH MULTIPLE PRESCRIPTIONS
Lee MacDonald, Alasdair Syme, Christopher Thomas
Dalhousie University, Halifax, NS

3 CAN DOSE PROXIMAL TO THE PTV INFLUENCE THE RISK OF DISTANT METASTASES IN EARLY STAGE LUNG CANCER PATIENTS TREATED WITH SBRT?
André Diamant1, Avishek Chatterjee1, Sergio Faria1, Issam El Naqa2, Houda Bahig3, Edith Filion3, Cliford Robinson4, Hani Al Halabi1, Jan Seuntjens1
1McGill University, Montreal, QC
2Michigan University, Ann Arbor, MI
3Centre Hospitalier de l'Université de Montréal, Montreal, QC
4University of Washington in St. Louis, St. Louis, MO

4 SYNTHETIC-CT FROM 3D GRADIENT-ECHO MRI
Véronique Fortier, Ives R. Levesque
McGill University, Montréal, QC

5 INTRAOPERATIVE VERIFICATION OF NEEDLE PLACEMENT USING 360-DEGREE 3D TRANSVAGINAL ULTRASOUND DURING HIGH-DOSE-RATE INTERSTITIAL GYNECOLOGIC BRACHYTHERAPY
Jessica Rodgers1, Jeffery Bax2 Vikram Velker2, Kathleen Surry2, Eric Leung3, David D'Souza2, Aaron Fenster2
1Robarts Research Institute, London, ON
2University of Western Ontario, London, ON
3University of Toronto, Toronto, ON

6 STEREOTACTIC BODY RADIOTHERAPY (SBRT) FOR SPINAL METASTASES AT THE EXTREMES OF THE SPINE: IMAGING-BASED OUTCOMES FOR CERVICAL AND SACRAL METASTASES
University of Toronto, Toronto, ON
FEASIBILITY AND CONSISTENCY OF ON-TREATMENT CONE BEAM CT FEATURE EXTRACTION USING AN AUTOMATED DEFORMABLE REGISTRATION RADIOMICS PIPELINE
Pencilla Lang1, Tirth Patel1, Uffe Bernchou2, Carsten Brink2, Douglas J Moseley1, Nathan Becker1, Tony Tadic1, Andrew J Hope1
1Princess Margaret Cancer Centre, Toronto, ON
2Odense University Hospital, Odense, DK

A POPULATION-BASED STUDY OF MELANOMA BRAIN METASTASIS TREATMENT: HAVE ADVANCES IN RADIOTHERAPY AND SYSTEMIC THERAPY IMPROVED OUTCOMES?
Harry Brastianos1, Paul Nguyen1, Elizabeth Eisenhauer1, Timothy Hanna1, Arjun Sahgal2
1Queen's University, Kingston, ON
2University of Toronto, Toronto, ON

ANALYSIS OF RADIOTHERAPY PEER REVIEW: COSTING HUMAN RESOURCE SUPPORTS
Adam Mutsaers1, Robert Dinniwell1, Grace Lee2, Gabriel Boldt1
1University of Western Ontario, London, ON
2University of Toronto, Toronto, ON

PRIMARY ORGAN PRESERVATION VERSUS TOTAL LARYNGECTOMY FOR T4 LARYNX CANCER
Justin Oh, Eitan Prisman, Robert Olson, Eric Berthelet, John Wu, Eric Tran, Sarah Hamilton
University of British Columbia, Vancouver, BC

RESULTS OF A PROSPECTIVE COHORT TRIAL: STEREOTACTIC IMAGE-GUIDED NEOADJUVANT ABLATIVE RADIATION THEN LUMPECTOMY (SIGNAL) FOR EARLY-STAGE BREAST CANCER
Brian Yaremko1, Stewart Gaede1, Michael Lock1, Keegan Guidolin1, Kalan Lynn2, Matthew Moawad1, Edward Yu1, Tracy Sexton1, Robert Dinniwell1, Anat Kornecki1, Giulio Muscedere1, Ilanit BenNachum1, Olga Shmuilovich1, Neil Gelman1, Muriel Brackstone1
1Western University, London, ON
2St. Joseph Healthcare, London, ON
12 CANCER-SPECIFIC OUTCOMES OF HYPOFRACTIONATED LOCO-REGIONAL RADIOTHERAPY FOR PATIENTS WITH STAGE I-III BREAST CANCER
Theodora A. Koulis1, Robert Olson2, Alan Nichol3, Scott Tyldeley3, Pauline Truong3, Caroline Speers3, Lovedeep Gondara3, Lebo Kolisang1, Maha Almahmudi4
1University of British Columbia, Kelowna, BC
2University of British Columbia, Prince George, BC
3University of British Columbia, Vancouver, BC
4University of British Columbia, Abbotsford, BC

13 LOCAL RELAPSE AFTER BREAST CONSERVING THERAPY VERSUS MASTECTOMY FOR EXTENSIVE PURE DUCTAL CARCINOMA IN-SITU >4 CM
Sarah Hamilton1, Alan Nichol1, Lovedeep Gondara1, Elaine Wai2, Caroline Speers1, Rekha Diocee1, Pauline Truong2
1British Columbia Cancer, Vancouver, BC
2British Columbia Cancer, Victoria, BC

14 A SINGLE PRE-OPERATIVE RADIATION THERAPY (SPORT) PHASE 1 TRIAL FOR LOW RISK BREAST CANCER
Catherine Pembroke1, Michael Yassa2, Christine Lambert3, Sardis Meterissian3, Francine Trembley3, Dawn Anderson3, John Kerserlingk3, Peter Vasilis4, Valerie Panet-Raymond3, Tarek Hijal3
1Velindre Cancer Centre, Cardiff
2Universite de Montreal, Montreal, QC
3McGill University, Montreal, QC

15 CORRELATION OF PATHOLOGIC RESPONSE FOR BREAST CANCER AFTER NEOADJUVANT CHEMOTHERAPY ASSESSED BY MULTIPLE METHODS AND OUTCOMES FOLLOWING ADJUVANT RADIOTHERAPY
Jonathan Klein1, Elyse Watkins2, William Tran2, Elzbieta Slodkoska2, Gregory Czarnota2
1Albert Einstein College of Medicine, New York, NY
2University of Toronto, Toronto, ON

16 WHAT TARGET VOLUME SHOULD BE CONSIDERED WHEN IRRADIATING THE REGIONAL NODES IN BREAST CANCER? RESULTS OF A NETWORK - META-ANALYSIS
Christiane Matuschek, Jan Haussmann, Wilfried Budach, Balint Tamaskovics, Freddy Djiepmo, Edwin Boelke
Heinrich Heine University, Dusseldorf, Germany

2:30-3:30 CARO Oral Session 2 – Outcomes/Survival
Level B Salon A/B
Moderators:
Objectives: Upon completion of this session, the learner will be able to:
• Discuss specific topics in radiation medicine including cancer outcomes, quality of life after treatment, and changes in practice patterns based on different principles.

17 CANCER SURVIVAL OUTCOMES IN ONTARIO: SIGNIFICANT UNEXPLAINED VARIATIONS
Michael Brundage, Patti Groome, Timothy Hanna, Weidong Kong, Tina Dyer, Paul Peng, Brenda Carter, William Mackillop
Queen's University, Kingston, ON
18
A MULTICENTRE PROSPECTIVE COHORT STUDY EVALUATING QUALITY OF LIFE AFTER RADIATION OR SURGERY FOR POTENTIALLY UNSTABLE SPINAL METASTASES
Arjun Sahgal1, Anne Versteeg2, Laurence Rhines3, Daniel Sciubba4, James Schuster5, Michael Weber6, Peter Varga7, Stefano Boriani8, Chetan Bettegowda4, Michael Fehlings1, Michelle Clark9, Paul Arnold10, Ziya Goskaslan11, Charles Fisher12, 1University of Toronto, Toronto, ON 2University Medical Center Utrecht, Utrecht, NL 3The University of Texas MD Anderson Cancer Center, Houston, TX 4Johns Hopkins University School of Medicine, Baltimore, MD 5Hospital of the University of Pennsylvania, Philadelphia, PA 6McGill University, Montreal, QC 7National Center for Spinal Disorders and Buda Health Center, Budapest, HU 8IRCCS Galeazzi Orthopedic Institute, Milan, IT 9Mayo Clinic, Rochester, MN 10The University of Kansas Hospital, Kansas City, KS 11The Warren Alpert Medical School of Brown University, Providence, RI 12University of British Columbia, Vancouver, BC 13 AOSpine Knowledge Forum Tumour, AOSpine International, Research Department, Davos, CH

19
RADIOThERAPY AT THE END-OF-LIFE: EXAMINING PRACTICE PATTERNS IN A CANADIAN PROVINCE
Jordan Stosky1, Jackson Wu, Alysa Fairchild2, Marc Kerba1 1University of Calgary, Calgary, AB 2University of Alberta, Edmonton, AB

20
A PERSON-CENTRED MODEL OF CARE FOR RADIATION THERAPY SERVICES: PROOF-OF-CONCEPT STUDY
Michael Velec, Lauren Silver, Janet Hsu, Erin Velec, Rachel Zhou, Andrea Shessel, Elen Moyo
University of Toronto, Toronto, Ontario
Princess Margaret Cancer Centre, Toronto, ON

21
THE IMPACT OF THE ASCO CHOOSING WISELY CAMPAIGN FOR BREAST AND PROSTATE CANCER ON PHYSICIAN BEHAVIOUR
Danielle Rodin, Pragya Kakani, Meredith Rosenthal, Anna Sinaiko
Harvard T.H. Chan School of Public Health, Boston, MA

22
COMPARISON OF PATIENT REPORTED OUTCOMES BY EGFR AND ALK MUTATION STATUS IN LUNG CANCER PATIENTS TREATED WITH PALLIATIVE RADIOTHERAPY FOR BONE METASTASES
Michelle Bale1, Robert Olson2, Vincent Lapointe1, Neelam Minhas1, Mary McLay1, Fred Hsu3 1University of British Columbia, Vancouver, BC 2University of British Columbia, Prince George, BC 3University of British Columbia, Abbotsford, BC
Objectives: Upon completion of this session, the learner will be able to:

23
MOTION MANAGEMENT FOR LIVER STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR) - SINGLE INSTITUTIONAL EXPERIENCE WITH RESPIRATORY GATING VERSUS DYNAMIC TUMOUR TRACKING VERSUS MOTION-ENCOMPASSING (ITV) TECHNIQUES
Sheri Lomas1, Richard Lee1, Roy Ma2, Devin D. Schellenberg2, Marie-Laure Camborde1, Cathy Crumley1, Emma Dunne1, Alison Giddings1, Tania Karan1, Mitchell Liu2, Ante Mestrovic1, Sandy Nakano1, Christine Rodgerson1, Hardeep Sahota1, Allison Tammak1, Tania Arora1, Alanah M. Bergman1
1British Columbia Cancer Agency, Vancouver, BC
2University of British Columbia, Vancouver, BC

24
A FEASIBILITY STUDY OF A NOVEL BREAST SUPPORT TO REDUCE TOXICITY FROM SUPINE ADJUVANT WHOLE BREAST RADIOTHERAPY
Cheryl Duzenli1, Scott Young2, Tania Arora2, Keri Smith2, Christina Cumayas2, Tara Menna2, Joel Beaudry3, Levi Burns1, Bradford Gill2, Peter Lim1, Alan Nichol1, Paris Ann Ingledew1, Chan Elisa1, Christina Aquino Parsons1
1University of British Columbia, Vancouver, BC
2British Columbia Cancer Agency, Vancouver, BC
3University of Toronto, Toronto, ON

25
INDEPENDENT VALIDATION OF THE ALBI (ALBUMIN-BILIRUBIN) GRADE IN HEPATIC CANCER PATIENTS TREATED WITH RADIATION THERAPY
Jonatan Snir1, Jia Sangyang2, Jason Vickress2, Stewart Gaede2, Eugene Wong2, Jeffrey Cao2, Robert Stephens1, Victoria Charron1, Daegan Sit1, Michael Lock2
1London Regional Cancer Program, London, ON
2Western University, London, ON

26
SMALL TARGET VOLUME DELIVERY LIMITATIONS FOR LUNG SBRT
Daniel Morton, Lindsay Mathew, Iulian Badragan, Marcus Sonier
British Columbia Cancer Agency, Abbotsford, BC

27
INTRAFRACTION TRACKING FOR SPINAL SBRT AND MOTION ASSESSMENT ON AN ELEKTA LINAC
Daniel Markel, Daniel Letourneau, Harald Keller, David Schultz
University of Toronto, Toronto, ON

28
BRINGING RELIEF TO THE PRAIRIES: A SINGLE CENTRE’S EXPERIENCE IN IMPLEMENTING VOLUMETRIC MODULATED ARC THERAPY FOR LUNG SBRT USING FLATTENING FILTER-FREE BEAMS
Dominique Fortin, Varun Thakur
Saskatchewan Cancer Agency, Regina, SK
2:30-3:30  COMP Oral Session 2
Level B Salon C
Moderators:

Objectives: Upon completion of this session, the learner will be able to:

29  TOTAL BODY IRRADIATION ON A LINAC COUCH? A TREATMENT PLANNING STUDY OF MOVING COUCH GANTRY AND JAWS
Andrew Kerr, Stefano Peca
Queen’s University, Kingston, ON

30  DEVELOPMENT OF A DVH REGISTRY FOR PLAN EVALUATION, DOSE ACCUMULATION, AND COHORT ANALYSIS
Haley Patrick, John Kildea, Luis Souhami, Julia Albers
McGill University, Montreal, QC

31  ICONE-SRS: DEVELOPMENT OF SIMULATED ANNEALING INVERSE PLANNING FOR CONE-BASED STEREOTACTIC RADIOSURGERY
Anthony Lausch
Trillium Health Partners, Mississauga, ON

32  IMPORTANCE OF INITIAL PLAN PARAMETERS AS PREDICTORS OF INTER-FRACTIONAL PLAN QUALITY DEGRADATION
Sarah Weppler, Harvey Quon, Kitty Huang, Colleen Schinkel, Wendy Smith
University of Calgary, Calgary, AB

33  DOSE RECONSTRUCTION FOR LUNG CANCER PATIENTS WITH GROSS ANATOMICAL CHANGES DURING RADIOTHERAPY
Jeff D. Winter, Tony Tadic, Andrea Shessel, Joanne Moseley, Andrea Bezjak, Jean-Pierre Bissonnette
Princess Margaret Cancer Centre, Toronto, ON

34  THE INTRABEAM DOSIMETRIC INTERREGNUM: ARE THE BREAST TARGIT PROTOCOL DOSES DELIVERED BY INTRABEAM ACCURATE?
Peter Watson1, Hamed Bekerat2, Pavlos Papaconstadopoulos2, Jan Seuntjens1
1McGill University, Montreal, QC
2Jewish General Hospital, Montreal, QC

3:30-4:30  Poster Viewing/Refreshment Break
Level 3 Drummond, Salon 6/7, Foyer

4:30-6:00  CARO AGM
Level 4 Centre Ballroom

4:30-5:30  CCPM AGM
Level 4 East Ballroom

5:30-6:30  COMP AGM
Level 4 East Ballroom

7:00  Welcome Pub Night – Taverne 1909
1280, Avenue Des Canadiens-de-Montreal
Friday September 14

7:00-8:00  Breakfast and Registration
           Level 4

7:00-8:00  Yo-GO for RO (Yoga)
           Level B Salon A

8:00-9:00  Gordon Richards Lecture
           Level 4 Centre East Ballroom
           Introduction:

           Title
           Laura Dawson

           Objectives: Upon completion of this session, the learner will be able to:

9:00-10:15 COMP Awards/Gold Medal Presentation

10:15-10:45 Refreshment Break
             Level 4 West Ballroom

10:45-11:45 Poster Discussion 1
             Level 4 Centre Ballroom
             Moderators:

             Objectives: Upon completion of this session, the learner will be able to:
             • Discuss a variety of projects and research conducted across the country in radiation oncology.

35  OUTCOMES OF STEREOTACTIC BODY RADIOTHERAPY FOR ABDOMINOPELVIC OLIGOMETASTASES
   Jeevin Shah1, Jonathan Peng1, Elysia Donovan2, Raimond Wong1, Theodoros Tsakiridis1, Kimmen Quan1, Anand Swaminath1
   1McMaster University, Hamilton, ON
   2Juravinski Cancer Centre, Hamilton, ON

36  DOSE TOLERANCE OF THE BRACHIAL PLEXUS: A SYSTEMATIC REVIEW OF THE LITERATURE
   Michael Yan, Michael Brundage
   Queen's University, Kingston, ON

37  EFFECT OF FEEDING TUBE STRATEGY ON HOSPITALIZATION RATES AND OUTCOMES IN HEAD AND NECK CANCER PATIENTS TREATED WITH CHEMORADIOTHERAPY
   Gaurav Bhattacharya1, Josee Ivars2, Samy El Sayed1, Libni Eapen1, Alain Haddad1, Marc Gaudet1
   1University of Ottawa, Ottawa, ON
   2Bishop's University, Sherbrooke, QC
38 COMPARISON OF A RADIATION SPECIFIC SCORING SYSTEM (CPI) AND ALBI TO PREDICT LIVER CANCER PATIENT OUTCOMES
Sangyang Jia, Jonatan Snir, Laura Callan, Michael Lock
University of Western Ontario, London, ON

39 STEREOTACTIC RADIOThERAPY FOR PANCREATIC CANCER: A RETROSPECTIVE INSTITUTIONAL REVIEW
Rachel Glicksman1, Hans Chung2, Sten Myrehaug2, Darby Erler2, Renee Korol2, Aliaksandr Karotki2, Amandeep Taggar2, Yee Ung2
1University of Toronto, Toronto, ON
2Odette Cancer Centre, Toronto, ON

40 RE-Irradiation of primary adult CNS tumours: Outcomes and toxicities
Aishah Al-Qaderi, David Shultz, Fabio Moraes, Tony Tadic, Normand Laperriere, Barbara-Ann Millar, Alejandro Berlin
University of Toronto, Toronto, ON

41 IS THE IMPORTANCE OF HEART DOSE OVERSTATED IN THE TREATMENT OF NON-SMALL CELL LUNG CANCER? A SYSTEMATIC REVIEW OF THE LITERATURE
Tina Wanting Zhang1, Jonatan Snir1, Gabe Boldt2, George Rodrigues1, Alexander Louie1, Stewart Gaede1, David Palma1
1University of Western Ontario, London, ON
2London Regional Cancer Program, London, ON

42 STEREOTACTIC BODY RADIOThERAPY FOR METASTATIC COLORECTAL CANCER: COMPREHENSIVE REVIEW FROM A LARGE SINGLE INSTITUTION
Robert Thompson1, Patrick Cheung1, William Chu1, Sten Myrehaug1, Ian Poon1, Arjun Sahgal1, Hany Soliman1, Chia-Lin Tseng1, Shun Wong1, Yee Ung1, Ana Abrahao1, Darby Erler1, Liying Zhang2, Yoo-Joung Ko1, Hans Chung1
1University of Toronto, Toronto, ON
2MacroStat Inc., Toronto, ON

43 OUTCOMES OF INTENSITY MODULATED IRRADIATION FOR SINONASAL CANCERS IN THE MODERN ERA
Houda Bahig, Ehab Y Hanna, Adam S Garden, Sweet Ping Ng, Theresa Nguyen, Steven J Frank, Brandon G Gunn, David I Rosenthal, David C Fuller, William H Morrison, Renata Ferrarotto, Diana Bell, Jack Phan
The University of MD Anderson Cancer Center, Houston, TX

44 EARLY TOXICITY AND QUALITY OF LIFE RESULTS OF TUMOUR-TARGETED DOSE ESCALATION FOR LOCALIZED PROSTATE CANCER
Noelia Sanmamed, Cynthia Menard, Jenny Lee, Alejandro Berlin, Tim Craig, Bernadeth Lao, Alex Rink, Andrew Bayley, Charles Catton, Mary Gospodorowicz, Padraig Warde, Peter Chung
University Toronto, Toronto, ON
10:45-11:45  | Poster Discussion 2  
Level 4 East Ballroom  
Moderators:

Objectives: Upon completion of this session, the learner will be able to:
- Discuss a variety of projects and research conducted across the country in radiation oncology.

