Radiation Oncology/Oncologic Imaging

RADIOLOGICAL SOCIETY OF NORTH AMERICA
105th Scientific Assembly and Annual Meeting

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Walk Through the Week

Sunday, Dec. 1, 2019

10:45 AM–12:15 PM
Scientific Papers Sessions
Gastrointestinal (LIRADS)
Session SSA07 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S103AB
Gastrointestinal (Rectal Cancer)
Session SSA09 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S103CD
Nuclear Medicine (Genitourinary Oncology Nuclear Medicine and PET)
Session SSA16 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S505AB
Radiation Oncology (Radiobiology/Science)
Session SSA23 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S502AB

10:45 AM–12:15 PM
Educational Courses
Oncodiagnosis Panel: Renal Cell Carcinoma
Session SPOI11 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . E353C

12:30–1:00 PM
Posters and Exhibits: Discussions
Radiation Oncology Sunday Poster Discussion
Session ROS-SUA . . . . . . . RO Community, Learning Center

1:00–3:00 PM
Educational Courses
Interventional Oncology Series: Interventional Therapies for Primary and Metastatic Lung Tumors
Course VSIO11 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S405AB

1:00–1:30 PM
Posters and Exhibits: Discussions
Radiation Oncology Sunday Poster Discussions
Session ROS-SUB . . . . . . RO Community, Learning Center

2:00–3:30 PM
Educational Courses
Abbreviated/Faster MRI Abdominal Pelvic Protocols
Course RC109 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . E450B
Interactive Game: Cases in Body Oncologic Imaging that I Have Learned the Most From (Interactive Session)
Course RC118 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S102CD
What’s New in the Treatment of Brain Metastases?
Course RC120 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S501ABC

Accreditation and Designation Statements
The Radiological Society of North America (RSNA) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The RSNA designates this live activity for a maximum of 94.00 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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Corporate Symposium
Please refer to each course description in the online program to determine if CME credit is offered for the session. Instructions on claiming credit will be provided during the course. CME credit for the Corporate Symposia will be provided through a third-party provider and not through RSNA.

Program information is subject to change. For the most up-to-date information, please use your Meeting App or visit Meeting.RSNA.org.
Dual Energy CT for Radiotherapy Applications
Course RC122 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S504AB

3:15–5:15 PM
Educational Courses
Interventional Oncology Series: Novel Targets for Interventional Oncologists
Course VSIO12 . . . . . . . . . . . . . . . . . . . . . . . . . . . S405AB

Monday, Dec. 2, 2019

8:30–10:00 AM
Educational Courses
BOOST: Head and Neck-Anatomy and Treatment Planning (Interactive Session)
Course MSRO21 . . . . . . . . . . . . . . . . . . . . . . . . . . . S402AB
BOOST: Breast-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO25 . . . . . . . . . . . . . . . . . . . . . . . . . . . S103CD
Novel Anti-cancer Agents in Genitourinary Malignancies: What Your Reports Should Include
Course RC207 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S102CD
Whole Body MRI for Precision Oncology in Malignant Bone Disease
Course RC218 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S103AB
Stereotactic Ablative Radiotherapy (SABR) for Oligometastases/Oligoprogression: A New Treatment Paradigm
Course RC220 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S401CD
Advanced PET Imaging for Radiotherapy Planning and Response Assessment
Course RC222 . . . . . . . . . . . . . . . . . . . . . . . . . . . . N229

10:30 AM–12:00 PM
Educational Courses
Molecular Imaging Symposium: Oncologic MI Applications
Course MSMI22 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S405AB
BOOST: CNS-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO22 . . . . . . . . . . . . . . . . . . . . . . . . . . . S103AB
BOOST: Gynecologic-Anatomy and Treatment Planning (Interactive Session)
Course MSRO26 . . . . . . . . . . . . . . . . . . . . . . . . . . . S103CD
Novel Discoveries Using the NCI’s Cancer Imaging Archive (TCIA) Public Data Sets
Course RCC22 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E353A

10:30 AM–12:00 PM
Scientific Papers Sessions
Chest (Radiomics - Malignancy)
Session SSC03 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E451A
Gastrointestinal (Advanced Response Evaluation)
Session SSC06 . . . . . . . . . . . . . . . . . . . . . . . . . . . . N230B
Science Session with Keynote: Genitourinary (Prostate MRI in Biopsy, Therapy, and Surveillance)
Session SSC07 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E260
Science Session with Keynote: Radiation Oncology (CNS Malignancies)
Session SSC14 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E261

12:15–12:45 PM
Posters and Exhibits: Discussions
Radiation Oncology Monday Poster Discussions
Session ROS-MOA . . . . . . RO Community, Learning Center

12:45–1:15 PM
Posters and Exhibits: Discussions
Radiation Oncology Monday Poster Discussions
Session ROS-MOB . . . . . . RO Community, Learning Center

1:00–3:00 PM
Educational Courses
Interventional Oncology Series: Interventional Oncology Basic Science-Progress, Challenges, and Opportunities
Course VSIO21 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E450B