45  
RETROSPECTIVE MONTE CARLO DOSE-VOLUME ANALYSIS OF A SWEEPING-BEAM TOTAL BODY IRRADIATION TECHNIQUE  
Levi Burns1, Tony Teke2, Tony Popescu1, Cheryl Duzenli1  
1British Columbia Cancer Agency, Vancouver, BC  
2British Columbia Cancer Agency, Kelowna, BC

46  
ACCOMPANYING PATIENT - AN ORGANIZATIONAL RESOURCE AS A MEANS TO IMPROVE THE EXPERIENCE OF PATIENTS WITH CANCER: A NEEDS ASSESSMENT STUDY  
Israël Fortin, Valérie Lahaie, Amélé-Nina Setto, Marie-Pascale Pomey  
Université de Montréal, Montréal, QC

47  
WORKLOAD ESTIMATES USING PAIRED DETECTORS  
Robert Corns1, Keith Henderson2, Charles Schroeder3, Gurpreet Sandhu4, Ian McKay2  
1East Carolina University, Greenville, NC  
2Health Canada, Ottawa, ON  
3CancerCare Manitoba, Winnipeg, MB  
4British Columbia Cancer Agency, Surrey, BC

48  
ADVANCED PROSTATE IMAGING OF RECURRENT CANCER AFTER RADIOTHERAPY (PICS): INTERIM RESULTS OF A PROSPECTIVE, MULTI-CENTRE TRIAL  
Wei Liu1, Hans Chung2, Peter Chung3, Katherine Zukotynski4, Ur Metser3, Irina Rachinsky1, Robert Wolfson5, Susan Archer1, Louise Emmett6, Glenn Bauman1  
1London Regional Cancer Program, London, ON  
2Odette Cancer Centre, Toronto, ON  
3Princess Margaret Cancer Centre, Toronto, ON  
4Hamilton Health Sciences Centre, Hamilton, ON  
5Sunnybrook Health Sciences Centre, Toronto, ON  
6St. Vincent's Hospital, Sydney, AU

49  
CANNABIS UTILIZATION RATES IN THE CANCER PATIENT POPULATION  
Kevin Martell1, Alysa Fairchild2, Bronwen LeGerrier2, Richie Sinha1, Sarah Baker2, Hongwei Liu1, Abhijit Ghose1, Ivo Olivotto1, Marc Kerba1  
1University of Calgary, Calgary, AB  
2University of Alberta, Edmonton, AB

50  
RADIATION INDUCED MENINGIOMA IN ADULT SURVIVORS OF CHILDHOOD LEUKEMIA OR PRIMARY BRAIN TUMOUR TREATED WITH CRANIAL RADIOTHERAPY: INCIDENCE AND SCREENING RECOMMENDATIONS  
Maryam Dosani, Jordan Tran, Jessica Conway, Karen Goddard  
British Columbia Cancer Agency, Vancouver, BC
REPORT EXPLORING THE INFLUENCE OF ABDOMINAL COMPRESSION ON DOSIMETRY OF ADJACENT GASTRO-INTESTINAL CRITICAL STRUCTURES AND TOXICITIES FOR PATIENTS TREATED WITH NON-HEPATIC ABDOMINAL SBRT
Soumyajit Roy, Svetlana Kuznetsova, Petra Grendarova, Kundan Thind, Nicolas Ploquin, Richie Sinha
University of Calgary, Calgary, AB

PRESENTING STAGE AND RISK GROUP IN MEN WHO DIE OF PROSTATE CANCER
Scott Tyldesley, Sunil Parimi, Suraya Bondy, Maria Aparicio, Jane Cho, Katherine Sunderland, Francois Bachand, Kim Chi, Tom Pickles
1University of British Columbia, Vancouver, BC
2British Columbia Cancer Victoria, Victoria, BC
3British Columbia Cancer Vancouver, Vancouver, BC
4British Columbia Cancer Kelowna, Kelowna, BC

LAYING THE GROUNDWORK FOR ACCURATE CHERENKOV EMISSION-BASED ELECTRON BEAM DOSIMETRY
Yana Zlateva, Bryan Muir, Issam El Naqa, Jan Seuntjens
1McGill University, Montreal, QC
2National Research Council of Canada, Ottawa, ON
3University of Michigan, Ann Arbor, MI

MC SIMULATIONS OF MIRCOCT IMAGING ON THE SMALL ANIMAL RADIATION RESEARCH PLATFORM (SARRP)
Dylan Breitkreutz, Chris Johnstone, Magdalena Bazalova-Carter
University of Victoria, Victoria, BC

A COMPARATIVE STUDY OF QUALITY OF LIFE IN PATIENTS WITH LOW-AND INTERMEDIATE-RISK PROSTATE CANCER: STEREOTACTIC RADIOTHERAPY VERSUS HIGH DOSE-RATE BRACHYTHERAPY MONOTHERAPY VERSUS HIGH DOSE-RATE BRACHYTHERAPY BOOST
Joelle Helou, Gerard Morton, Andrea Bezjak, Alex Kiss, Nicole Mittmann, Ananth Ravi, Hans Chung, Melanie Davidson, Patrick Cheung, Andrew Loblaw
University of Toronto, Toronto, ON

SUBCUTANEOUS SPACER INJECTION TO REDUCE SKIN TOXICITY FOR ACCELERATED PARTIAL BREAST BRACHYTHERAPY
Jean-Philippe Pignol, Gerson Struik, Taco Klem
1Dalhousie University, Halifax, NS
2Erasmus Medical Centre, Rotterdam, NL
3St Franciscus Gasthuis, Rotterdam, NL
THE IMPACT OF INTRAPROSTATIC CALCIFICATIONS ON BIOCHEMICAL CONTROL AFTER PERMANENT PROSTATE IMPLANT

Eric Vigneault1, Khaly Mbodji1, Andre-Guy Martin1, Nelson Miksys2, Rowan Thomson2, Sylviane Aubin1, Nicolas Varfalvy1, Luc Beaulieu1
1CHU de Québec Université Laval, Québec, QC
2Carleton University, Ottawa, Ottawa, ON

RESULTS OF A PHASE II PROSPECTIVE STUDY ON DOSE ESCALATION TO THE DOMINANT INTRA-PROSTATIC LESIONS (DILS) WITH ULTRASOUND (US)-PLANNED HDR PROSTATE BRACHYTHERAPY

Steven Tisseverasinghe1, Juanita Crook1, Deidre Batchelar1, Cynthia Araujo1, Miren Gaztañaga2, Michelle Hilts1, Marie-Pierre Milette1, Ana Ots3, Jim Rose4, Francois Bachand1
1University of British Columbia, Kelowna, BC
2Universidad Complutense Madrid, Madrid, SP
3Lincoln County hospital, Lincoln, BC
4University of British Columbia, Abbotsford, BC

ISODOSE SURFACE VOLUMES IN CERVIX CANCER BRACHYTHERAPY: COMPARISON OF STANDARD (POINT A) AND INDIVIDUALIZED IMAGE GUIDED ADAPTIVE (EMBRACE) BRACHYTHERAPY

Monica Serban1, Christian Kirisits2, Karen Nkwane1, Isabelle Dumas3, Jamema Swamidas4, Astrid de Leeuw5, Robert Hudej6, Gerry Lowe7, Nicole Nesvacil2, Richard Pötter2, Jacob Lindegaard1, Kari Tanderup1
1Aarhus University, Aarhus, DK
2Medical University of Vienna, Vienna, AT
3Gustave-Roussy, Villejuif, Paris, FR
4Tata Memorial Hospital, Mumbai, IN
5University Medical Center Utrecht, Utrecht, NL
6Institute of Oncology Ljubljana, Ljubljana, SI
7Cancer Centre, Mount Vernon Hospital, London, UK

MULTI-INSTITUTIONAL STUDY OF SALVAGE IRRADIATION WITH SINGLE-MODALITY INTERSTITIAL BRACHYTHERAPY FOR THE TREATMENT OF RECURRENT GYNECOLOGICAL TUMOURS IN THE PELVIS

Hamid Raziee1, David D’Souza2, Vikram Velker2, Eric Leung1
1University of Toronto, Toronto, ON
2University of Western Ontario, London, ON

11:45-12:45 Radiation Therapy Speaker Exchange
Level 4 East Ballroom
Introduction:

Title
Melanie Dempsey

Objectives:
Upon completion of this session, the learner will be able to:

12:45-2:45 Lunch – Level 4 West Ballroom
Industry Symposium
Committee Meetings
Fellow Competition
Level 4 Centre Ballroom
Moderators:

Objectives: Upon completion of this session, the learner will be able to:
- Review a variety of fellow research conducted across the country in radiation oncology.

61 COMPARISON OF LOCAL FAILURE AND RADIONECROSIS ACCORDING TO DOSE PRESCRIPTION FOR SMALL TO MEDIUM Sized BRAIN METASTASIS TREATED WITH RADIOSURGERY
Fabio Y Moraes, Jeff Winter, Archya Dasgupta, Catherine Coolens, Barbara-Ann Millar, Normand Laperriere, Derek Tsang, Tatiana Conrad, Gelareh Zadeh, Mark Bernstein, Paul Kongkham, Alejandro Berlin, David Shultz
University of Toronto, Toronto, ON

62 COMPARISON OF THE CLINICAL BEHAVIOUR OF N3 HPV RELATED AND UNRELATED HEAD AND NECK CANCER IN THE IMRT ERA
Nhu Tram Nguyen1, Jie Sue2, Eugene Yu2, Eric Tran3, John Waldron1, Wei Xu2, John Kim1, Jolie Ringash1, Andrew Bayley1, Andrew Hope1, Meredith Giuliani1, John Cho1, Scott Bratman1, Aaron Hansen1, Jonathan Irish2, John de Almeida2, Bayardo Perez-Ordenez2, Ilan Weinreb1, Brian O'Sullivan1, Shao Hui Huang1
1Princess Margaret Cancer Centre, Toronto, ON
2University of Toronto, Toronto, ON
3British Columbia Cancer Agency, Vancouver, BC

63 CHANGE OF RADIOTHERAPY PRACTICE PATTERN IN LYMPHOMA AT A LARGE ACADEMIC CENTRE
Melody Qu, Richard Tsang, David Hodgson, Alexander Sun, Normand Laperriere, Woodrow Wells, Mary Gospodarowicz
University of Toronto, Toronto, ON

64 WHAT'S THE MATTER WITH MATTED NODES? SIGNIFICANCE OF MATTED LYMPH NODES IN HPV-RELATED OROPHARYNGEAL SQUAMOUS CELL CARCINOMA: A MULTI-INSTITUTIONAL POPULATION-BASED COHORT STUDY
Kitty Huang1, Robyn Banerjee1, Brock Debenham2, Adarsh Patel1, Farahna Sabiq1, Harold Lau1, David Skarsgard1, John Lysack1, Guanmin Chen1, Harvey Quon1
1University of Calgary, Calgary, AB
2University of Alberta, Edmonton, AB

65 WHOLE GENOME CHARACTERIZATION OF CERVICAL CANCER
Jelena Lukovic1, Kathy Han1, Melania Pintilie2, Naz Chaudary2, Julissa Tsao2, Rene Quevedo1, Richard Hill2, Anthony Fyles1, Jessica Weiss2, Trevor Pugh1, Michael Milosevic1
1University of Toronto, Toronto, ON
2Princess Margaret Cancer Centre, Toronto, ON

66 OPTIMIZING RECTAL SPACER GEL PLANNING
Jacqueline Lam1, Isabelle Gagné2, Howard Pai1, Jennifer Goulart1, Abraham Alexander1
1University of British Columbia, Victoria, BC
2University of Victoria, Victoria, BC
2:45-3:45  Radiation Therapy Oral Session 1  
Level B Salon A  
Moderators:  

Objectives:  
Upon completion of this session, the learner will be able to:  

67  
PROSTATE OR BONE? - COMPARING THE EFFICACY OF IMAGE GUIDANCE SURROGATES FOR PELVIS & PROSTATE RADIOTHERAPY USING ACCUMULATED DELIVERED DOSE  
Vickie Kong, Andrew Bayley, Charles Catton, Tim Craig, Peter Chung  
University of Toronto, Toronto, ON  

68  
DOES ACCUMULATED DOSE TO PAROTID GLANDS IMPROVE PREDICTION OF PATIENT REPORTED OUTCOMES RELATED TO SALIVARY FUNCTION IN NASOPHARYNGEAL CANCER PATIENTS?  
Olive Wong, BeiBei Zhang, John Waldron, Joanne Moseley, Jenny Lee, Andrew Hope, Jolie Ringash, Shao Hui Huang, Brian O’Sullivan, Meredith Giuliani, Andrea McNiven  
Princess Margaret Cancer Centre, Toronto, ON  

69  
SEMI-AUTOMATED VOLUMETRIC MODULATED ARC THERAPY PLANNING FOR POST-OPERATIVE RADIOTHERAPY IN ENDOMETRIAL CANCER: IMPROVEMENTS IN NORMAL TISSUE SPARING AND PLANNING TIME  
Tony Kin-Ming Lam, Jeff Winter, Tara Rosewall, Kathy Han, Michael Milosevic, Tony Tadic  
Princess Margaret Cancer Centre, Toronto, ON  

70  
ENSURING A REPRODUCIBLE PATIENT POSITION FOR PERMANENT BREAST SEED IMPLANT  
Michelle Brandel, Laura Vernon, Michelle Hilts, Deidre Batchelar, Danielle Anderson, Bart Robertson, Juanita Crook  
Sindi Ahluwalia Centre for the Southern Interior, Kelowna, BC  

71  
FROM CT-GUIDED TO MR-GUIDED INTRACAVITARY BRACHYTHERAPY FOR CERVICAL CANCER: WHAT DO THE KEY STAKEHOLDERS HAVE TO SAY ABOUT THE TRANSITION?  
Kitty Chan, Tara Rosewall, Angela Cashell, Anne DiTomasso, Susan Patterson, Akbar Beiki-Ardakani, Anthony Fyles, Michael Milosevic  
Princess Margaret Cancer Centre, Toronto, ON  

72  
EXTRACTING FROM PATIENT EXPERIENCE: ATTITUDE TOWARDS BRACHYTHERAPY IN BRITISH COLUMBIA  
Jenny Soo, Scott Tyldesley, John French  
British Columbia Cancer Agency, Vancouver, BC
Workshop 1  MRI-only treatment planning: Ready for the clinic?  Ives Leveque
Level B Salon A
Ives Levesque, Cynthia Ménard, David Roberge

Objectives: By the end of this session, the participants will be able to:
1. List the benefits and challenges of MRI-only treatment planning.
2. Describe technologies available for MRI-only treatment planning.
3. Discuss potential areas of clinical applications of MRI-only treatment planning.
4. Be aware of the impact on clinical workflows and administrative issues.

Workshop 2  Image-Guided Adaptive Radiotherapy: Principles and Practices  Mike Velec
Level B Salon B
Michael Velec, Michael Milosevic, Jean-Pierre Bissonnette, Laura Dawson

Objectives: By the end of this session, the participants will be able to:
1. Review the rationale and clinical evidence for adaptive radiotherapy.
2. Identify key technologies and common adaptation strategies in clinical use.
3. Recognize the impact on Therapists, Physicists and Oncologists and opportunities for collaboration.
4. Discuss adaptation practices for several challenging patient cases.

Workshop 3  Delivery Simulation in Prostate Brachytherapy  Tyler Myer
Level B Salon C
Tyler Myler, Luc Beaulieu, Michael Roumeliotis, Sarah Quirk, Siraj Husain, Kevin Martell, Amy Frederick, Alexandra Guebert

Objectives: By the end of this session, the participants will be able to:
1. Describe the process steps used for intraoperatively planned prostate brachytherapy.
2. Identify tasks commonly associated with each discipline (MP, RTT, RO) during an implant.
3. Develop hands-on experience in implant techniques with phantom simulation.

Workshop 4  Using e-tools to put patients at the centre of their care  Tarek Hijal
Level 2 Salon 4/5
Tarek Hijal, Laurie Hendren, John Kildea

Objectives: By the end of this session, the participants will be able to:
1. Design at a high-level, a patient-centric module for a mobile app based on the patient-centric principles represented.
2. Evaluate e-tools based on how they follow the design principles.

Workshop 5  Modern Management of Brain Metastases  Valerie Raymond-Panet
Level A Hemon
Valerie Panet-Raymond, Arjun Sahgal, Alan Nichol, Neil Kopke, Russell Ruo, Johanna Ortiz Jimenez

Objectives: By the end of this session, the participants will be able to:
1. Understand the current changes to the management of brain metastases cases.

7:00  Cocktail Reception – Fairmont QE Agora
900 Rene Levesque Blvd. W
Saturday September 15, 2018

7:00-8:00  CROF Fun Run/Walk
Meet in the Hotel Lobby

8:00-9:00  Breakfast and Registration
Level 4

9:00-10:00 CARO Oral Session 3 – All Mixed Up
Level 4 Centre Ballroom
Moderators:

Objectives: Upon completion of this session, the learner will be able to:
• Discuss specific topics in radiation medicine including total marrow irradiation, inter-
observer variability on delineation, nanoparticles as radiosensitizer, immunotherapy
and radiotherapy for lung cancer, peer-review in lung cancer, and use of single fraction
radiotherapy for bone metastases.

73  EVALUATING DOSE-ESCALATED TOTAL MARROW IRRADIATION (TMI) FOR
RELAPSED MULTIPLE MYELOMA
Rajiv Samant1, Balazs Nyiri2, Lee Gerig1, Jamie Bahm2, Steve Andrusyk2, Vimoj Nair1,
Andrea Kew1, Arleigh McCurdy1, Amarilis Figueiredo1, Christopher Bredeson1, Harry
Atkins1
1University of Ottawa, Ottawa, ON
2The Ottawa Hospital, Ottawa, ON

74  VARIABILITY IN EXPERT DELINEATION OF TARGETS AND ORGANS-AT-RISK IN
GLIOMAS FOR CT-MRI AND MRI-ONLY WORKFLOWS
Chia-Lin Tseng1, James Stewart1, Gillian Whitfield2, Joost Verhoeff3, Joseph Bovi4, Hany
Soliman1, Caroline Chung5, Sten Myrehaug1, Mikki Campbell1, Young Lee1, Mark
Ruschin1, Arjun Sahgal1
1University of Toronto, Toronto, ON
2The University of Manchester, Manchester, UK
3University Medical Center Utrecht, Utrecht, NL
4Medical College of Wisconsin, Milwaukee, WI
5The University of Texas, Houston, TX

75  AN IN VIVO MODEL TO STUDY THE USE OF NANOPARTICLES AS A
RADIOSENSITIZER IN RADIATION BEAMS GENERATED FROM A LOW Z TARGET
Michael Ha1, Olivia Piccolo1, Nicole Melong1, John Lincoln1, David Parsons2, Alexander
Detappe3, Olivier Tillement4, Ross Berbeco5, Jason Berman1, James Robar1
1Dalhousie University, Halifax, NS
2UT Southwestern, Dallas, TX
3MIT, Boston, MA
4Universite de Lyon, Villeurbanne, FR
5Harvard University, Boston, MA

76  REAL WORLD IMMUNOTHERAPY RESPONSE AND PULMONARY TOXICITY IN
PATIENTS TREATED WITH CHEST RADIOTHERAPY
Daniel Glick, Elaine Wai, Edward Brooks, Dave Fenton, Leathia Fiorino, Georgia Geller,
Zia Poonja, Doran Ksieniski
University of British Columbia, Victoria, BC
DEVELOPMENT OF BEST PRACTICES OF PEER REVIEW IN LUNG RADIATION THERAPY
Anand Swaminath1, Brian Yaremko2, Luluel Khan3, Carina Simniceanu4, Michael Brundage5
1McMaster University, Hamilton, ON
2Western University, London, ON
3University of Toronto, Toronto, ON
4Cancer Care Ontario, Toronto, ON
5Queen's University, Kingston, ON

PROGRAMMATIC COMPARISON AND DISSEMINATION OF SINGLE FRACTION RADIOTHERAPY PRESCRIBING PRACTICES FOR BONE METASTASES CAN RESULT IN MEANINGFUL AND LASTING CHANGE IN PRACTICE ON A POPULATION LEVEL
Robert Olson1, Mathew Chan2, Neelam Minhas1, Gurkirat Kandola1
1University of British Columbia, Prince George, BC
2University of British Columbia, Vancouver, BC

Objectives: Upon completion of this session, the learner will be able to:
- Understand important concepts in treatment planning and delivery of modern radiation therapy for GI and GU tumours.
- Learn about costs of different modalities, and new imaging tools related to the treatment of prostate cancer.

IMPACT OF DOSE-CAPPING WITH CONCURRENT CHEMORADIOThERAPY IN RECTAL CANCER PATIENTS
Peter (Ran) Yang, Kurian Joseph, Sunita Ghosh, Tirath Nijjar, Diane Severin, Keith Tankel, Moftah Younis, Alysa Fairchild, Jennifer Spratlin, Karen Mulder, Nawaid Usmani
University of Alberta, Edmonton, AB

DEFERRAL OF SURGERY POST-CHEMORADIATION FOR LOCALLY ADVANCED RECTAL CANCER: THE EXPERIENCE OF THE MCGILL UNIVERSITY HEALTH CENTRE
Neil Kopek, Sergio Faria, Tarek Hijal, Patrick Charlebois, Caroline Reinhold, Giovanni Artho, Raghu Rajan, Sender Liberman
McGill University, Montreal, QC

RADIOBIOLOGICALLY-GUIDED RADIOTHERAPY IN LARGE PRIMARY AND METASTATIC HEPATIC LESIONS
Daegan Sit1, Jonatan Snir2, Stewart Gaede1, Michael Lock1
1McMaster University, Hamilton, ON
2Western University, London, ON

A PROSPECTIVE, MULTINATIONAL COMPARISON OF MULTI-PARAMETRIC AND WHOLE BODY MAGNETIC RESONANCE IMAGING (MP-MRI AND WB-MRI) F-18 FLUORO-METHYL-CHOLINE (FCH) AND GA-68 HBED-CC (PSMA) IN HIGH RISK MEN BEING CONSIDERED FOR SALVAGE RADIATION TREATMENT FOR BIOCHEMICAL FAILURE POST RADICAL PROSTATECTOMY: DETECTION RATES, MANAGEMENT IMPACT AND TREATMENT RESPONSE
Glenn Bauman1, Ur Metser2, Andrew Scott3, Frederic Poulart4, Andrew Weickhardt5, Ian Davis6, Rod Hicks7, Shonit Punwani8, Sue Chua9, Louise Emmett10
83
COST-UTILITY ANALYSIS OF DIFFERENT RADIATION MODALITIES FOR INTERMEDIATE-RISK PROSTATE CANCER
Najlaa Alyamani1, Marc Gaudet1, Sasha Van Katwyk1, Julie Renaud2, Alain Haddad1
1University of Ottawa, Ottawa, ON
2The Ottawa Hospital, Ottawa, ON

84
HYPOFRACTIONATED INTENSITY MODULATED RADIATION THERAPY TO PROSTATE AND PELVIC NODES PLUS ANDROGEN SUPPRESSION IN HIGH RISK PROSTATE CANCER.
Sergio Faria, Fabio Cury, Marie Duclos, Luis Souhami
McGill University, Radiation Oncology, Montreal, QC

9:00-10:00 COMP Oral Session 3
Level 3 Drummond
Moderators:

Objectives: Upon completion of this session, the learner will be able to:

85
CLINICAL EVALUATION OF A MACHINE LEARNING-BASED AUTOMATED TREATMENT PLANNING METHOD FOR PROSTATE RADIOTHERAPY
Leigh Conroy, Alejandro Berlin, Michael C. Tjong, Tim Craig, Peter Chung, Chris McIntosh, Thomas G. Purdie
Princess Margaret Cancer Centre, Toronto, Ontario

86
THE CLINICAL CASE FOR SIMULTANEOUSLY-OPTIMIZED MIXED ELECTRON-PHOTON RADIOTHERAPY ON STANDARD RADIOTHERAPY LINACS: BREAST AND SOFT TISSUE SARCOMA IRRADIATION
Marc-Andre Renaud, Monica Serban, Christine Lambert, Carolyn Freeman, George Shenouda, Jan Seuntjens
McGill University, Montreal, QC

87
AUTOMATED TREATMENT PLANNING FOR STEREOTACTIC BRAIN RADIOSURGERY
Malik Brunet-Benkhoucha, Michael Ayles
Hôpital Maisonneuve-Rosemont, Montreal, QC

89
MICROCT IMAGING DOSE FOR A COMMERCIAL IMAGE-GUIDED SMALL ANIMAL IRRADIATOR
Chris Johnstone, Magdalena Bazalova-Carter
University of Victoria, Victoria, BC
A REVIEW OF THE CURRENT STATE OF PHYSICS AND DOSIMETRY REPORTING IN RADIATION BIOLOGY RESEARCH
Yannick Poirier, Emily Draeger, Amit Sawant, Isabel-Lauren Jackson, Zeljko Vujaskovic
University of Maryland School of Medicine, Baltimore, MD

EPID RECONSTRUCTION OF THE DELIVERED PATIENT RADIATION DOSE FOR NON-COPLANAR BEAM THERAPY
Ivan Kutuzov, Boyd McCurdy
The University of Manitoba, Winnipeg, MB

9:00-10:00 COMP Oral Session 4
Level B Salon A/B/C
Moderators:

Objectives: Upon completion of this session, the learner will be able to:

EFFECT OF REDUCED DOSE OF GADOLINIUM CONTRAST IN TUMOUR VOLUME DELINEATION AIDED BY DCE-MRI FOR SINGLE FRACTION RADIOTHERAPY IN EARLY STAGE BREAST CANCER PATIENTS
Matthew Mouawad1, Stewart Gaede2, Neil Gelman3, R. Terry Thompson3, Frank S. Prato3, George Hajduk2, Edward Yu2, Tracy Sexton2, Brian Yeremko2, Michael Lock2, Muriel Brackstone1, Heather Biernaski3
1Western University, London, ON
2London Regional Cancer Program, London, ON
3Lawson Health Research Institute, London, ON

DEFINING BACKGROUND IN RECTAL CANCER FDG-PET SCANS BY DECOMPOSING DIFFERENTIAL UPTAKE VOLUME HISTOGRAMS
James Schneider1, Robert Lisboa1, Marc Hickeson1, Guillaume Chaussé1, Nada Tomic1, Té Vuong1, François DeBlois2, Jan Seuntjens1, Slobodan Devic1
1McGill University, Montreal, QC
2L'Université de Montréal, Montreal, QC

THE FEASIBILITY OF Registering INTRA-OPERATIVE CONE-BEAM CT IMAGING TO RADIATION PLANNING CT IMAGES FOR HEAD AND NECK CANCER
Robert Weersink1, Sarah Aubert2, Michael Daly3, Nidal Muhanna1, Harley Chan3, BC John Cho1, David Jaffray1, Jonathon Irish1
1University of Toronto, Toronto, ON
2McMaster University, Hamilton, ON
3Princess Margaret Cancer Centre, Toronto, ON

PERFORMANCE COMPARISON BETWEEN THREE DIFFERENT IMAGE FUSION METHODS FOR THE REGISTRATION OF LIVER REGION IN PLANNING CT AND POST RADIATION THERAPY PRIMOVIST ENHANCED MRI
Svetlana Kuznetsova, Petra Grendarova, Richie Sinha, Kundan Thind, Nicolas Ploquin
University of Calgary, Calgary, AB
23

TEXTURE FEATURES FROM EARLY ENHANCEMENT POST-CONTRAST MRI ARE PREDICTIVE OF METASTATIC SARCOMA
Zaki Ahmed, Carolyn R. Freeman, Krista Goulding, Tom Powell, Jan Seuntjens, Robert Turcotte, Ives R. Levesque
McGill University, Montreal, QC

RENAL CT PERFUSION IMAGING DURING HEMODIALYSIS: RELATING KIDNEY BLOOD FLOW TO RESIDUAL RENAL FUNCTION LOSS
Raanan Marants, Claire Grant, Christopher McIntyre, Ting-Yim Lee
University of Western Ontario, London, ON

9:00-10:00 Radiation Therapy Oral Session 2
Level 3 Salon 6/7
Moderators:

Objectives: Upon completion of this session, the learner will be able to:

A COMPARISON OF USER EXPERIENCE AND ACCURACY OF SET-UP IN THE USE OF THERMOPLASTIC AND 3D PRINTED BEAM DIRECTIONAL SHELLS FOR EXTERNAL BEAM RADIOTHERAPY
Fiona Robertson1, Paddy Niblock2, Philip Vaughan2, Robert Jackson2, Scott Dunbar3
1Queen Margaret University, Dundee, UK
2University of Dundee, Dundee, UK
3Self employed, Dundee, UK

RADIATION THERAPY STAFFING LEVELS AND WORKLOAD IN CANADA
Alison Giddings1, Luminita Nica1, John French1, Amanda Bolderston1, Carol-Anne Davis2, Marcia Smoke3
1British Columbia Cancer Agency, Vancouver, BC
2Dalhousie University, Halifax, NS
3Juravinski Cancer Centre, Hamilton, ON

INTEGRATING TREATMENT COMPLEXITY INTO RADIATION THERAPY CASE COSTING
James Loudon, Edwin Chan, Leslie Proctor, Linda Welham
Southlake Regional Health Centre, Newmarket, ON

EVALUATION OF RADIOTHERAPY PATIENT DATA COLLECTION IN BREAST CANCER PEER REVIEW ROUNDS
Grace Lee1, Robert Dinniwell2, Lucy Lu1, Susanne Lofgren1, Anthony Fyles1, Fei-Fei Liu1, Kathy Han1, Wilfred Levin1, Tatiana Conrad1, Jennifer Croke1, Joelle Helou1, Aisling Barry1, C. Anne Koch1
1University of Toronto, Toronto, ON
2University of Western Ontario, London, ON

SEVEN DAY MODEL FOR RADIATION THERAPY (SMRT) - CAPACITY MANAGEMENT AT TRILLIUM HEALTH PARTNERS
Gaylene Medlam, Raxa Sankreacha, Kristal Bozzo, Anthony Brade, Elliot Archer
Trillium Health Partners, Mississauga, ON
INVESTIGATING RADIATION THERAPY INCIDENTS: THE POWER OF A COLLABORATIVE INVESTIGATION
Carol-Anne Davis1, Nicole Harnett2, Brian Liszewski2
1Dalhousie University, Halifax, NS
2University of Toronto, Toronto, ON

10:00-11:00 Jean Roy Lecture
Level 4 Centre Ballroom
Introduction:

Title
Luc Beaulieu

Objectives: Upon completion of this session, the learner will be able to:

11:00-11:30 Refreshment Break
Level 4

11:30-12:30 Reviewer's Choice
Moderators:

Objectives:
Upon completion of this session, the learner will be able to:
- Understand a variety of interesting and select topics of radiation therapy innovations, and how these impact our cancer population.
- Describe the results of innovative and practice-changing research done by Canadian peers.

103 NOT PUBLISHED

104 FINAL ANALYSIS OF A PHASE III COMPARISON OF PROPHYLACTIC CRANIAL IRRADIATION VERSUS OBSERVATION IN PATIENTS WITH LOCALLY ADVANCED NON-SMALL CELL LUNG CANCER: 10-YEAR UPDATE OF RTOG 0214
Alexander Sun1, Chen Hu2, Elizabeth Gore3, Stuart Wong3, Gregory Videtic4, Swati Dutta5, Mohan Suntharalingam6, Yuhchyau Chen7, Laurie Gaspar8, Hak Choy9
1University of Toronto, Toronto, ON
2Johns Hopkins University School of Medicine, Philadelphia, PA
3Medical College of Wisconsin, Milwaukee, WI
4Cleveland Clinic Foundation, Cleveland, OH
5Michigan Cancer Research Consortium, Grand Rapids, MI
6University of Maryland Medical System, Maryland, MD
7University of Rochester, Rochester, NY
8University of Colorado, Denver, CO
9UT Southwestern Medical Center, Dallas, TX
105
LONG TERM OUTCOMES OF A PHASE II TRIAL OF NEOADJUVANT TEMOZOLOMIDE (TMZ) FOLLOWED BY ACCELERATED HYPOFRACTIONATED RADIOTHERAPY (AHRT) AND CONCOMITANT TMZ FOLLOWED BY ADJUVANT TMZ IN PATIENTS WITH NEWLY DIAGNOSED GlioblASTOMA (GBM)
George Shenouda, Luis Souhami, Kevin Petrecca, Scott Owen, Valerie Panet-Raymond, Tatiana Carvalho, Marie-Christine Guiot, Bassam Abdulkarim
McGill University, Montreal, QC

106
COMPETING CAUSES OF DEATH IN PATIENTS WITH EARLY STAGE SEMINOMA: A POPULATION BASED MORTALITY ANALYSIS COMPARING RADIATION THERAPY VERSUS CHEMOTHERAPY
Gaurav Bahl, Rima Pathak, Jenny Ko, Michael Sia, Scott Tyldesley
University of British Columbia, Vancouver, BC

107
STEREOTACTIC BODY RADIOTHERAPY FOR THE TREATMENT OF VENTRICULAR TACHYCARDIA REFRACTORY TO CATHETER ABLATION: PRELIMINARY RESULTS
Université de Lausanne, Lausanne, FR

108
DEEP NEURAL NETWORK FOR MR-TO-CT IMAGE TRANSLATION APPLIED TO H&N PATIENT DATA
Mostafa Shahabinejad, Teo Stanescu, Timothy Chan, Ali Hosni, Andrea McNiven, Shao Hui Huang, Andrew Bayley, Scott Bratman, John Cho, Meredith Giuliani, Andrew Hope, John Kim, Brian O'Sullivan, Jolie Ringash, John Waldron, David Jaffray
University of Toronto, Toronto, ON

12:30-2:00
CARO ESTRO Symposium
Facilitator:
Radiomics
Wouter van Elmpt (ESTRO)

Objectives: Upon completion of this session, the learner will be able to:

2:00-2:15
Closing Remarks
POSTER ABSTRACTS

109
MC SIMULATIONS OF MIRCOCT IMAGING ON THE SMALL ANIMAL RADIATION RESEARCH PLATFORM (SARRP)
Dylan Breitkreutz, Chris Johnstone, Magdalena Bazalova-Carter
University of Victoria, Victoria, BC

110
DOSIMETRIC EVALUATION OF PSMA PET-DELINEATED DOMINANT INTRA-PROSTATIC LESION SIMULTANEOUS IN-FIELD BOOSTS
Christopher Goodman1, Anthony Chytros2, Hatim Fakir1, Stephen Pautler1, Joseph Chin1, Glenn Bauman1
1University of Western Ontario, London, ON
2University of Waterloo, Waterloo, ON

111
AN OPEN-SOURCE APPLICATION WITH GRAPHICAL USER INTERFACE FOR RAPID 2-D IN VIVO DOSIMETRY BY PORTAL IMAGING
David DeVries, Zach Whatman, Xiangyang Mei, Stefano Peca
Queen's University, Kingston, ON

112
INVESTIGATION OF THE QUININE SULFATE SPECTRAL PROPERTIES AND ITS EFFECTS ON THE CERENKOV EMISSION DOSIMETRY
Emilie Jean, Marie-Ève Delage, Luc Beaulieu
Université Laval, Québec, QC

113
MAGIC-TYPE POLYMER GEL FOR THREE DIMENSIONAL DOSE DISTRIBUTION OF GRID THERAPY
Hassanali nedaei, Tehran University of medical Sciences, Tehran
Somiah Darbar Panah Ahmadi
Tehran University of Medical Sciences, Tehran, Iran

114
PENUMBRA MEASUREMENTS AND COMPARISON OF IN-HOUSE AND STANDARD CIRCULAR CONES BY GAFCHROMIC FILM, PINPOINT ION CHAMBER AND MCNPX MONTE CARLO SIMULATION
Tehran University of Medical Sciences, Tehran, Iran

115
DEVELOPMENT AND CHARACTERIZATION OF A 3 POINTS PLASTIC SCINTILLATOR DOSIMETER IN HDR BRACHYTHERAPY
Haydee Maria Linares Rosales1, Louis Archambault1, Sam Beddar2, Luc Beaulieu1
1CHU de Quebec-Université Laval, Quebec, QC
2The University of Texas MD Anderson Cancer Center, Houston, TX

116
A NOVEL METHODOLOGY FOR RESOLVING THE ELECTRON ENERGY FLUENCE OF A RADIATION BEAM
Humza Nusrat1, Arman Sarfehnia2, Geordi Pang2
1Ryerson University, Toronto, ON
2Sunnybrook Health Sciences Centre, Toronto, ON
EXPERIMENTAL VALIDATION OF THE MONTE CARLO CALCULATED \[ K_{\text{Q}_{\text{MSR}},\text{Q}_{0}}^{\text{F}_{\text{MSR}},\text{F}_{\text{REF}}} \] FACTORS FOR THE REFERENCE DOSIMETRY OF LEKSELL GAMMA KNIFE ICON UNIT IN THE CONTEXT OF THE IAEA TRS-483 PROTOCOL

Lalageh Mirzakhani1, Arman Sarfehnia2, Jan Seuntjens1
1McGill University, Montreal, QC
2Sunnybrook Health Sciences Centre, Toronto, ON

ANNUAL LINAC CALIBRATION IMPLEMENTATION WITHIN QATRACK+

Laurent Tantôt
Hôpital Maisonneuve-Rosemont, Montréal, QC

PERFORMANCE OF 9 ELEKTA X-RAY VOLUME IMAGING (XVI) GENERATORS FOR PLANAR AND VOLUME VIEW ACQUISITIONS

Laurie K. Archambault, Matthieu Lemire
Hospital Maisonneuve-Rosemont (CIUSSS), Montreal, QC

THE EFFECT OF THE FLATTENING FILTER ON PHOTONEUTRON PRODUCTION AT 10 MV IN THE VARIAN TRUEBEAM LINAC

Logan Montgomery, Michael Evans, Li Heng Liang, John Kildea
McGill University, Montreal, QC

COMPARING THE USE OF PLENOPTIC VERSUS STANDARD CAMERAS IN 3D SCINTILLATION-BASED DOSIMETRY SYSTEMS

Madison Rilling, François Bourassa, Simon Thibault, Louis Archambault
Université Laval, Québec City, QC

RESPONSE OF AN ORGANIC PHOTODIODE TO MEGAVOLTAGE PHOTON BEAMS

Michael Hupman, Ian Hill, Alasdair Syme
Dalhousie University, Halifax, NS

RADIATION DOSE IN C. T. PROCEDURES USING SIZE SPECIFIC DOSE ESTIMATION

Narinder Paul Singh1, Neha Chaudhary2, Bhupendra Singh Rana3, Sanjeev Kumar4, Inderjeet Singh sandhu5,
1PTU Jalandhar, Jalandhar, IN
2MD Oswal Cancer Treatment and Research, Ludhiana, IN
3PGIMER, Chandigarh, IN
4SD College, Chnadigarh, IN
5Chitkara University, Rajpura, IN

4D-VMAT DOSE CALCULATION USING TREATMENT SPECIFIC RESPIRATORY MOTIONS

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DOSE PERTURBATION OF ESOPHAGEAL STENTS IN VOLUMETRIC MODULATED ARC THERAPY