1:30–2:45 PM
Educational Courses
Basic Physics Lecture for the RT: Radiation Safety Refresher Course
Session SPPH21 . . . . . . . . . . . . . . . . . . . . . . . . . . . . S402AB

3:00–4:15 PM
Educational Courses
BOOST: Head and Neck-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO24 . . . . . . . . . . . . . . . . . . . . . . . . . . . S103AB
BOOST: Gynecologic-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO28 . . . . . . . . . . . . . . . . . . . . . . . . . . . S103CD

3:00–4:00 PM
Scientific Papers Sessions
Science Session with Keynote: Radiation Oncology (Gynecologic Cancers)
Session SSE25 . . . . . . . . . . . . . . . . . . . . . . . . . . . . E263
Tuesday, Dec. 3, 2019

8:30–10:00 AM
Educational Course
BOOST: Gastrointestinal-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO31 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S103AB

An Integrated Approach to Tumor Heterogeneity Using Imaging
Course RC318 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S502AB
Radiogenomics of GBM
Course RC320 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . N230B

Advances in Cone Beam CT Acquisition and Reconstruction in Radiotherapy
Course RC322 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S503AB

8:30 AM–12:00 PM
Educational Courses
Neuroradiology Series: Brain Tumors
Course RC305 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S406B

Genitourinary Series: Imaging with Impact in Gynecologic Oncology
Course RC307 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . E353B

10:30 AM–12:00 PM
Scientific Papers Sessions
Nuclear Medicine (Lymphoma PET)
Session SSG09 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S504CD

Radiation Oncology (Lung, Mediastinum, Pleura)
Session SSG15 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S503AB

4:30–6:00 PM
Educational Courses
Chances and Opportunities for Cancer Screening
Course RC418 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . S401CD
Imaging Evaluation After Stereotactic Radiotherapy
Course RC420 ........................................ N230B
Anatomical MR Imaging for Radiotherapy Planning and Guidance
Course RC422 ........................................ S501ABC
US for Thyroid Cancer: Diagnosis, Surveillance, and Treatment
Course RC450 ........................................ S403A

4:30–5:30 PM
Educational Courses
BOOST: Gastrointestinal- Anorectal Cancer eContouring
Course MSRO39 ........................................ S104B

Wednesday, Dec. 4, 2019

8:30–10:00 AM
Educational Courses
BOOST: Pediatric-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO41 ........................................ S103CD
Update on Radionuclide Therapies
Course RC511 ........................................ S504CD
Metabolic Tumor Imaging: Current and Beyond
Course RC518 ........................................ S501ABC
MR Image Guidance Radiotherapy
Course RC520 ........................................ E353A
Machine Learning for Radiotherapy Applications
Course RC522 ........................................ E352

10:30 AM–12:00 PM
Scientific Papers Sessions
Chest (Lung Cancer Screening)
Session SSK05 ......................................... N229
Radiation Oncology (Genitourinary)
Session SSK20 ......................................... S102CD

10:30 AM–12:00 PM
Educational Courses
BOOST: Lymphoma-Case-based Multidisciplinary Review (Interactive Session)
Course MSRO42 ........................................ S103CD

12:15–12:45 PM
Posters and Exhibits: Discussions
Radiation Oncology Wednesday Poster Discussions
Session ROS-WEA .......................... RO Community, Learning Center

12:45–1:15 PM
Posters and Exhibits: Discussions
Radiation Oncology Wednesday Poster Discussions
Session ROS-WEB .......................... RO Community, Learning Center

1:00–3:00 PM
Educational Courses
Interventional Oncology Series: Renal Ablation/Embolization
Course VSI041 ........................................ S405AB

3:00–4:00 PM
Scientific Papers Sessions
Chest (Dual-energy CT - Malignancy)
Session SSM05 ......................................... N226
Molecular Imaging (Oncology)
Session SSM16 ........................................ S505AB
Physics (Radiation Therapy/Outcome Modeling/Image Processing)
Session SSM23 ........................................ S102CD
Radiation Oncology (Head and Neck, Skin)
Session SSM24 ........................................ S104A

3:00–4:15 PM
Educational Courses
BOOST: Advanced Techniques in Image-guided Therapy (Interactive Session)
Course MSRO44 ........................................ S103CD

3:15–5:15 PM
Educational Courses
Interventional Oncology Series: Clinical Trials in Interventional Oncology
Course VSI042 ........................................ S405AB

4:30–5:30 PM
Educational Courses
BOOST: Lung Stereotactic Body Radiotherapy (SBRT)-eContouring
Course MSRO49 ........................................ S103CD

4:30–6:00 PM
Educational Courses
Controversy Session: Proton Therapy: Hope or Hype?
Session SPSC44 ......................................... E353C
Thursday, Dec. 5, 2019

8:30–10:00 AM
Educational Courses
Tumor Imaging Metrics: Is It Time to Invest in a Service?
Course RC618 ................................................. S404AB
Functional MR Imaging for Tumor Targeting in Radiotherapy
Course RC622 .................................................. E353A

10:30 AM–12:00 PM
Scientific Papers Sessions
Gastrointestinal (Oncology)
Session SSQ06 ................................................. S103AB
Nuclear Medicine (Breast/General Oncology Nuclear Medicine
and PET)
Session SSQ14 .................................................. S402AB