Robert Kosztyla1, Cheryl Duzenli1, Basil Nasir2, Shilo Lefresne1
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2Vancouver General Hospital, Vancouver, BC
126
INVESTIGATING THE FEASIBILITY OF EPID-BASED FOUR-DIMENSIONAL IN VIVO DOSE VERIFICATION FOR REAL TIME TUMOUR TRACKING
Sajjad Aftabi1, David Sasaki1, Timothy VanBeek2, Stephen Pistorius1, Boyd McCurdy1
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127
EFFECT OF THIN X-RAY FILTER DESIGN IN MODERN IMAGE-GUIDED SMALL ANIMAL IRRADIATORS ON X-RAY DOSIMETRY AND RADIATION BIOLOGICAL EFFECTIVENESS
Yannick Poirier1, Charles Kirkby2, Christopher Johnstone3
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2University of Calgary, Lethbridge, AB
3University of Victoria, Victoria, BC

128
COMMISSIONING A SOLID TANK PROTOTYPE FAN-BEAM OPTICAL CT SCANNER FOR 3D RADIATION DOSIMETRY
Andy Ogilvy
University of British Columbia Okanagan, Kelowna, BC

129
RESOLVING THE FAT GLYCEROL RESONANCE (4.2 PPM) FROM THE WATER SIGNAL IN MAGNETIC RESONANCE SPECTROSCOPY AT 3 T
Logan Fairgrieve-Park, Clara Fallone, Atiyah Yahya
University of Alberta, Edmonton, AB

130
ADDRESSING DATA VARIABILITY FROM DIFFERENT INSTITUTIONS FOR ROBUST RADIOMIC MODEL BUILDING
Avishek Chatterjee, Martin Vallières, Anthony Dohan, Ives Levesque, Yoshiko Ueno, Sameh Saif, Caroline Reinhold, Jan Seuntjens
McGill University, Montreal, QC

131
SEMI-AUTOMATED CREATION OF A VARIABLE DENSITY PHANTOM
Bradford Gill1, Yi Zhou Cheng1, Robin Coope1, Cornell Lee1, Vitali Moiseenko2, Laura Cervino2
1British Columbia Cancer Agency, Vancouver, BC
2University of California, San Diego, La Jolla, CA

132
OPTIMIZING AN IN VIVO 1H MAGNETIC RESONANCE SPECTROSCOPY TECHNIQUE FOR THE DETECTION OF 13C4-GLUTAMATE AT 9.4 T TO ENABLE TRICARBOXYLIC ACID CYCLE MEASUREMENTS
Brennen Dobberthien, Anthony Tessier, Atiyah Yahya
University of Alberta, Edmonton, AB

133
A SCANNING METHOD FOR X-RAY FLAT-PANEL CALIBRATION
Christopher Dydula, Paul C. Johns
Carleton University, Ottawa, ON

134
MRI IMAGING PREPROCESSING PIPELINE FOR RADIOMIC STUDIES OF THE BRAIN
Daniel Gourdeau, Philippe Després, Louis Archambault
Université Laval, Québec, QC
135 SEGMENTATION OF APPLICATORS IN THREE-DIMENSIONAL ULTRASOUND FOR MINIMALLY INVASIVE LIVER THERAPIES
Derek Gillies, Jessica Rodgers, Chandima Edirisinghe, Nirmal Kakani, Aaron Fenster
University of Western Ontario, London, ON

136 UNPACKING CT RADIOMICS BIOMARKERS IN TUMOURS USING DYNAMIC PET IMAGING
Edward Taylor, Caryn Geady, Harald Keller, Neesha Dhani, David Hedley, Alex Sun, David Jaffray
University of Toronto, Toronto, ON

137 NON-INVASIVE IMAGING OF TUMOUR HYPOXIA USING EF5 AND PET-CT IN HEAD AND NECK CANCER: A PILOT STUDY
Eric Tran1, Sarah Hamilton1, Don Wilson1, Francois Benard1, Alphonse Tran2, Frederic Lacroix Poisson1, Eric Berthelet1, Jonn Wu1
1University of British Columbia, Vancouver, BC
2Universite de Montreal, Montreal, QC

138 PERSONALIZATION OF CANCER DRUGS CLEARED BY KIDNEYS USING OPTICAL TRANSCUTANEOUS PULSE DYE DENSITOMETRY
Fiona Li, Alexandra Hauser-Kawaguchi, Christopher McIntyre, Mamadou Diop, Keith St. Lawrence, Leonard Luyt, James Koropatnick, Ting-Yim Lee
University of Western Ontario, London, ON

139 A METHOD OF KINETIC MODELING WITH TUNEABLE LEVEL-OF-DETAIL SUITABLE FOR SPARSE SAMPLING
Haley Clark1, Stefan Reinsberg2, Susan Zhang2, Steven Thomas2
1British Columbia Cancer Agency, Surrey, BC
2University of British Columbia, Vancouver, BC

140 QUANTIFYING THE RELATIVE IMPORTANCE OF PAROTID GLAND COMPARTMENTS FOR LATE POST-RADIOTHERAPY SALIVARY FUNCTION
Haley Clark1, Stefan Reinsberg2, Vitali Moiseenko3, Jonn Wu2, Steven Thomas2
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2University of British Columbia, Vancouver, BC
3University of California San Diego, La Jolla, CA

141 A PROCEDURE FOR GENERATING ISOVOLUMETRIC ORGAN COMPARTMENTS FOR ORGANS-AT-RISK USING PLANNING CONTOURS
Haley Clark1, Stefan Reinsberg2, Vitali Moiseenko3, Jonn Wu2, Steven Thomas2
1British Columbia Cancer Agency, Surrey, BC
2University of British Columbia, Vancouver, BC
3University of California San Diego, La Jolla, CA

142 A RADIOTHERAPY TREATMENT PLANNING TECHNIQUE FOR SECOND COURSES THAT INCORPORATES COMPLETE ORGAN-AT-RISK DOSE HISTORY
Haley Clark1, Fred Cao1, Carson Leong1, Eric Berthelet2
1British Columbia Cancer Agency, Surrey, BC
2British Columbia Cancer Agency, Vancouver, BC
A NOVEL METHOD OF CALIBRATION FOR IMPROVING ACCURACY AND SENSITIVITY IN DUAL ENERGY COMPUTED TOMOGRAPHY PERFUSION
Hedi Mohseni, Catherine Coolens
Princess Margaret Cancer Centre, Toronto, ON

USE OF HIGH RESOLUTION ACOUSTIC MICROSCOPY FOR SKIN CANCER DIAGNOSIS: CORRELATION WITH HISTOLOGY
Ina Seviaryna1, Roman Maev1, Sarah Youssef1, Sachiko Yoshida2, Naohiro Hozumi2, David Shum3, 1University of Windsor, Windsor, ON
2Toyohashi University of Technology, Toyohashi, Japan
3Windsor Regional Hospital, Windsor, ON

3D CHARACTERIZATION OF HUMAN SKIN WITH ACOUSTIC IMPEDANCE MICROSCOPE FOR MELANOMA DETECTION: ESTIMATION OF SKIN LAYERS THICKNESSES
Roman Maev1, Ina Seviaryna1, Sarah Youssef1, Sachiko Yoshida2, Naohiro Hozumi2, David Shum3, Ryosuke Fujii2
1University of Windsor, Windsor, ON
2Toyohashi University of Technology, Toyohashi, Japan
3Windsor Regional Hospital, Windsor, ON

IMPROVING IMAGE GUIDANCE FOR LIVER SBRT USING GADOXETATE DISODIUM
John Lincoln1, David Parsons2, Sharon Clarke1, Wladyslawa Cwajna1, James Robar1
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ANALYTICAL MODELING FOR THE SINGLY-RAYLEIGH-SCATTERED FLUENCE IN CBCT APPLICATION
Kaiming Guo1, Yutong Zhao1, Tim Van Beek2, Boyd McCurdy2
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2CancerCare Manitoba, Winnipeg, MB

SIGNAL ENHANCEMENT VOLUME INCREASE IN DCE-MRI AFTER SINGLE FRACTION SBRT OF EARLY STAGE BREAST CANCER
Matthew Mouawad1, Stewart Gaede2, Neil Gelman3, Frank S. Prato3, R. Terry Thompson3, Anat Kornecki1, Olga Shmuilovich1, Ilanit Ben Nachum1, Michael Lock4, Muriel Brackstone1, Heather Biernaski3
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2London Regional Cancer Program, London, ON
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IMPLEMENTATION OF A PIXEL-BASED WEIGHTING FACTOR DUAL-ENERGY X-RAY IMAGING SYSTEM
Michael Reno Mike Sattarivand,
Dalhousie University, Halifax, NS

A SOFTWARE TOOL TO CONVERT GE PET SINOGRAM RAW DATA INTO STIR INTERFILE FORMAT
Mike Sattarivand1, Emma Shouldice2, George Mawko1
1Dalhousie University, Halifax, NS
2Memorial University, St. John's, NL
THE NEED FOR STANDARDIZATION IN THE MEASUREMENT OF INTRAVOXEL INCOHERENT MOTION PHYSIOLOGICAL PARAMETERS
Nicholas Majtenyi1, Thanh B. Nguyen2, Gregory O. Cron3, Ian G. Cameron3
1Carleton University, Ottawa, ON
2University of Ottawa, Ottawa, ON
3The Ottawa Hospital, Ottawa, ON

PRE-CLINICAL VALIDATION OF OPEN SOURCE TOOLS TO CALCULATE AND TRACK MR DISTORTION USING BOTH SMALL AND LARGE FIELD OF VIEW PHANTOMS
Chelsea Greenwald1, Mircea Lazea2, Niranjan Venugopal1
1Saskatchewan Cancer Agency, Saskatoon, SK
2CIRS Inc., Norfolk, VA

AN IMPROVED TREATMENT PLANNING AND QUALITY ASSURANCE PROCESS FOR EYE PLAQUE BRACHYTHERAPY
Robert Weersink, Akbar Beiki-Ardakani, Susan Patterson, Heather Ballantyne, Anne Di Tomasso, Jette Borg, Alex Vitkin, Alexandra Rink
Princess Margaret Cancer Centre, Toronto, ON

OPTICAL SURFACE MAPPING FOR EVALUATING THE DOSIMETRIC IMPACT OF WEIGHT LOSS IN HEAD & NECK PATIENTS
Todd Stevens
Dalhousie University, Saint John, NB

A MULTI-DISCIPLINARY APPROACH TO RT DOCUMENTATION
Kathleen Surry1, Wendy Schoen2, Matt Mulligan2, Quinn Benwell2, Dani Scott2, Hatim Fakir1, Douglas Hoover1
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EXPLORING INCIDENT REPORTS FOR RADIATION ONCOLOGY USING NLP TOOLS.
Erick Velazquez, John Kildea
McGill University, Montreal, QC

LARGE VARIABILITY IN PHYSICS TREATMENT PLAN REVIEW PRACTICE: RESULTS FROM TWO SURVEYS
Harald Keller1, Greg Salomons2, Gordon Chan3, Lee Chin1, Keith Nakonechny4, Cathy Neath5
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2Queen's University, Kingston, ON
3Juravinski Cancer Centre, Hamilton, ON
4Simcoe Muskoka Regional Cancer Centre, Barrie, ON
5R.S. McLaughlin Durham Regional Cancer Centre, Oshawa, ON

PEER REVIEW AT THE MCGILL UNIVERSITY HEALTH CENTRE
Sonia Skamene, Carolyn Freeman, Tarek Hijal
McGill University Health Centre, Montreal, QC
A RASPBERRY PI AND SCINTILLATOR-BASED IMAGING SYSTEM FOR DETERMINATION OF RESPIRATORY GATING TEMPORAL ACCURACY.
Steven Thomas, Richard Lee
British Columbia Cancer Agency, Vancouver, BC

SAFETY IMPACT OF EXCEEDING LINAC VAULT DESIGN WORKLOAD LIMITS
Yani Picard, Jeff Sandeman
Canadian Nuclear Safety Commission, Ottawa, ON

ITERATIVE DESIGN AND CONSTRUCTION OF AN IN-HOUSE IMMOBILIZATION DEVICE FOR VMAT CRANIAL SPINAL IRRADIATION
Alana Hudson, Sarah Quirk, Casey Bojechko, Christian Bagg, Coline Dirkse, Debbie Gordon, Raman Kalsi, Shaun Loewen, Rob Nordal, Darren Graham, Will Jiang, David Wu, Natalie Clements
Tom Baker Cancer Centre, Calgary, AB

CT-BASED ASSESSMENT OF LIVER POSITION STABILITY AND REPRODUCIBILITY WHEN USING ACTIVE BREATHING COORDINATOR
Alex Karotki1, Darby Erler2, Saher Ali1, William Chu2, Sten Myrehaug2, Hans Chung2
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2University of Toronto, Toronto, ON

VALIDATION OF PLANNING CT TO CONE-BEAM CT DEFORMABLE IMAGE REGISTRATION-BASED CONTOUR PROPAGATION FOR ACCELERATED PARTIAL BREAST IRRADIATION
Amy Frederick, Michael Roumeliotis, Petra Grendarova, Peter Craighead, Elizabeth Watt, Tyler Meyer, Ivo Olivotto, Sarah Quirk
University of Calgary, Calgary, AB

DOSIMETRIC VERIFICATION OF A 7 MM SET-UP MARGIN FOR ACCELERATED PARTIAL BREAST IRRADIATION USING DAILY CONE-BEAM COMPUTED TOMOGRAPHY FOR IMAGE GUIDANCE
Amy Frederick, Tiana Trumpour, Sarah Quirk, Petra Grendarova, Peter Craighead, Ivo Olivotto, Tyler Meyer, Michael Roumeliotis
University of Calgary, Calgary, AB

REDUCTION OF ELECTRON BACKSCATTER FROM INTRA-ORAL LEAD SHIELDS USING ALUMINUM BAKING SHEETS - A PRACTICAL SOLUTION
Cynthia Kwan, Shuying Wan, Richard Germond
Northeast Cancer Centre, Health Sciences North, Sudbury, ON

IMPLEMENTATION OF SNC IC PROFILER FOR ANNUAL QA OF 6 MV AND 6 MV FFF BEAMS ON A TRUEBEAM LINAC
Daniel Cho, Michael Schwendener, Shuying Wan
Northeast Cancer Centre, Sudbury, ON

IMAGE COUNTING AND THE INCREASED USE OF IGRT FOR PATIENT SET-UP
Emilie Soisson, Victor Matassa, John Kildea
McGill University, Montreal, QC

WITHDRAWN
IMPACT OF JAW TRACKING ON BEAM DELIVERY TIME
Ian Nygren
University of Alberta, Red Deer, AB

THE IMPACT OF HYDROGEL SPACER ON PROSTATE INTRA-FRACTION MOTION BASED ON PRE-AND POST-CBCTS
Isabelle M. Gagne1, Parminder Basran1, David Paetkau1, Abraham Alexander2, Jacqueline Lam1, Howard Pai1
1University of Victoria, Victoria, BC
2University of British Columbia, Victoria, BC

USE OF 3D PRINTING TECHNOLOGY FOR RIGID BOLUS PRODUCTION USING OPTICAL OR CT SCAN BASED IMAGING DATA: A CASE SERIES
Justin Owen, Arbind Dubey, David Sasaki, Boyd McCurdy, Rashmi Koul
University of Manitoba, Winnipeg, MB

CONCURRENT CRANIOSPINAL IRRADIATION (CSI) WITH TEMOZOLOMIDE (TMZ) IN PRIMARY DIFFUSE LEPTOMENINGEAL GLIOMATOSIS (PDLG): A CASE REPORT AND REVIEW OF THE LITERATURE
Justin Owen, Saranya Kakumanu, Craig Harlos
University of Manitoba, Winnipeg, MB

A NOVEL TECHNIQUE OF DELIVERING BREAST RADIOTHERAPY USING VISUALLY MONITORED DEEP INSPIRATION BREATH HOLD FOR PATIENTS WITH HEARING IMPAIRMENT
Karen Long, Rosanne Moore, Salimah Alibhai, Petra Grendarova
University of Calgary, Calgary, AB

TECHNICAL CONSIDERATIONS IN STEREOTACTIC ABLATIVE BODY RADIOTHERAPY FOR LOCALIZED NEUROENDOCRINE CANCER OF THE LUNG
Laura Callan, Stewart Gaede, Alexander V. Louie
University of Western Ontario, London, ON

AUTOMATED SEGMENTATION OF THE INTERNAL TARGET VOLUME ON UNGATED CBCT IMAGES IN LUNG SBRT
Marcin Wierzbicki, Anand Swaminath
McMaster University, Hamilton, ON

EVALUATION OF IMRT TREATMENT OF THORAX ESOPHAGEAL CARCINOMA IN ELEKTA AND VARIAN LINAC
Zifeng Chi, Ruohui Zhang, Wenwen Bai, Shiguang Wang
Hebei Medical University, Shijiazhuang

EVALUATION OF INTENSITY MODULATED RADIATION THERAPY PLANNING FOR CERVICAL CANCER BASED ON AUTO-PLANNING
Zifeng Chi, Ruohui Zhang, Wenwen Bai, Mingchang Miao, Shiguang Wang
Hebei Medical University, Shijiazhuang, CN
178
INFLUENCE OF DEFORMABLE IMAGE REGISTRATION SOFTWARE IMPLEMENTATION ON ADAPTIVE RADIATION THERAPY REPLAN DECISIONS
Sarah Weppler, Colleen Schinkel, Wendy Smith
University of Calgary, Calgary, AB

179
DOSIMETRIC STUDY ON PATIENT TRANSFER BETWEEN VARIAN CLINAC IX AND TRUEBEAM LINACS
Shima Yaghoobpour Tari, Grace Zeng, Michelle Nielsen
Trillium Health Partners, Mississauga, ON

180
SYNTHESIS OF GOLD NANOPARTICLES FUNCTIONALIZED WITH PLANT EXTRACT FOR TREATMENT OF PROSTATE CANCER
Shruti Nambiar1, Ernest Osei1, Johnson Darko1, Andre Fleck2, Anthony Mutsaers2, Shawn Wettig1
1University of Waterloo, Waterloo, ON
2University of Guelph, Guelph, ON

181
QUANTIFICATION AND MONITORING OF MAGNETIC FIELD INDUCED EFFECTS ON A LINEAR ACCELERATOR IN AN MR-GUIDED RT ENVIRONMENT
Teo Stanescu1, Makan Farrokhkhash2, Ting Zhang2, Bern Norrlinger2, Iman Dayarian3, Dragos Constantin4, Marco Carlone5, David Jaffray1
1University of Toronto, Toronto, ON
2N/A, Toronto, ON
3Georgia Institute of Technology, Atlanta, GA
4Varian Medical Systems, Palo Alto, CA
5University British Columbia Okanagan, Kelowna, BC

182
EVALUATION OF TUNGSTEN INTERNAL EYE SHIELDS IN KILOVOLTAGE X-RAY BEAMS AND MEGAVOLTAGE ELECTRON BEAMS
Yihan Yao, Shuying Wan
Northeast Cancer Center, Sudbury, ON

183
USE OF 10 MV FFF TO REDUCE THYROID DOSE IN PEDIATRIC WHOLE LUNG IRRADIATION
Youssef Ben Bouchta, Andrea Lo, Karen Goddard, Alanah M. Bergman
British Columbia Cancer Agency, Vancouver, BC

184
IMPROVED DELIVERY ACCURACY AND REDUCED TREATMENT TIME USING DCAT WITH FFF COMPARED TO VMAT FOR LUNG SBRT PATIENTS
Aaron Vandermeer1, Alicia Cronin2, Darcy Mason1
1Durham Regional Cancer Centre, Oshawa, ON
2University of Guelph, Guelph, ON

185
A NEW TECHNIQUE FOR DELIVERING ABLATIVE DOSE TO PANCREATIC CANCER: A PROOF OF CONCEPT
Amandeep Taggar, Sten Myrehaug, Yee Ung, Hans Chung, Darby Erler, Renee Korol, Alex Karotki
University of Toronto, Toronto, ON

186
STOCHASTIC FRONTIER ANALYSIS TO IMPROVE ORGANS-AT-RISK SPARING IN VMAT-TREATED PROSTATE CANCER
Angelika Kroshko1, Nicolas Varfalvy1, Olivier Morin2, Louis Archambault1
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2University of California San Francisco, San Francisco, CA
187 INVERSE PLANNING AND OPTIMIZATION FOR VMAT MARKER-BASED LUNG TUMOUR TRACKING
Azeez Omotayo1, Boyd McCurdy1, Sankar Venkataraman2
1University of Manitoba, Winnipeg, MB
2CancerCare Manitoba, Winnipeg, MB

188 PLANNING PELVIC INGUINAL LYMPH NODE RADIATION THERAPY WITH TOTAL HIP REPLACEMENT
Daniel Morton, Cheryl McGregor, Jim Rose, Ramani Ramaseshan
British Columbia Cancer Agency, Abbotsford, BC

189 IMRT STRATEGIES FOR DEFINITIVE TREATMENT OF INTACT CERVICAL CANCER: A LITERATURE REVIEW
Donna Murrell1, Julie Himmelman2, Raxa Sankreacha3, Ananth Ravi4, Jennifer Croke5, Kathleen Surry1
1London Regional Cancer Program, London, ON
2Cancer Care Ontario, Toronto, ON
3Carlo Fidani Peel Regional Cancer Centre, Mississauga, ON
4Sunnybrook Odette Cancer Centre, Toronto, ON
5Princess Margaret Cancer Centre, Toronto, ON

190 ARMS UP OR ARMS DOWN FOR RADIOTHERAPY IN STAGE III NSCLC? A DOSIMETRIC COMPARISON
Donna Murrell, Scott Karnas, Mark Corkum, Scott Hipwell, David Palma, George Rodrigues, Alexander Louie
London Regional Cancer Program, London, ON

191 DOSIMETRIC EVALUATION OF DYNAMIC CONFORMAL ARC THERAPY
Elsayed S. M. Ali1, Lorcel Ericka Venturina2, Greg Fox3
1University of Ottawa, Ottawa, ON
2Carleton University, Ottawa, ON
3The Ottawa Hospital Cancer Centre, Ottawa, ON

192 KNOWLEDGE-BASED PLANNING SCRIPT FOR IMRT LUNG TREATMENT
Étienne Roussin, Matthieu Lemire
Université de Montréal, Montréal, QC

193 FISRT YEAR PRACTICE OF PROFIT HYPOFRACTIONATED PROSTATE RADIATION AS STANDARD CRAE: PLANNING DOSIMETRY
Grace Zeng1, Borka Basaric1, Michael Lamey1, Larry Wang2, Anthony Lausch1, Yongjin Wang1, Jasper Yuen1, Raxa Sankreacha1
1Trillium Health Partners, Mississauga, ON
2St. George’s University, Grenada

194 TARGET VOLUME VARIATION WITH DIFFERENTIAL BLADDER FILLING IN NEOADJUVANT RADIOTHERAPY FOR RECTAL CANCER PATIENTS
Jason Ding, Carrie Gerdes, Emilia Timotin, Harold Reiter, Raimond Wong
McMaster, Hamilton, ON
195
DEVELOPMENT AND ASSESSMENT OF A NOVEL AUTOMATIC METHOD OF CBCT DENSITY ASSIGNMENT FOR HEAD AND NECK PATIENTS WITH DENTAL ARTIFACTS
Jenny Lee, Andrea McNiven, Tony Tadic, Bui Chan, Olive Wong, John Waldron, Beibei Zhang
University of Toronto, Toronto, ON

196
SIMULTANEOUS TRAJECTORY AND VOLUMETRIC MODULATED ARC THERAPY OPTIMIZATION
Joel Mullins, Marc-André Renaud, Jan Seuntjens
McGill University, Montreal, QC

197
CONSEQUENCES OF REMOVING UPPER DOSE CONSTRAINT FOR PLANNING TARGET VOLUME IN PROSTATE VOLUMETRIC MODULATED ARC THERAPY PLANNING
Lingyue Sun, Wendy Smith, Abhijit Ghose, Charles Kirkby
University of Calgary, Calgary, AB

198
VALIDATION OF TWO ANATOMICAL PREDICTORS OF HEART DOSE IN LEFT-SIDED BREAST CANCER PATIENTS TREATED WITH ADJUVANT RADIOTHERAPY
Lucas C. Mendez1, Matt Wronski1, Claire McCann1, Pearl Zaki1, Erin McKenzie1, Yasmeen Razvi1, Stephanie Chan1, Danny Vespri1, Eric Leung1, Justin Lee2, Sandi Bosnic2 Edward Chow1
1University of Toronto, Toronto, ON
2McMaster University, Hamilton, ON

199
TOTAL MARROW IRRADIATION USING HELICAL TOMOTHERAPY FOR MULTIPLE MYELOMA: A CASE STUDY OF A TALL PATIENT
Malgorzata Niedbala, Rajiv Samant, Balazs Nyiri
University of Ottawa, Ottawa, ON

200
CHANGING FACE OF PALLIATIVE PRACTICES IN RADIATION THERAPY FOR SIMPLE BONE METASTASIS IN A SINGLE INSTITUTION
Nataliya Moldovan, James Beck, Boyd McCurdy, Rashmi Koul
University of Manitoba, Winnipeg, MB

201
TREATMENT OF STAGE II LYMPH-NODE NEGATIVE ENDOMETRIAL CARCINOMA WITH ADJUVANT VAGINAL BRACHYTHERAPY ALONE
Nataliya Moldovan, University of Manitoba, Winnipeg, Manitoba
Alon Altman, Aldrich Ong, Pascal Lambert
University of Manitoba, Winnipeg, MB

202
AN AUTOMATIC SKIN-FLASH METHOD FOR BREAST IMRT AND THE PERTINENCE OF ADDITIONAL MANUAL MLC RETRACTIONS
Rafael Khatchadourian, Michael Ayles, Caroline Duchesne
Université de Montréal, Montréal, QC

203
DEVELOPING A WORKFLOW FOR COMMISSIONING AND QUALITY ASSURANCE OF THE PINNACLE TREATMENT PLANNING-ADAPTIVE PLANNING MODULE
Roxana Vlad1, Marcin Wierzbicki1, Orest Ostapiak1, Lindsay Morris2
1Mc Master University, Hamilton, ON
2University of Guelph, Guelph, ON
EVALUATION OF MIXED ENERGY PARTIAL ARCS FOR VOLUMETRIC MODULATED ARC THERAPY FOR PROSTATE CANCER
Shadab Momin1, James Grafe1, Rao Khan2
1Ryerson University, Toronto, ON
2Washington University, St. Louis, MI

INTEGRATION OF RADIOBIOLOGICAL MODELLING AND SUMMARY INDICES IN COMPARATIVE PLAN EVALUATION: A STUDY COMPARING VMAT AND 3D-CRT IN PATIENTS WITH LOCALLY ADVANCED NSCLC USING INDIGENOUS SOFTWARE
Soumyajit Roy, Iulian Badragan, Sheikh Nisar Ahmed, Michael Sia, Jorawur Slngh, Gaurav Bahl
University of British Columbia, Abbotsford, BC

PSA BOUNCE AFTER STEREOTACTIC BODY RADIOTHERAPY FOR PROSTATE CANCER: POOLED ANALYSIS FROM FOUR SBRT TRIALS EVALUATING DIFFERENT TIME-DOSE-FRACTION SCHEDULES
Soumyajit Roy1, Andrew Loblaw2, Patrick Cheung2, William Chu2, Hans Chung2, Danny Vesprini2, Aldrich Ong3, Amitava Chowdhury3, Dilip Panjwani4, Geordi Pang2, Renee Korol2, Melanie Davidson2, Ananth Ravi2, Boyd McCurdy3, Joelle Helou2, Lijing Zhang2, Alexandre Mamedov2, Andrea Deabreu3, Harvey Quon1
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3University of Manitoba, Winnipeg, MB
4University of British Columbia, Abbotsford, BC

TOTAL BODY PHOTON IRRADIATION WITH ISLAND-BLOCK ATTENUATORS: DOSE DISTRIBUTIONS GENERATED WITH A MONTE CARLO TREATMENT PLANNING SYSTEM
Michael Evans, Russell Ruo, Marc-André Renaud, William Parker, Sonia Skamene, Carolyn Freeman, Jan Seuntjens
McGill University, Montreal, QC

NOVEL RADIATION-ACTIVATED PHOTODYNAMIC (RADIOPDT) NANOPARTICLES FOR TREATING PROSTATE CANCER
Deepak Dinakaran, Hua Chen, Brad Warkentin, Piyush Kumar, Nawaid Usmani, Ravin Narain, John Lewis, Ronald Moore
University of Alberta, Edmonton, AB

OCULAR BRACHYTHERAPY FOR INTRA-OCULAR MELANOMA: EXPERIENCE AND OUTCOMES IN THE PROVINCE OF ALBERTA
Deepak Dinakaran, Matthew Larocque, Kelsey Roelofs, Parampal Grewal, Steven Lapere, Albert Murtha, Ezekiel Weis
University of Alberta, Edmonton, AB

ON THE GEOMETRICAL AND DOSIMETRIC ACCURACY OF SMALL ANIMAL IRRADIATIONS PERFORMED WITH A CONVENTIONAL MEDICAL LINAC
Louis Archambault1, Josée Langevin2, Josée Galarineau2, François Thériault-Proulx1, Julie Fradette1
1CHU de Québec, Université Laval, Quebec City, QC
2Cégep de Sainte-Foy, Québec, QC
211 MOLECULAR TARGETING TO EXPAND THE THERAPEUTIC RATIO IN WOMEN WITH CURABLE CERVICAL CANCER
Naz Chaudary1, Magali Lecavalier-Barsoum2, Pratibha Thapa1, Meegan Larsen1, Melania Pintilie1, Kathy Han1, Richard Hill1, Michael Milosevic1
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2Jewish General Hospital, Montreal, QC

212 A NEW COMBINATION OF PRO-APOPTOTIC AGENTS AND RADIOTHERAPY FOR TREATMENT OF SOFT TISSUE SARCOMAS
Philip Wong, Julie Lafontaine, Francis Rodier
Centre Hospitalier de l'Université de Montréal, Montreal, QC

213 QUALITY OF LIFE: A PROSPECTIVE RANDOMIZED TRIAL OF PALLIATIVE VOLUMETRIC ARC THERAPY (VMAT) VERSUS CONFORMAL RADIATION THERAPY (CRT)
Philip Wong, Louise Lambert, Phengsavanh Thanomsack, Genevieve Coulombe, Carole Lambert, Anne-Marie Charpentier, Maroie Barkati, Israel Fortin, David Roberge
Centre Hospitalier de l'Université de Montréal, Montreal, QC

214 EXTERNAL BEAM RADIATION-SENSITIVE BIOPOLYMER FOR TARGETED DRUG DELIVERY
Shannon Yoo1, Zi-Hua Justin Jiang2, Wilson Roa1
1Cross Cancer Institute, Edmonton, AB
2Lakehead University, Thunder Bay, ON

215 GENETIC PROFILING OF OLIGODENDROGLIOMAS (IDH MUTATED AND 1P19Q CO-DELETED) TREATED WITH ADJUVANT RADIOTHERAPY OR OBSERVATION INFORMS PROGNOSIS
Fabio Y Moraes1, Jonathan So1, Yasin Mamatjan2, Gelareh Zadeh2, Ken Aldape2,
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2Princess Margaret Cancer Centre, Toronto, ON

216 INTERNATIONAL MULTI-CENTER VALIDATION OF AN INTERMEDIATE-RISK SUBCLASSIFICATION OF MEN TREATED WITH RADICAL TREATMENT WITHOUT HORMONE THERAPY
Fabio Y Moraes1, Noelia Salgado1, Alexander Koven1, Haiyan Jiang1, Rachel Glicksman1, Elton T T Leite2, Rafael Gadia2, Joao Luis F Silva2, Neil Fleshner1 Peter Chung1, Charles Catton1, Zachary Zumsteg3, Todd Morgan4, Jason Hearns4, Rohit Mehrad4, Robert Desa4, Felix Fang5, Antonio Finelli1, Daniel Spratt4, Alejandro Berlin1
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217 PLASMA METABOLOMIC PROFILES IN PATIENTS WITH HEPATOCELLULAR CARCINOMA BEFORE AND AFTER SBRT
Sylvia Ng1, Irwin Kurland2, Chandan Guha2, Yunping Qiu2, Laura Dawson1
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2Albert Einstein College of Medicine, Bronx, NY
218 MONITORING RADIATION RESISTANCE AND RESPONSE OF NON-SMALL CELL LUNG CANCER USING RAMAN SPECTROSCOPIC SIGNATURES OF TUMOUR HYPOXIA
Samantha Van Nest1, Leah Nicholson2, Alexandre Brolo1, Julian Lum2, Andrew Jirasek3
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3University of British Columbia Okanagan, Kelowna, BC

219 CARO CASARA
EVALUATION OF 18F-EF5 SUITABILITY FOR DETECTION OF HYPOXIA IN LOCALIZED ADENOCARCINOMA OF THE PROSTATE.
Brennan Wadsworth1, Kevin Bennewith2, Francois Benard2, Michael McKenzie2, Lorenz Yeung2, Donald Yapp2, Don Wilson2, Carlos Villami1
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2British Columbia Cancer Agency, Vancouver, BC

220 INVESTIGATION OF THE PTV MARGIN IN PERMANENT BREAST SEED IMPLANT (PBSI) BRACHYTHERAPY: A PILOT STUDY
Alexandra Guebert, Michael Roumeliotis, Elizabeth Watt, Amy Frederick, Tiana Trumpour, Tyler Meyer, Sarah Quirk
University of Calgary, Calgary, AB

221 T2-WEIGHTED MRI-DERIVED RADIOIMIC FEATURE CHANGES IN THE DOMINANT INTRAPROSTATIC LESION FOR PATIENTS TREATED WITH FOCAL SALVAGE HDR PROSTATE BRACHYTHERAPY
Sangjune Lee, Ananth Ravi, Gerard Morton, Andrew Loblaw, Chia-Lin Tseng, Alexandru Nicolae, Mark Semple, Hans Chung
University of Toronto, Toronto, ON

222 AUTOMATIC CONTOUR PROPAGATION OF ORGANS-AT-RISK ON SERIAL MRI AND DOSIMETRIC IMPLICATIONS IN GlioBLASTOMA PATIENTS UNDERGOING CHEMO-RADIATION
Sangjune Lee, James Stewart, Young Lee, Sten Myrehaug, Arjun Sahgal, Mark Ruschin, Chia-Lin Tseng
University of Toronto, Toronto, ON

223 NEOADJUVANT RADIOTHERAPY AND BRACHYTHERAPY IN ENDOMETRIAL CANCER WITH GROSS CERVICAL INVOLVEMENT: A CHIRENDO RESEARCH GROUP STUDY
Melica Nourmoussavi, Vanessa Samouelian, Israel Fortin, Béatrice Cormier, Thomas Warkus, Yohann Dabi, Marie-Claude Beauchemin, Maroie Barkati
Université de Montréal, Montreal, QC

224 NON-UNIFORM LOADING OF EPISCERAL PLAQUES IN TREATMENT OF UVEAL MELANOMA: A CONFORMAL AND COST-EFFECTIVE APPROACH
Akbar Beiki-ardakani1, Robert Weersink2, Ivan Yeung2, Jette Borg2, John Jezioranski1, Alex Vitkin2, Alexandra Rink2, David Jaffray2, Filiberto Altomare2, Hatem Krema2, Rand Simpson2, John Waldron2, Normand Laperrere2
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2University of Toronto, Toronto, ON
RESULTS OF A PHASE I RANDOMIZED-CONTROLLED TRIAL EVALUATING CONVENTIONAL VERSUS MACHINE LEARNING TREATMENT PLANNING FOR PROSTATE LOW-DOSE-RATE BRACHYTHERAPY
University of Toronto, Toronto, ON

PERIOPERATIVE BRACHYTHERAPY FOR MARGIN CONTROL IN ORAL TONGUE CANCER
Boris Bahoric, Ilia Ianovski, Michael P Hier, Alex M Mlynarek, Martin J Black, Khalil Sultanem
McGill University, Montreal, QC

IMPLEMENTATION AND VALIDATION OF IPSA ON GPU ARCHITECTURE FOR FAST MULTI-CRITERIA OPTIMIZATION FOR HDR BRACHYTHERAPY
Cédric Bélanger1, Yunzhi Ma2, Loïc Paradis-Lapierrière1, Adam Cunha3, Luc Beaulieu1
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SEXUAL FUNCTION AFTER PROSTATE SEED BRACHYTHERAPY-LONG-TERM SINGLE CENTRE EXPERIENCE
Daniel Taussky, Guila Delouya
Centre Hospitalier de l'Université de Montréal, Montreal, QC

RISK FACTORS FOR BIOCHEMICAL RECURRENCE AFTER A TISSUE-ABLATIVE PSA
Daniel Taussky, Guila Delouya, Jean-Paul Bahary, Carole Lambert, Nissan Meissner
Centre Hospitalier de l'Université de Montréal, Montreal, QC

CAN A DOMINANT INTRAPROSTATIC LESION (DIL) BOOST WITH PERMANENT I-125 PROSTATE IMPLANTS, ALTERED OUTCOMES AND IMPROVE BIOCHEMICAL DISEASE-FREE SURVIVAL (BDFS) IN INTERMEDIATE RISK PROSTATE CANCER?
Elizabeth Guimond, Laval University, Quebec, Quebec
Marie-Claude Lavallee, William Foster, Eric Vigneault, Karolan Guay, Andre-Guy Martin
Laval University, Quebec, QC

SHOULD BONES BE CONSIDERED AS ORGANS AT RISK FOR INTERMEDIATE ENERGY BRACHYTHERAPY SOURCES?
Gabriel Famulari, Joanne Alfieri, Shirin A Enger
McGill University, Montreal, QC

AUTOMATIC OPTIMIZATION OF TREATMENT DOSIMETRY TO IMPROVE VISUAL OUTCOMES IN EPISCLERAL PLAQUE BRACHYTHERAPY
Gawon Han, Matthew Larocque, Geetha Menon
University of Alberta, Edmonton, AB

OCULAR BRACHYTHERAPY TUMOUR APEX AND SCLERAL DOSES DURING CONCURRENT SILICONE OIL VITRECTOMY TREATMENT
Hali Morrison1, Matthew P. Larocque2, Ezekiel Weis2, Geetha Menon2, Ron S. Sloboda2
1University of Calgary, Calgary, AB
2University of Alberta, Edmonton, AB
234
TRUEBEAM EDGE VMAT SRS TREATMENT PROCESS OF A PINEAL PARENCHYMAL TUMOUR
Hali Morrison1, Pamela Leco2, Gerald Lim1, Nicolas Ploquin1, Kundan Thind1
1University of Calgary, Calgary, AB
2Tom Baker Cancer Centre, Calgary, AB

235
PRIMARY-SCATTER SEPARATED DOSE COMPARISON OF THE ADVANCED COLLAPSED CONE
ENGINE FOR AN I-125 BRACHYTHERAPY SOURCE
Hali Morrison1, Steven Nich1, Geetha Menon2, Matthew P. Larocque2, Bob van Veelen3, Yury
Niatsetski3, Ezekiel Weis2, Ron S. Sloboda2
1University of Calgary, Calgary, AB
2University of Alberta, Edmonton, AB
3Elekta Brachytherapy, Veenendaal

236
LONG-TERM TUMOUR CONTROL IN A PROSPECTIVE SINGLE ARM STUDY OF POST-OPERATIVE
ADJUVANT PARTIAL BREAST IRRADIATION UTILIZING HIGH DOSE RATE INTERSTITIAL
BRACHYTHERAPY
Hosam Kader,
University of British Columbia, Victoria, BC

237
A PERMANENT BREAST SEED IMPLANT PILOT STUDY: MEDIUM-TERM DISEASE CONTROL
OUTCOMES
Hosam Kader
University of British Columbia, Victoria, BC

238
MECHANICAL PERTURBATION ENHANCED POWER DOPPLER ULTRASOUND IMAGING FOR
IMPROVED INTRA-OPERATIVE LOCALIZATION OF INTERSTITIAL BRACHYTHERAPY NEEDLES
Jonatan Snir1, Nathan Orlando2, John Patrick1, Kathleen Surry2, Vikram Velker2, Douglas Hoover2
1London Regional Cancer Program, London, ON
2Western University, London, ON

239
TREATMENT RELATED CERVICAL NECROSIS IN THE SETTING OF IMAGE GUIDED ADAPTIVE
BRACHYTHERAPY (IGABT): A CASE SERIES WITH DOSIMETRIC ANALYSIS
Kara Schnarr, Robert Hunter, Thomas Farrell, Malti Patel, James Wright, Iwa Kong
McMaster University, Hamilton, ON

240
RESPONDING TO THE BREAKDOWN OF THE SOLE RADIOTHERAPY MACHINE IN UGANDA
Ndinawe Kateera1, Joda Kuk2, Kara Schnarr3, Farrok Karsan4, Rajendra Chauhan4
1Road to Care, Kampala
2Grand River Regional Cancer Centre, Kitchener, ON
3McMaster University, Hamilton, ON
4Aga Khan University Hospital, Nairobi

241
QUALITY ASSURANCE ASSESSMENT FOR THE TREATMENT OF LOCALLY ADVANCED CERVICAL
CANCER USING DELPHI CONSENSUS GUIDELINE QUALITY-OF-CARE INDICATORS: A SINGLE-
INSTITUTIONAL EXPERIENCE
Kitty Huang, Corinne Doll, Tien Phan, Laurel Traptow, Robyn Banerjee
University of Calgary, Calgary, AB
242
MONTE CARLO DOSE CALCULATIONS MODELLING EDEMA RESOLUTION IN PERMANENT IMPLANT PROSTATE BRACHYTHERAPY
Luke McCooeye1, Gavin Hurd1, Luc Beaulieu2, Emily Heath1, Rowan Thomson1
1Carleton University, Ottawa, ON
2Université Laval, Quebec City, Quebec, QC

243
PROSTATE BRACHYTHERAPY INTRAOPERATIVE DOSIMETRY BASED ON TRANSRECTAL-ULTRASOUND PROSTATE CONTOURS THAT HAVE BEEN DEFORMED TO ACCOUNT FOR PROBE REMOVAL
Maryam Golshan, Ingrid Spadinger, Sara Mahdavi, Golnoosh Samei, James Morris, Tom Pickles, Tim Salcudean
University of British Columbia, Vancouver, BC

244
BRACHYTHERAPY IN THE MANAGEMENT OF EOSPHAGEAL CANCER: A SINGLE INSTITUTION EXPERIENCE
Nikitha Moideen, Conrad Falkson, Aamer Mahmud, Wilma Hopman
Queen's University, Kingston, ON

245
DOSE TO THE BLADDER NECK: IMPACT ON URINARY TOXICITY AFTER MRI-GUIDED HDR PROSTATE BRACHYTHERAPY
Noelia Sanmamed1, Peter Chung1, Alejandro Berlin1, Jette Borg1, Bernadeth Lao1, Robert Weersink1, Akbar Beiki-Ardakani1, Anna Simenov1, Alex Rink1, Cynthia Menard2, Joelle Helou1
1Princess Margaret Cancer Centre, Toronto, ON
2McGill University, Montreal, QC

246
DEVELOPING A QUALITY CONTROL TOOL FOR CLINICAL ULTRASOUND-GUIDED HDR PROSTATE BRACHYTHERAPY BASED ON PATIENT-SPECIFIC GEOMETRIC BY USING STOCHASTIC FRONTIER ANALYSIS
Reza Moosavi Askari1, Luc Beaulieu1, Louis Archambault1, Éric Poulin2
1Université Laval, Québec, QC
2CHU de Québec, Quebec, QC

247
CNSC EXPECTATIONS FOR THE SECURITY OF PRESCRIBED EQUIPMENT CONTAINING RADIOACTIVE SOURCES, WITH EMPHASIS TOWARDS THE HIGH DOSE RATE (HDR) BRACHYTHERAPY UNITS
Rick Kosierb
Canadian Nuclear Safety Commission, Ottawa, ON

248
SURFACE MOULD BRACHYTHERAPY FOR SKIN CANCERS: THE BRITISH COLUMBIA CANCER EXPERIENCE
Stephanie Casey, Joseph Awotwi-Pratt, Gaurav Bahl
University of British Columbia, Vancouver, BC

249
THREE-DIMENSIONAL-GUIDED PERINEAL-BASED INTERSTITIAL BRACHYTHERAPY IN PRIMARY VAGINAL CANCER: A SYSTEMATIC REVIEW OF LOCAL CONTROL AND TOXICITIES
Yonatan Weiss1, Lucas Mendez1, David D'Souza2, Ananth Ravi1, Lisa Barbera1, Eric Leung1
1University of Toronto, Toronto, ON
2Western University, London, ON
A MONTE-CARLO STUDY OF CELLULAR DOSIMETRY OF RADIOACTIVE GOLD-PALLADIUM NANOPARTICLES BASED ON IN VIVO AND EX VIVO DISTRIBUTIONS
Yunzhi Ma, Myriam Laprise-Pelletier, Jean Lagueux, Marie-France Côté, Marc-André Fortin, Luc Beaulieu
Université Laval, Quebec, QC

AN EXAMINATION OF NEEDLE DEFLECTION IN HIGH DOSE RATE PROSTATE CANCER BRACHYTHERAPY
Nathan Orlando, Douglas Hoover, Chandima Edirisinghe, David D'Souza, Eugene Wong, Aaron Fenster
Western University, London, ON

RISKS OF SECONDARY CANCER FOR WHOLE BREAST AND PARTIAL BREAST IRRADIATIONS - A PROPOSAL FOR A MEAN LUNG DOSE CONSTRAINT
Jean-Philippe Pignol1
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COST-EFFECTIVENESS ANALYSIS COMPARISON OF LINAC AND ROBOTIC BASED SBRT FOR EARLY STAGE NON-SMALL CELL LUNG CANCER
Jean-Philippe Pignol1, Michael Frelinghuysen2, Joost Jan Nuyttens2,
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ONE-YEAR COSMESIS AND FIBROSIS FROM ACCEL: ACCELERATED PARTIAL BREAST IRRADIATION (APBI) USING 27 GY IN FIVE DAILY FRACTIONS
Petra Grendarova, Mark Lesiuk, Peter Craighead, Hongwei Liu, Jane Wilson1, Sarah Quirk1, James Pinilla, Katelyn Bignell, Tien Phan, Michael Roumeliotis, Ivo A Olivotto
University of Calgary, Calgary, AB

THE ROLE OF ADJUVANT RADIO CHEMOTHERAPY FOR GASTRIC CANCER: RESULTS OF A META-ANALYSIS
Edwin Boelke, Christiane Matuschek, Jan Haussmann, Wilfried Budach, Balint Tamaskovics, Freddy Dijepmo
Heinrich Heine University, Dusseldorf, Germany

PLANNING STUDY: FROM VMAT ON A CONVENTIONAL LINAC TO DYNAMIC-TRACKING IMRT ON VERO - THE IMPACT ON RILD RISK CALCULATIONS FOR HEPATOCELLULAR CARCINOMA OF THE LIVER
Marie-Laure Camborde1, Tania Karan1, Robert Kosztyla1, Alanah Bergman1, Roy Ma2, Devin Schellenberg2, Tania Karan1, Mitchell Liu2, Ante Mestrovic1, Steven Thomas1
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VERO TRACKING QA IMPLEMENTATION: FROM GATING TO TRACKING
Alanah Bergman, Marie-Laure Camborde, Tania Karan, Richard Lee
British Columbia Cancer Agency, Vancouver, BC
258
AN INSTITUTIONAL RETROSPECTIVE REVIEW OF LOCALLY ADVANCED ESOPHAGEAL CANCER PATIENTS TREATED WITH PERIOPERATIVE CHEMOTHERAPY AND CHEMORADIOThERAPY FOLLOWED BY SURGERY
Justin Owen, Naseer Ahmed, Koroush Madani, Suha Kakki, Zoann Nugent, Gordon Buduhan
University of Manitoba, Winnipeg, MB

259
MACHINE LEARNING PREDICTION OF EARLY DISTANT PROGRESSION FOR OLIGOMETASTATIC AND OLIGOPROGRESSIVE COLORECTAL CANCER PATIENTS TREATED WITH STEREOTACTIC BODY RADIOTHERAPY
Pencilla Lang1, Mohammad Kayvanrad1, Rob D. Thompson2, Patrick Cheung1, Efstathios D. Gennatas3, Gilmer Valdes3, Hans T Chung1
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260
PATIENT-REPORTED QUALITY OF LIFE FOLLOWING STEREOTACTIC BODY RADIATION THERAPY FOR PRIMARY KIDNEY CANCER: RESULTS FROM A PROSPECTIVE COHORT STUDY
Anand Swaminath1, Mark Niglas2, Patrick Cheung2, Darby Erler2, Renee Korol2, Julie Blain1, Himanshu Lukka1, Danny Vespini2, William Chu2
1McMaster University, Hamilton, ON
2University of Toronto, Toronto, ON

261
PROSTATE CANCER UPSTAGING BY PLANNING MRI AND ITS IMPACT ON TREATMENT DECISIONS
Gary Mok, Danny Duplan, Anne-Sophie Gauthier-Paré, Levon Igidbashian, Yves Benabu, Vahid Khairi, Moein Alizadeh
Cité de la Santé et Services Sociaux de Laval, Laval, QC

262
SMALLER PLANNING TARGET VOLUME IN BLADDER RADIATION THERAPY IS POSSIBLE WHEN USING DAILY CBCT AS METHOD FOR AN IMAGE GUIDED TREATMENT DELIVERY
Khaled Adil, Marija Popovic, Fabio Cury, Sergio Faria, Marie Duclos, Luis Souhami
McGill University, Montreal, QC

263
DOSIMETRIC AND CLINICAL PREDICTORS OF RENAL TOXICITY AFTER STEREOTACTIC BODY RADIOTHERAPY FOR PRIMARY RENAL CELL CARCINOMA
Mark Niglas1, Patrick Cheung1, Anand Swaminath2, Renee Korol1, Darby Erler1, Danny Vespini1, William Chu1,
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2McMaster University, Hamilton, ON

264
OUTCOMES AND TOXICITY OF STEREOTACTIC RADIOTHERAPY FOR METASTATIC BREAST CANCER - A RETROSPECTIVE COHORT STUDY
Motasem Hanaqta, Mark Niglas, Collier Jiang, Patrick Cheung, William Chu, Hans Chung, Sten Myrehaug, Ian Poon, Sahgal Arjun, Hany Soliman
University of Toronto, Toronto, ON
PATHOLOGICALLY NODE POSITIVE CARCINOMA PROSTATE-PREVALENCE, PATTERN OF CARE AND OUTCOME FROM A POPULATION BASED STUDY
Michael Sia1, Soumyajit Roy1, Scott Tyllesley2, Gaurav Bahl1, Katherine Sunderland2
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FREE PSA RATIO AS A PREDICTOR OF ADVERSE OUTCOMES AFTER CURATIVE-INTENT EXTERNAL BEAM RADIATION THERAPY FOR PROSTATE CANCER: A NOVEL APPLICATION OF AN "OLD" BIOMARKER

RENAL SABR IN PATIENTS WITH A SOLITARY KIDNEY: AN INDIVIDUAL-PATIENT POOLED ANALYSIS FROM THE INTERNATIONAL RADIOSURGERY ONCOLOGY CONSORTIUM FOR KIDNEY (IROCK)
Rohann Correa1, Shankar Siva2, Michael Staeehler3, Andrew Warner1, Senthilkumar Gandhidasan2, Lee Ponsky4, Rodney Ellis4, Irving Kaplan5, Anand Mahadevan5, William Chu6, Anand Swaminathan7, Hiroshi Onishi8, Bin Teh8, Simon Lo10, Alexander Muacevic3, Alexander Louie1
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4University Hospitals Seidman Cancer Center, Cleveland, OH
5Beth Israel Deaconess Medical Center and Harvard University, Boston, MA
6Odette Cancer Centre, Toronto, ON
7McMaster University, Hamilton, ON
8University of Yamanashi, Yamanashi, Japan
9Cancer Center and Research Institute, Houston, TX
10University of Washington School of Medicine, Seattle, WA

HYPOFRACTIONATED INTENSITY MODULATED RADIATION THERAPY PLUS WEEKLY GEMCITABINE FOR BLADDER PRESERVATION IN PATIENTS WITH INVASIVE BLADDER CANCER
Saad Alrashidi, Luis Souhami, Fabio Cury, Wassim Kassouf, Sergio Faria, Marie Vanhuyse, Marie Duclos
McGill University, Montreal, QC

PROSTATE RADIOTHERAPY IS ASSOCIATED WITH IMPROVED SURVIVAL IN NEWLY-DIAGNOSED METASTATIC HORMONE-SENSITIVE PROSTATE CANCER
Scott Morgan1, Oliver Holmes2, Julia Craig1, Scott Grimes1, Libni Eapen1, Shawn Malone1
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PATTERNS OF ADJUVANT RADIOTHERAPY AMONG LOW-, INTERMEDIATE-, AND HIGH-RISK GROUPS IN EARLY-STAGE ENDOMETRIAL CANCER
Jiheon Song, Tien Le, Choa E, Marc Gaudet, Krystine Lupe, Rajiv Samant
University of Ottawa, Ottawa, ON
271 IMPACT OF EXTENDED FIELD AND/OR INTEGRATED BOOST USING VMAT ON ACUTE HEMATOLOGICAL TOXICITY IN PATIENTS WITH LOCALLY ADVANCED CERVICAL CANCER UNDERGOING RADIOCHEMOTHERAPY Kate Johnson1, Stéphanie Smet2, Alina Sturdza3, Martin Buschmann3, Elena Umbrescu4, Yvette Seppenwoolde3, Maximilian Schmid3, Pascal Lambert5 1University of Manitoba, Winnipeg, MB 2University Hospital Leuven, Leuven, Belgium 3Medical University of Vienna, Vienna, Austria 4Hospital Santa Creu i Sant Pau, Barcelona, Spain 5CancerCare Manitoba, Winnipeg, MB

272 AN MRI-BASED RADIOMIC SIGNATURE FOR DISEASE-FREE SURVIVAL IN LOCALLY ADVANCED CERVICAL CANCER Kathy Han, Mattea Welch, Jessica Weiss, Melina Pintilie, Anthony Fyles, Michael Milosevic Princess Margaret Cancer Centre, Toronto, ON

273 OF MONSEL’S AND MRI: CAUTION REQUIRED FOR IMAGE QUALITY Keith Wachowicz, Fleur Huang, Geetha Menon University of Alberta, Edmonton, AB

274 PATTERNS OF RECURRENCE BY TYPE OF ADJUVANT RADIOTHERAPY FOR STAGE II ENDOMETRIAL CANCER: A PROVINCIAL REVIEW Kim Paulson1, Natalie Logie2, Gawon Han1, Derek Tilley3 Geetha Menon1, Tien Phan4, Gregg Nelson4, Brad Murray1, Sunita Ghosh1, Robert Pearcey1, Fleur Huang1, Ericka Wiebe1 1University of Alberta, Edmonton, AB 2University of Miami, Miami, FL 3Alberta Health Services, Calgary, AB 4University of Calgary, Calgary, AB

275 EVALUATION OF LARYNX PRESERVATION ON PATIENTS WITH LOCALLY ADVANCED LARYNGEAL CANCER IN THE ERA OF IMRT: RESULTS FROM A SINGLE TERTIARY CANCER CENTRE Jiheon Song, Ionut Busca, Dylan Yegendorf, Libni Eapen, Samy El-Sayed, Marc Gaudet, Alain Haddad University of Ottawa, Ottawa, ON

276 INFLUENCE OF COMORBIDITY ON THERAPEUTIC DECISION-MAKING AND IMPACT ON OUTCOMES IN PATIENTS WITH HEAD AND NECK SQUAMOUS CELL CANCERS: RESULTS FROM A PROSPECTIVE COHORT STUDY Jai Prakash Agarwal, Monali Swain, Deepanjali Adulkar, Santam Chakraborty, Tejpal Gupta, Ashwini Budrukkar, Sarbani Ghosh-Laskar, Vedang Murthy Tata Memorial Hospital, Mumbai, India

277 A COLLABORATIVE APPROACH TO CARE: THE DEVELOPMENT OF A MULTIDISCIPLINARY CLINIC FOR HEAD AND NECK CANCER PATIENTS IN NOVA SCOTIA Natasha McMaster1, Loraine MacLean1, Carol-Anne Davis2, Joy Tarasuk1, Karen Woodworth1, Joy Calkin1, Dr. Nathan Lamond2, Jill Petrella1, Dr. Matthew Rigby2, Helmut Hollentorst2, 1Nova Scotia Cancer Care Program, Halifax, NS 2Dalhousie University, Halifax, NS
A BIOIMPEDANCE ANALYSIS OF HEAD AND NECK CANCER PATIENTS
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PATIENT REPORTED OUTCOMES DURING RADIOTHERAPY FOR HEAD AND NECK CANCER: A PROSPECTIVE OUTCOMES AND SUPPORT INITIATIVE
Sarah Hamilton1, Eric Tran1, Vincent Lapointe1, Julianna Caon2, Angela Bowman1, Cindy Reynolds1, Minette Lagman1, Cheryl Ho1, Erika Brown3, Robert Olson3
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DOCUMENTATION AND INCIDENCE OF LATE EFFECTS AND SCREENING RECOMMENDATIONS FOR ADOLESCENT AND YOUNG ADULT HEAD AND NECK CANCER SURVIVORS TREATED WITH RADIOTHERAPY
Sarah Hamilton1, Omair Arshad2, Jaime Kwok2, Eric Tran1, Fuschia Howard2, Karen Goddard1
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LATE TOXICITY FOR EARLY GLOTTIS CANCERS TREATED WITH HYPOFRACTIONATED RADIOTHERAPY
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EARLY STAGE GLOTTIS CANCER: OUTCOMES AND EARLY TOXICITY
Steven Tisseverasinghe1, Samy El-Sayed2, Helene Vanasse2, Tinghua Zhang2, Sarang Gupta2
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COMPARISON BETWEEN POSTOPERATIVE TRUS-CT FUSION WITH MRI-CT FUSION FOR POSTIMPLANT QUALITY ASSURANCE IN PROSTATE LDR PERMANENT SEED BRACHYTHERAPY
Steven Tisseverasinghe, Juanita Crook, David Petrik, Ross Halperin, David Kim, Francois Bachand, Cynthia Araujo
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OUTCOMES OF STEREOTACTIC ABLATIVE RADIOTHERAPY FOR PRESUMED EARLY-STAGE LUNG CANCER: THREE-YEAR RESULTS IN A 119 PATIENT COHORT
Antoine Dautruche, Edith Filion, Dominique Mathieu, Louise Lambert, Toni Vu, David Roberge, Marie-Pierre Campeau
Université de Montreal, Montreal, QC
285
CAN THE NEUTROPHIL-TO-LYMPHOCYTE RATIO AND PLATELET-TO-LYMPHOCYTE RATIO PREDICT SURVIVAL IN PATIENTS TREATED WITH STEREOTACTIC BODY RADIATION THERAPY FOR NON-SMALL CELL LUNG CANCER? A SYSTEMATIC REVIEW
Daegan Sit1, Thomas Raissi2, Meredith Giuliani3, Percy Lee4, Narek Shaverdian4, Cindy Walker-Dilks1, Anand Swaminath1
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286
PROSPECTIVE EVALUATION OF QUALITY OF LIFE AND PULMONARY FUNCTION IN EARLY-STAGE NON-SMALL CELL LUNG CANCER PATIENTS TREATED WITH ROBOTIC SBRT: 5-YEAR RESULTS
Dominique Mathieu1, Marie-Pierre Campeau1, Houda Bahig1, Toni Vu1, Louise Lambert1, Stéphane Bedwani1, Caroline Laviole2, David Roberge1 François Brouillette1, Andrei Gorgos1, Édith Filion1
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2Université Laval, Québec, QC

287
DOSIMETRIC IMPACTS OF VARIATIONS IN ORGAN AT RISKS DELINEATION DURING LUNG SABR
Dominique Mathieu, Laurent Bilodeau, Vincent Cousineau Daoust, Édith Filion, Stéphane Bedwani, Alexis Lenglet, David Roberge, Houda Bahig, Toni Vu, Nicolas Côté, Marie-Pierre Campeau
Université de Montréal, Montréal, QC

288
THE IMPACT OF TUMOUR SIZE ON LOCAL TUMOUR CONTROL FOR PERIPHERAL LUNG LESIONS TREATED WITH STEREOTACTIC ABLATIVE BODY RADIOTHERAPY (SABR): A MULTI-INSTITUTIONAL STUDY
Eman Khawandanh1, Robert Corns2, Devin Schellenberg2, Liu Mitchell1, Susan Zhang1, Maryam Dosani1, Alanah Bergman1, Derek Hyde3, Tony Teke3, Vicky Huang2, Emma Dunne1, Steven Thomas1
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2British Columbia Cancer Agency, Surrey, BC
3British Columbia Cancer Agency, Kelowna, BC

289
A DOSIMETRY COMPARISON AND LOCAL TUMOUR CONTROL ANALYSIS OF 3DCRT-SABR VERSUS VMAT-SABR FOR PERIPHERAL LUNG LESIONS
Eman Khawandanh1, Devin Schellenberg2, Robert Corns2, Liu Mitchell1, Maryam Dosani1, Alanah Bergman1, Steven Thomas1, Vicky Huang2, Derek Hyde3, Tony Teke3, Susan Zhang1
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2British Columbia, Surrey, BC
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290
ARE HIGHER RADIATION DOSES BENEFICIAL IN LIMITED-STAGE SMALL-CELL LUNG CANCER? A PROPENSITY SCORE-MATCHED ANALYSIS
Hanbo Chen, Emma Ali, David Palma, George Rodrigues, Alexander Louie
University of Western Ontario, London, ON

291
A NOVEL AND PRACTICAL PROGNOSTIC MODEL FOR LIMITED-STAGE SMALL CELL LUNG CANCER
Hanbo Chen, Andrew Warner, Emma Ali, George Rodrigues, Alexander Louie
University of Western Ontario, London, ON
STEREOTACTIC ABLATIVE RADIOTHERAPY FOR A RARE CASE OF EARLY LUNG CANCER FOLLOWING DOUBLE LUNG TRANSPLANTATION
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RADIOTHERAPY NEAR END OF LIFE IN A RAPID ACCESS LUNG CANCER CLINIC COMPARED TO STANDARD PRACTICE
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PALLIATIVE RADIOTHERAPY NEAR THE END OF LIFE IN LUNG CANCER PATIENTS: A POPULATION-BASED ANALYSIS
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FINANCIAL TOXICITY PREDICTS SURVIVAL FOLLOWING CHEMORADIOTHERAPY FOR LOCALLY ADVANCED NON-SMALL CELL LUNG CANCER IN A SOCIOECONOMICALLY DIVERSE POPULATION
Jonathan Klein, William Bodner, Madhur Garg, Shalom Kalnicki, Nitin Ohri
Albert Einstein College of Medicine, New York, NY

ACCELERATED HYPOFRACTIONATED RADIOTHERAPY FOR CENTRALLY LOCATED LUNG TUMOURS NOT SUITABLE FOR STEREOTACTIC BODY RADIOTHERAPY (SBRT) OR CONCURRENT CHEMORADIOThERAPY (CRT)
K. Liang Zeng, Ian Poon, Yee Ung, Liying Zhang, Patrick Cheung
University of Toronto, Toronto, ON

UPSTAGING RATE IN LOCALLY ADVANCED LUNG CANCER PATIENTS AS A FUNCTION OF DELAY FROM DIAGNOSTIC IMAGING
Andrew Bang, Mohammad Hasan, Eli Lechtman, Eshetu Atenafu, Alex Sun, Jean-Pierre Bissonnette
University of Toronto, Toronto, ON

A PROSPECTIVE STUDY OF MRI ASSESSMENT OF POST-RADIATION CHANGES FOLLOWING STEREOTACTIC BODY RADIATION THERAPY FOR NON-SMALL CELL LUNG CANCER
Pablo Munoz-Schuffenegger, Sonja Kandel, Zishan Allibhai, Andrew Hope, Andrea Bezjak, Alexander Sun, Anna Simeonov, John Cho, Meredith Giuliani
University of Toronto, Toronto, ON

CLINICAL IMPACT OF INCREASED COMPLEXITY OF TOTAL MARROW IRRADIATION TREATMENTS
Amanda Cherpak, Mammo Yewondwossen, Liam Mulroy
Dalhousie University, Halifax, NS

TREATMENT OUTCOMES OF PATIENTS WITH LOW GRADE LYMPHOMA OF THE ORBIT OR CONJUNCTIVAE
Elaine Wai1, Caroline Holloway1, Tom Pickles2
1University of British Columbia, Victoria, BC
2University of British Columbia, Vancouver, BC
301
Efficacy of Palliative Radiation Therapy (RT) for Diffuse Large B-Cell Lymphoma: A Population-Based Retrospective Review
Jordan Wong, Tom Pickles, Joseph Connors, Christina Aquino-Parsons, Laurie Sehn, Ciara Freeman, Andrea Lo
University of British Columbia, Vancouver, BC

302
Outcome and Role of Radiotherapy in Stage I-II Mesenteric Diffuse Large B-Cell Lymphoma
Melody Qu, Michael Jones, Richard Tsang, David Hodgson, Alexander Sun, Michael Crump, Mary Gospodarowicz
University of Toronto, Toronto, ON

303
Personalized Skin Cancer Radiation Therapy from Referral to First Treatment
Michelle Nielsen, Ann Foo, Glenn LouHing, Marisa Finlay
Trillium Health Partners, Mississauga, ON

304
Implementing a New Treatment Option; Radiotherapy for Early Stage Dupuytren’s Contracture
Stephanie Berkelaar, Amber Bardock
British Columbia Cancer Agency, Kelowna, BC

305
Quantifying Operator Variability in Contouring Male Bowel Bag on Treatment Planning and Cone Beam CT with Expanded and Refined RTOG Guidelines
Elizabeth Orton, Kristopher Dennis, Elsayed S. M. Ali
University of Ottawa, Ottawa, ON

306
Behind the Curtain - Establishing Models of Care in RT
Fiona Mitchell1, Gillian Graham2, Shannon Eberle1
1University of Alberta, Edmonton, AB
2University of Calgary, Calgary, AB

307
Reasons for Screen Failure Among Patients Identified as Candidates for a Phase 2 Study of 5-Fraction Stereotactic Body Radiation Therapy (SBRT) for Oligometastatic Cancer
Jan Ponichtera, Anthony Brade, John Kim, Andrew Hope, Alex Sun, Meredith E. Giuliani, James Brierley, Christine A. Koch, Bernard J. Cummings, Zahra Kassam, Mojgan Taremi, Jolie G. Ringash, Rebecca Wong, Pablo Munoz-Schuffenegger, Patricia Lindsay, Tony Panzarella, Laura A. Dawson, Andrea Bezjak
University of Toronto, Toronto, ON

308
Radiotherapy in the Last Month of Life: Case Series Including Cause of Death
Ziad Simon Fawaz, Tarek Hijal, Joanne Alfieri, Sergio Faria, Marc David, Neil Kopek
McGill University, Montreal, QC

309
The Development of a Prediction Model Using Deep Learning for Short Term Prognosis in Patients Seen in a Palliative Rapid Access Clinic
Chan-Kyung Jane Cho1, Ehsan Vahedi2, Jonn Wu1
1University of British Columbia, Vancouver, BC
2Redmond, WA
310 PATTERNS OF PRACTICE SURVEY: RADIOTHERAPY FOR EXTREMITY SOFT TISSUE SARCOMA
Chan-Kyung Jane Cho1, Charles Catton2, Caroline Holloway3, Karen Goddard1
1University of British Columbia, Vancouver, British Columbia
2University of Toronto, Toronto, ON
3University of British Columbia, Victoria, BC

311 RADIOTHERAPY FOR EXTREMITY SOFT TISSUE SARCOMA: THE ROLE OF NORMAL SOFT TISSUE STRIP IN VMAT PLANNING
Chan-Kyung Jane Cho1, Nevin McVicar2, Robynn Ferris2, Kerry James2, Karen Goddard1, Steven Thomas1
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2British Columbia Cancer Agency, Vancouver, BC

312 UTILIZATION RATES OF PALLIATIVE SINGLE FRACTION RADIOTHERAPY (SFRT) VERSUS MULTIPLE FRACTION RADIOTHERAPY (MFRT) FOR BONE METASTASES IN MANITOBA AND IDENTIFICATION OF RISK FACTORS ASSOCIATED WITH RECEIPT OF MFRT: A RETROSPECTIVE, POPULATION-BASED, COHORT STUDY
Youn Tae Chung, Aldrich Ong, Bashir Bashir, James Beck, Rashmi Koul, Cooke Andrew, Maged Nashed, Arbind Dubey, Julian Kim
University of Manitoba, Winnipeg, MB

313 END OF LIFE CARE DISCUSSIONS IN PRACTICE: SURVEY OF CANADIAN RADIATION ONCOLOGISTS
Justin Oh1, Kristopher Dennis2, Shilo Lefresne1, Michael McKenzie1
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2University of Ottawa, Ottawa, ON

314 WHITE MATTER HYPERINTENSITIES ON MAGNETIC RESONANCE IMAGING AND THEIR EFFECT ON COGNITIVE FUNCTION AFTER WHOLE BRAIN RADIOTHERAPY (WBRT)
Matthew Chan1, Elaine Ni Mhurchu2, David Ferguson2, Ren Yuan2, David Li1, Lovedee Gondara2, Alan Nichol2
1University of British Columbia, Vancouver, BC
2British Columbia Cancer Agency, Vancouver, BC

315 CLOSING THE LOOP: WOULD A POST-TREATMENT PHONE CALL IMPROVE THE PERCEPTIONS ABOUT QUALITY OF CARE FOR PALLIATIVE RADIATION THERAPY OUTPATIENTS?
Nareesa Ishmail, Christine Zywine, Tara Rosewall
University of Toronto, Toronto, ON

316 FUNCTIONAL CRANIO-SPINAL IRRADIATION: A DOSIMETRIC COMPARISON AND EFFICIENCY ANALYSIS
Jack Zheng1, Saif Aljabab2, Patricia Lacasse3, Jamie Bahm2, Katie Lekx-Toniolo1, Ralph P. Ermoian2, Laval Grimard1
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2University of Washington, Seattle, Washington
3The Ottawa Hospital Cancer Center, Ottawa, ON

317 DOSIMETRIC COMPARISON OF VMAT AND 3D CONFORMAL TECHNIQUES FOR CRANIO-SPINAL IRRADIATION IN PEDIATRIC PATIENTS WITH SCOLIOSIS
Wei Ning (Will) Jiang, Sarah Quirk, Alana Hudson, Che Hsuan (David) Wu, Daphne Irwin, Daren Graham, Natalie Clements, Casey Bojechko, Robert Nordal, Shaun Loewen
University of Calgary, Calgary, AB
318
THE PROGNOSTIC IMPACT OF PD-L1 AND CD8 EXPRESSION IN ANAL CANCER PATIENTS TREATED WITH CHEMORADIOThERAPY
Wei Ning (Will) Jiang1, Angela Man Yui Chan2, Gloria Roldan Urgoiti1, Elizabeth N. Kornaga2, Peter Mathen3, Rosanna Yeung4, Mie Konno2, Sandra Lee1, Alan Box1, Martin Köbel1, Kurian Jones Joseph5, Corinne M. Doll1
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2Tom Baker Cancer Centre, Calgary, AB
3National Institute of Health, Bethesda, MD
4University of Washington, Seattle, WA
5University of Alberta, Edmonton, AB

319
RESEARCH PRODUCTIVITY OF CANADIAN RADIATION ONCOLOGY RESIDENTS: A TIME-TREND ANALYSIS
Adam Mutsaers1, David Palma1, Sangyang Jia2, Timothy Nguyen3, Andrew Warner3
1University of Western Ontario, London, ON
2Schulich School of Medicine, London, ON
3University Health Network, Toronto, ON

320
DO CANADIAN RADIATION ONCOLOGISTS CONSIDER GERIATRIC ASSESSMENT IN THE DECISION-MAKING PROCESS FOR TREATMENT OF NON-METASTATIC PROSTATE CANCER PATIENTS 80 YEARS OF AGE AND OLDER? - NATIONAL SURVEY
Arman Zereshkian1, Xingshan Cao2, Martine Puts1, Krista Dawdy2, Lisa Di Prospero1, Shabbir Alibhai3, Ewa Szumacher2
1University of Toronto, Toronto, ON
2Sunnybrook Health Sciences Centre, Toronto, ON
3University Health Network, Toronto, ON

321
RADONC RESIDENT GUIDE: PLACING RADIATION ONCOLOGY IN THE PALM OF YOUR HAND
Arpita Sengupta, Dalhousie University, Halifax, Nova Scotia
Lara Best, Arjav Gupta
Dalhousie University, Halifax, NS

322
HUDDLE UP: CULTIVATING A CULTURE OF QUALITY IMPROVEMENT
Brian Liszewski1, Francois Gallant2, Glen Gonzales2, Aisha Sheikh1, Guna Budrevics2, Laura D’Alimonte1
1University of Toronto, Toronto, ON
2Toronto, ON

323
ALIGNING REQUIREMENTS OF TRAINING AND ASSESSMENT IN RADIATION PLANNING IN THE ERA OF COMPETENCY-BASED MEDICAL EDUCATION
Nikitha Moideen, Eleftherios Soleas, Maria Kalyvas, Catherine de Metz, Nancy Dalgarno, Rylan Egan
Queen’s University, Kingston, ON

324
CREATION OF AN EDUCATIONAL QUALITY IMPROVEMENT PROGRAM FOR RADIATION ONCOLOGY RESIDENTS
Catherine Pembroke1, Joanne Alfieri2, Alain Biron2, Carolyn Freeman2, Tarek Hijal2
1Cardiff University, Cardiff
2McGill University, Montreal, QC
COMMUNICATING THE EXTERNAL BEAM RADIATION EXPERIENCE (CEBRE): A NOVEL GRAPHIC NARRATIVE PATIENT EDUCATION TOOL
Daniel Golden1, Ritu Arya1, Brian Callender1, Marina De Pablo1, Kira Novak2, Shanyanyan Li2, Apoorva Shenoy2, Andrea Everman2, Sarah Braunstein2, Isabel Dec2, Sonia Lala2, Yachu Feng2, Laura Biltz2, Anne McCall1, Tomoko Ichikawa2
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2Illinois Institute of Technology, Chicago, IL

YOU AIN'T SEEN NOTHING YET: INTEGRATING THERAPEUTIC MRI INTO RADIATION THERAPY PRACTICE
Darby Erler1, Laura D'Alimonte1, Mikki Campbell2
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IMPROVING RESIDENT SELECTION PRACTICES IN RADIATION ONCOLOGY USING A MULTIPLE MINI INTERVIEW FORMAT
David Bowes, Karen Watts, Holly Campbell, Trisha Daigle-Maloney
Dalhousie University, Halifax, NS

BURNOUT AND RESILIENCY IN CANADIAN ONCOLOGY RESIDENTS: A NATIONWIDE RESIDENT AND PROGRAM DIRECTOR SURVEY
Hannah Dahn, Angela McGibbon, David Bowes
Dalhousie University, Halifax, NS

DESIGN OF A "TRANSITION TO PRACTICE" ROTATION FOR RADIATION ONCOLOGY RESIDENTS
Hannah Dahn, Karen Watts, Lara Best, David Bowes
Dalhousie University, Halifax, NS

DEVELOPING A GLOBAL HEALTH SCHOLARSHIP FOR YOUNG LEADERS IN RADIATION ONCOLOGY: RESULTS OF A PILOT PROGRAM
Horia Vulpe1, Jean-Marc Bourque2, Fleur Huang3, Ian Pereira4, Jenna Adleman1, Danielle Rodin1, Joda Kuk5, Timothy Hanna4
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3University of Alberta, Edmonton, AB
4Queen's University, London, ON
5Grand River Regional Cancer Centre, Kitchener, ON

CREATION AND IMPLEMENTATION OF HIGH-FIDELITY COMPUTER-BASED SIMULATION TO IMPROVE RESIDENT COMPETENCY IN RADIOTHERAPY TREATMENT PLAN EVALUATION
Jenna Adleman, University of Toronto, Toronto, Ontario
Jeff Winter, Thomas Purdie, Andrea McNiven, Jennifer Croke
University of Toronto, Toronto, ON

EVOLVING MENTORSHIP NEEDS FOR RADIATION ONCOLOGY RESIDENTS DURING TRAINING: IMPLICATIONS FOR PROGRAM DESIGN
Jennifer Croke1, Emily Milne1, Andrea Bezjak1, Sylvia Heeneman2, Meredith Giuliani1
1University of Toronto, Toronto, ON
2Maastricht University, Maastricht, The Netherlands
333 EXPLORING THE EDUCATIONAL NEEDS OF WOMEN WITH GYNECOLOGICAL CANCERS POST-BRACHYTHERAPY
Anet Julius, Jodi-Ann Manhertz, Carol Heck, Kitty Chan, Jennifer Croke, Janet Papadakos
University of Toronto, Toronto, ON

334 EXTRACTING FROM PATIENT EXPERIENCE: THE USE OF VIRTUAL SOFTWARE FOR RADIATION THERAPY EDUCATION FOR BREAST CANCER PATIENTS
Jenny Soo1, Christina Aquino-Parsons2, Paris-Ann Ingledew2
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2University of British Columbia, Vancouver, BC

335 PRE-LAUNCH FEEDBACK FOR EFFECTIVE TRANSITION TO PRACTICE TRAINING WITH COMPETENCY-BASED MEDICAL EDUCATION IN RADIATION ONCOLOGY
Lara Best1, Arpita Sengupta1, Joan Sargeant1, René J.L. Murphy2, Catherine de Metz3, Paris-Ann Ingledew4, Shaun K. Loewen5, Theresa Trotter5
1Dalhousie University, Halifax, NS
2Acadia University, Wolfville, NS
3Queen's University, Kingston, ON
4University of British Columbia, Vancouver, BC
5University of Calgary, Calgary, AB

336 EMPATHIC PATIENT-ORIENTED COMMUNICATION IN CANCER CARE COURSE: PROGRAM DESIGN AND EVALUATION
Meredith Giuliani, Janet Papadakos, Caitlin Gillan, Anna D'souza, Jennifer Croke, Raymond Jang, Kim Miller, Kirsten Wentlandt, Tina Papadakos
Princess Margaret Cancer Centre, Toronto, ON

337 EXPLORING THE ROLE OF PROSTATE CANCER SURVIVORS IN MANAGING SURVIVORSHIP CARE
Meredith Giuliani1, Naa Kwarley Quartey1, Charles Catton1, Anna D'souza1, Edward Kucharski2, Manjula Maganti1, Andrew Matthew1, Janet Papadakos1
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2Cancer Care Ontario, Toronto, ON

338 THE PREVALENCE AND NATURE OF UNMET SURVIVORSHIP NEEDS OF PROSTATE CANCER PATIENTS
Janet Papadakos1, Naa Kwarley Quartey1, Charles Catton1, Anna D'souza1, Edward Kucharski2, Manjula Maganti1, Andrew Matthew1, Meredith Giuliani1
1Princess Margaret Cancer Centre, Toronto, ON
2University of Toronto, Toronto, ON

339 LEARNING IN 360 DEGREES: A PILOT STUDY ON THE USE OF VIRTUAL REALITY FOR RADIATION THERAPY PATIENT EDUCATION
Merrylee McGuffin1, Kalaina Johnson2, Brian Liszewski1
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2The Michener Institute for Applied Health Sciences, Toronto, ON

340 MONITORING THE SITUATION: IMPLEMENTATION OF A PATIENT INFORMATION MONITOR IN A RADIATION THERAPY DEPARTMENT WAITING ROOM
Merrylee McGuffin1, Brian Liszewski1, Ruby Bola2, Stephanie Kulczyski2, Nikolas Gregor2, Fatima Hashmi2, Dilshad Nathoo2, Helen Su2, Romeo Tirona2, Angela Turner1, Laura D'Alimonte1
1University of Toronto, Toronto, ON
2Sunnybrook Health Sciences Centre, Toronto, ON
341
RESULTS FROM THE 2017 SURVEY OF RADIATION ONCOLOGY RESIDENTS IN CANADA
Michael Wang1, Shaun Loewen2, Meredith Giuliani3, Alysa Fairchild1, Don Yee1, Brock Debenham1
1Cross Cancer Institute, Edmonton, AB
2Tom Baker Cancer Centre, Calgary, AB
3Princess Margaret Cancer Centre, Toronto, ON

342
DISTRACTED DRIVING? AN EXAMINATION OF CONSOLE INTERRUPTIONS DURING RADIATION THERAPY TREATMENT.
Sarah Kristensen1, Alison Giddings2, John French2, Amanda Bolderston2, Lindsey Baker3
1British Columbia Cancer Agency, Surrey, BC
2British Columbia Cancer Agency, Vancouver, BC

343
BREAST CANCER PATIENTS’ PERCEPTIONS OF ADJUVANT RADIOThERAPY: AN ASSESSMENT OF PRE-TREATMENT KNOWLEDGE AND INFORMATIONAL NEEDS
Sonja Murchison1, Jenny Soo2, Aneeta Kassam2, Paris-Ann Ingledew1, Sarah Hamilton1
1University of British Columbia, Vancouver, BC
2British Columbia Cancer Agency, Vancouver, BC

344
ESTABLISHING A ROLE FOR TUMOUR GENOMICS IN RADIATION MEDICINE: AN ANALYSIS OF HEAD AND NECK CANCER PATIENTS ENROLLED IN THE PERSONALIZED ONCO-GENOMICS (POG) INITIATIVE
Sonja Murchison1, Laura Williamson2, Jasleen Grewal2, Eric Zhao2, Tony Ng1, Stephen Yip1, Steven Jones2, Marco Marra2, Janessa Laskin1, Sarah Hamilton1
1University of British Columbia, Vancouver, BC
2Canada's Michael Smith Genome Sciences Centre, Vancouver, BC

345
PROMOTING CAREER SELECTION THROUGH A COMPREHENSIVE ENRICHMENT EXPERIENCE: A REVIEW OF THE CARO-CROF SUMMER STUDENTSHIP
Stella Kang1, Amanda Caissie1, Zahra Kassam2, Paris-Ann Ingledew3, Joanne Alfieri4, Matthew Parliament5, Meredith Giuliani2
1Dalhousie University, Saint John, NB
2University of Toronto, Toronto, ON
3University of British Columbia, Vancouver, BC
4McGill University, Montreal, QC
5University of Alberta, Edmonton, AB

346
BUILDING COMMUNITY AMONG PROVINCES, PROFESSIONS AND PATIENTS THROUGH THE DEVELOPMENT OF PATIENT AND CAREGIVER RESOURCES
Stephanie Freire
Dalhousie University, Charlottetown, PEI

347
THE ROLE OF PARTIAL BREAST IRRADIATION IN THE PREVIOUSLY IRRADIATED BREAST
Korzets Yasmin1, Barry Aisling1, Anthony Fyles1, Grace Lee1, Osvaldo Espin Garcia2, Thomas Purdie1, Ann Christine Koch1, David Hodgson1
1Princess Margaret Cancer Centre, Toronto, ON
2MMath, Toronto, ON
MANAGEMENT OF LOCO-REGIONAL RECURRENT BREAST CANCER AFTER PRIOR RADIATION TO THE BREAST OR CHEST WALL
Barry Aisling1, Anthony Fyles1, Yasmin Korzets1, Grace Lee1, Osvaldo Espin Garcia2, Shagun Misra1, Thomas Purdie1, Ann Christine Koch1
1University of Toronto, Toronto, ON
2MMath, Toronto, ON

THE HUMAN SIDE OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE: DO WE KNOW WHAT'S COMING AND WHAT TO DO ABOUT IT?
Caitlin Gillan, Nicole Harnett, Tom Purdie, David Jaffray, Brian Hodges
University of Toronto, Toronto, ON

PHYSICIAN AND FACILITY DRIVERS OF SPENDING VARIATION IN LOCALIZED PROSTATE CANCER
Danielle Rodin1, Alyn Chien2, Chad Ellimoot3, Paul Nguyen4, Pragya Kakani1, Matthew Mossanen5, Meredith Rosenthal1, Mary Beth Landrum6, Anna Sinaiko5
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5Brigham and Women's Hospital, Boston, MA
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IMPROVING CLINICAL QUALITY BASED ON PATIENT'S PERSPECTIVE
Etienne Letourneau, Annie Houle, Julie Héon, Marie-André Fortin
Université de Montréal, Laval, QC

TARGETING THE AREAS OF CARE THAT REQUIRED IMPROVEMENT IN PARTNERSHIP WITH PATIENTS
Etienne Letourneau, Annie Houle, Moein Alizadeh
Université de Montréal, Laval, QC

DISPARITIES IN ACCESSIBILITY TO RADIOTHERAPY IN A HIGH-INCOME COUNTRY: THE CASE OF CANADA
Jessica Chan1, Alfredo Polo2, May Abdel-Wahab2, Daichi Hirata3, Jean-Marc Bourque4, Eduardo Zubizarreta2
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2International Atomic Energy Agency, Vienna, Austria
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ACCESS TO RADIOTHERAPY AMONG INDIGENOUS POPULATIONS IN CANADA
Jessica Chan1, Alfredo Polo2, May Abdel-Wahab2, Daichi Hirata3, Jean-Marc Bourque1, Eduardo Zubizarreta2
1University of Ottawa, Ottawa, ON
2International Atomic Energy Agency, Vienna
3Hiroshima University, Hiroshima
EVALUATION OF A WEB-BASED TOOL HELPING PROSTATE CANCER PATIENTS BECOME ACTIVE PARTNERS IN THEIR CARE: A PILOT STUDY
Marie-Andrée Fortin1, Marie-Thérèse Lussier1, Moein Alizadeh1, Claude Richard1, Israel Fortin2, Binta Fatoumata Diallo1
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2Université de Montréal, Montreal, QC

LYMPH NODE RATIO AS A PREDICTOR OF DISTANT METASTASES IN MAJOR SALIVARY GLAND CARCINOMAS
Nhu-Tram Nguyen, Shao Hui Huang, Wei Xu, Yi Wen Zhang, Andrew Bayley, Scott V. Bratman, John Cho, Meredith Giuliani, Andrew Hope, John Kim, Brian O’Sullivan, Jolie Ringash, John Waldron, Aaron Hansen, John R. de Almeida, Eric Monteiro, Douglas Chapeha, Jonathan Irish, David P Goldstein, Ali Hosni
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EVALUATING THE NECESSITY OF RADIOTHERAPY DOSE ESCALATION FOR INFLAMMATORY BREAST CANCER (IBC) IN THE CONTEXT OF MODERN MULTI-MODALITY TREATMENT: A MULTI-INSTITUTION RETROSPECTIVE REVIEW, 2000-2011
Sunand Kannappan, Rahul Arora, Tien Phan
University of Calgary, Calgary, AB

HIGH DOSE STEREOTACTIC ABLATIVE RADIOTHERAPY (HD-SABR) FOR RADIORESTITANT LUNG METASTASIS: ASSESSING THE ACCURACY OF COMMERCIAL DOSE ALGORITHMS FOR A FUTURE CLINICAL TRIAL
Brandon Disher1, Sergei Zavgorodni2, George Hajdok3, Stewart Gaede3, Julian Kim1, Boyd McCurdy1, Jerry Battista3
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2University of Victoria, Victoria, BC
3University of Western Ontario, London, ON

HIGH DOSE STEREOTACTIC ABLATIVE RADIOTHERAPY (HD-SABR) FOR DOSE ESCALATION OF RADIORESISTANT LUNG METASTASIS
Brandon Disher1, George Hajdok2, Stewart Gaede2, Julian Kim1, Boyd McCurdy1, Jerry Battista2
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2University of Western Ontario, London, ON

CHARACTERIZATION OF INTRA-FRACTION PATIENT MOTION FOR HYPO-FRACTIONATED TREATMENTS OF THE CENTRAL NERVOUS SYSTEM AND THE PROSTATE
Eric Vandervoort1, Daniel Kyrollos2, Elsayed S. M. Ali1
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NEUROLOGICAL DEATH IS COMMON IN PATIENTS WITH EGFR MUTANT NON-SMALL CELL LUNG CANCER
Matthew Ramotar1, Sierra Barnes2, Mark Doherty1, David Shultz1
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2McMaster University, Hamilton, ON

COMMISSIONING AND CLINICAL IMPLEMENTATION OF AN ENDOBRONCHIALLY IMPLANTED TRANSPONDER (CALYPSO) SYSTEM FOR LUNG STEREOTACTIC BODY RADIATION THERAPY
Sankar Venkataraman, Brandon Disher, Julian Kim, Azeez Omatayo, Boyd McCurdy
University of Manitoba, Winnipeg, MB
363 INCIDENCE OF RADIONECROSIS IN SINGLE VERSUS HYPOFRACTIONATED STEREOTACTIC RADIOSURGERY TREATMENT FOR BRAIN METASTASIS
Elysia Donovan, Sameer Parpia, Jeffrey Greenspoon
McMaster University, Hamilton, ON

364 ATTITUDE AND BELIEFS TOWARDS STEREOTACTIC BODY RADIOTHERAPY FOR OLIGOMETASTATIC BREAT CANCER: A SURVEY OF CANADIAN MEDICAL ONCOLOGISTS
Elysia Donovan, Som D Mukherjee, Sukhbinder Dhesy-Thind, Anand Swaminath
McMaster University, Hamilton, ON

365 DOES MODERN MEDIASTINAL IRRADIATION CAUSE ACUTE SUBCLINICAL CARDIAC DAMAGE? THE RESULTS OF THE MEDICATE STUDY (MEDIASTINAL IRRADIATION AND CARDIO-TOXIC EVENTS)
Elysia Donovan, Sukhbinder Dhesy-Thind, Anand Swaminath Darryl Leong, Sachi Voruganti, Jonathan Sussman, James Wright, Gordon Okawara, Hisham Dokainish, Gregory Pond, Peter Kavsak, Graeme Fraser, Stephen Sagar
McMaster University, Hamilton, ON

366 CONSENSUS GUIDELINES FOR TARGET VOLUME DEFINITION OF THE SACRUM IN SPINAL STEREOTACTIC BODY RADIATION THERAPY (SBRT)
Emma Maria Dunne1, Arjun Sahgal2, Simon S Lo3, Alanah Bergman1, Robert Kosztyla1, Eric L Chang4, UngKyu Chang5, Samuel T Chao6, Amol J Ghia7, Kristin J Redmond8, Scott G Soltys9, Salman Faruqi2, Mitchell C Liu1
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6Taussig Cancer Centre, Cleveland Clinic, Cleveland, Ohio
7The University of Texas MD Anderson Cancer Centre, Houston, Texas
8Johns Hopkins University School of Medicine, Baltimore, Maryland
9Stanford Cancer Institute, Stanford, California

367 STEREOTACTIC BODY RADIATION THERAPY (SBRT) FOR THE TREATMENT OF LIVER METASTASES: A SINGLE INSTITUTION EXPERIENCE
Emma Maria Dunne, Mitchell C Liu, Roy Ma, Cathy Crumley, Richard Lee, Moira Pearson, Hardeep Sahota, Devin Schellenberg
British Columbia Cancer Agency, Vancouver, BC

368 OVERLAP BETWEEN TUMOURS AND ABLATION ZONES AFTER MR-GUIDED PROSTATE FOCAL LASER ABLATION THERAPY
Eric Knull1, Aytekin Oto2, Scott Eggener2, David Tessier1, Serkan Guneyli2, Aritrick Chatterjee2, Aaron Fenster1
1University of Western Ontario, London, ON
2University of Chicago, Chicago, IL
369
ASSESSING COMBINED ERRORS IN IMAGE REGISTRATION AND GEOMETRIC ACCURACY FOR CT, MRI AND 3D ANGIOGRAPHY IMAGES FOR RADIOSURGERY PLANNING WITH THE CYBERKNIFE SOFTWARE
Ghada Aldosary1, Janos Szanto2, Oliver Holmes3, Claire Footit4, Eric Vandervoort1
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2The Ottawa Hospital Cancer Centre, Ottawa, ON
3University of Newfoundland, St. John’s, NL
4University of Ottawa, Ottawa, ON

370
SYSTEMATIC REVIEW OF THE INCIDENCE OF CHEST WALL TOXICITY FOLLOWING STEREOTACTIC BODY RADIATION THERAPY FOR EARLY STAGE NON-SMALL CELL LUNG CANCER
Indu Voruganti1, Elysia Donovan2, Cindy Walker-Dilks2, Anand Swaminath2
1Brown University, Providence, Rhode Island
2McMaster University, Hamilton, ON

371
CORRELATING EARLY CHANGES IN MAGNETIC RESONANCE BIOMARKERS WITH DOSE FOLLOWING SRS OF BRAIN METASTASES WITH AND WITHOUT EVIDENCE OF RADIONECROSIS
Jeff Winter1, Fabio Moraes1, Caroline Chung2, Catherine Coolens1
1Princess Margaret Cancer Centre, Toronto, ON
2University of Texas MD Anderson Cancer Center, Houston, TX

372
CHEST WALL PAIN FOLLOWING STEREOTACTIC BODY RADIATION THERAPY (SBRT) TO THE LUNG USING 48 GY IN THREE FRACTIONS: A SEARCH FOR PREDICTORS
Julia Albers, Sergio Faria, John Kildea, Catherine Pembroke, William Parker
McGill University, Montreal, QC

373
SYSTEMIC THERAPY AS A PREDICTOR OF PAIN AND VCF AFTER SPINE SBRT
Christian Fernando Arias Quiroz, Philip Wong, Mathilde Nahmiash, David Donath, David Roberge, Daniel Shedid, Zhi Wang, Ghassan Boubez, Giuseppina Laura Masucci
Centre Hospitalier de l'Université de Montréal (CHUM), Montréal, Quebec

374
STEREOTACTIC ABLATIVE RADIOTHERAPY FOR UPPER TRACT TRANSITIONAL CELL CARCINOMA: A SYSTEMATIC REVIEW
Osbert Zalay, Aamer Mahmud
Queen's University, Kingston, ON

375
EVALUATION OF INTRACTION MOTION AND TREATMENT TIME IN RELATION TO IMMOBILIZATION AND BEAM ARRANGEMENT IN STEREOTACTIC BODY RADIOTHERAPY FOR EARLY STAGE LUNG CANCER
Shannah Murland
Cross Cancer Institute, Edmonton, AB

376
RADIOSURGERY DOSIMETRIC COMPARISON BETWEEN BRAINLAB NOVALIS AND ECLIPSE VMAT FOR A LARGE PATIENT POPULATION
Zahra Anjomani, Gerald Lim, Hali Morrison, Kundan Thind, Nicolas Ploquin
University of Calgary, Calgary, AB
A MULTIDISCIPLINARY CLINICAL EXPERIENCE IN SEXUAL HEALTH CARE FOR ONCOLOGY PATIENTS
Adele Duimering1, Jill Turner2, Elisha Andrews2, Amy Driga2, Ashley Ayume2, John Robinson3, Lauren Walker3, Ericka Wiebe1
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LONG-TERM HEALTH-RELATED QUALITY OF LIFE IN SURVIVORS OF INTRACRANIAL GERM CELL TUMOURS
Andrea Lo
University of British Columbia, Vancouver, BC

OUTCOMES OF TRI-MODALITY BLADDER-SPARING THERAPY FOR MUSCLE-INVASIVE BLADDER CANCER
Eric Khang Nguyen, Greg Pond, Himanshu Lukka
McMaster University, Hamilton, ON

A PROSPECTIVE EVALUATION OF HEALTH-RELATED QUALITY OF LIFE OUTCOMES AFTER SKULL BASE RE-IRRADIATION
Houda Bahig, Sweet Ping Ng, Courtney Ill Pollard, Theresa Nguyen, Brandon G Gunn, David I Rosenthal, David C Fuller, Steven J Frank, Adam S Garden, William H Morrison, Jay P Reddy, Ehab Y Hanna, Franco DeMonte, Shirley Su, Jack Phan
The University of MD Anderson Cancer Center, Houston, TX

IMPROVEMENT IN PATIENT-REPORTED DISTRESS AFTER CHEMO-RADIATION IN CERVICAL CANCER PATIENTS
Jessica L Conway, Shira Felder, Jaiyan Tang, Jelena Lukovic, Haiyan Jiang, Anthony Fyles, Michael Milosevic, Kathy Han Jennifer Croke
University of Toronto, Toronto, ON

RE-ENGAGING SURVIVORS OF CHILDHOOD CANCER IN AFTERCARE: A QUALITY IMPROVEMENT INITIATIVE
Julianna Sienna, Stephan Tran, Eleanor Hendershot, Loretta Anderson, Linda Waterhouse, Crystal Hann, Stacey Marjerrison
McMaster University, Hamilton, ON

LOCAL RELAPSE AND SURVIVAL OUTCOMES IN PATIENTS WITH SCALP SARCOMA
Katie Jasper1, Caroline Holloway2, Pauline Truong2, Kimberly DeVries1
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2University of British Columbia, Victoria, BC

INTERNATIONAL REFERRAL FOR PROTON BEAM THERAPY - A PATIENT AND CAREGIVER PERSPECTIVE
Keith McIntosh, William Perceval McIntosh
Ottawa, ON
IS THERE A DIFFERENCE IN COMPLETION RATES? PILOT VERSUS PROVINCIAL IMPLEMENTATION OF EXPANDED PROSTATE CANCER INDEX COMPOSITE FOR CLINICAL PRACTICE (EPIC-CP) IN ONTARIO
Lisa Barbera1, Michael Brundage2, Farzana McCallum3, Zahra Ismail4, Mindaugas Mozuraitis4
1University of Toronto, Toronto, ON
2Queen's University, Kingston, ON
3Person Centred Care, Toronto, ON
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ADJUVANT RADIATION THERAPY IMPROVES PFS OF WHO GRADE II MENINGIOMA RESULTING IN IMPROVED LONG TERM SURVIVAL: A SINGLE INSTITUTION EXPERIENCE
Marta Talise1, Gerard Mohr2, Khalil Sultanem2, Salvatore Di Maio2, Thierry Muanza2
1McGill University, Montreal, QC
2Jewish General Hospital, Montreal, QC

INTEGRATION OF ONGOING QUALITY ASSURANCE MEASURES IN COLORECTAL CANCER SURVIVORSHIP CARE PLANS
Samantha Sigurdson1, James Biagi1, Hugh Langley1, Kardi Kennedy2, Jordan Beattie2, Aamer Mahmud1
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2Cancer Centre of Southeastern Ontario, Kingston, ON

A SINGLE INSTITUTION RETROSPECTIVE ANALYSIS OF ADULT HEAD & NECK RHABDOMYOSARCOMA (HN RMS) FROM 1984-2017
Shivali Barot, David Shultz, Brian O'Sullivan
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