12:15–12:45 PM
Posters and Exhibits: Discussions
Radiation Oncology Thursday Poster Discussions
Session ROS-THA ................................ RO Community, Learning Center

12:45–1:15 PM
Posters and Exhibits: Discussions
Radiation Oncology Thursday Poster Discussions
Session ROS-THB ................................ RO Community, Learning Center

1:00–3:00 PM
Educational Courses
Interventional Oncology Series: Musculoskeletal Intervention
Course VSIO51 .................................................. S405AB

3:00–4:00 PM
Educational Courses
Hot Topic Session: Integrating Immunotherapy with Radiation
Therapy
Session SPSH55 ................................................ S402AB

3:15–5:15 PM
Educational Courses
Interventional Oncology Series: International Interventional
Oncology-South Korea Presents
Course VSIO52 .................................................. S405AB

4:30–6:00 PM
Educational Courses
Advances in Imaging of Small Incidental Renal Masses
(Including Cancers): Implications for Management
Course RC707 ................................................... E353B

Interactive Game: Pearls and Tips in Oncologic Image
Interpretation (Interactive Session)
Course RC718 .................................................. S404AB
Functional MR Imaging for Normal Tissue Response
Assessment in Radiotherapy
Course RC722 .................................................. S503AB

Friday, Dec. 6, 2019

10:30 AM–12:00 PM
Scientific Papers Sessions
Nuclear Medicine (Thoracic Oncology Nuclear Medicine and
PET)
Session SST06 ................................................ E353B

Posters and Exhibits
Discussions
(CME is available when the author is present for discussion
during the lunch period)

Sunday, Dec. 1, 2019

12:30–1:00 PM
Scientific Posters
Cost Analysis of Audiovisual-Assisted Therapeutic Ambiance in
Radiation Therapy (AVATAR) Aided Omission of Anesthesia in
Radiation for Pediatric Malignancies
RO201-SD-SUA2 .................................................. Station #2
Smoking History and Cessation Discussions in Cancer
Patients Receiving Definitive Radiotherapy: Do We Treat All
Patients Equally?
RO200-SD-SUA1 .................................................. Station #1

12:30–1:00 PM
Education Exhibits
Stereotactive Ablative Radiotherapy for Oligometastatic
Colorectal Cancer
RO106-ED-SUA3 .................................................. Station #3

1:00–1:30 PM
Scientific Posters
High-Dose Irradiation in Combination with Anti-PD-L1 and
Anti-VEGF Promote Antitumor Immunity in Murine Lung
Tumors
RO202-SD-SUB1 .................................................. Station #1
The Relationship Between Fractures within the Irradiation Field Among Elderly Asian Women Who Have Received Definitive Radiation Therapy for Cervical Cancer Treatment
RO203-SD-SUB2  . . . . . . . . . . . . . . . . . . . . . . Station #2

1:00–1:30 PM
Education Exhibits
Radiation-Induced Malignancies: Current Update on Pathogenesis and Cross-Sectional Imaging Findings
RO107-ED-SUB3  . . . . . . . . . . . . . . . . . . . . . . Station #3

Monday, Dec. 2, 2019

12:15–12:45 PM
Scientific Posters
Learning Curve for Image-Guided Brachytherapy of Cervical Cancer
RO217-SD-MOA2  . . . . . . . . . . . . . . . . . . . . . . Station #2

12:45–1:15 PM
Scientific Posters
Outcomes of Stereotactic Radiotherapy for Vestibular Schwannoma
RO205-SD-MOB2  . . . . . . . . . . . . . . . . . . . . . . Station #2
Quantitative T1 Mapping Technique in Enhanced MRI to Assess Response to Chemoradiotherapy in Rectal Cancer
RO204-SD-MOB1  . . . . . . . . . . . . . . . . . . . . . . Station #1

Tuesday, Dec. 3, 2019

12:15–12:45 PM
Scientific Posters
MiRNA Expression Patterns as Potential Biomarkers in Predicting Response to Neoadjuvant Chemoradiotherapy in Rectal Cancer
RO206-SD-TUA1  . . . . . . . . . . . . . . . . . . . . . . Station #1
Prognostic Value of Whole-Body Low-Dose CT (WBLDCT) in the Staging and Restaging of Patients with Multiple Myeloma (MM): A Long Period Follow-Up
RO207-SD-TUA2  . . . . . . . . . . . . . . . . . . . . . . Station #2

12:45–1:15 PM
Scientific Posters
Intranodular Radiomic Features on Lung Non-Contrast CT Images Distinguish Malignant from Benign Pulmonary Nodules
RO209-SD-TUB2  . . . . . . . . . . . . . . . . . . . . . . Station #2
Relationship Between Spleen Dose and Lymphocyte Loss Rates During Radiation Therapy in Patients with Pancreaticobiliary and Gastroesophageal Tumors
RO208-SD-TUB1  . . . . . . . . . . . . . . . . . . . . . . Station #1

Wednesday, Dec. 4, 2019

12:15–12:45 PM
Scientific Posters
Imaging-guided Target Volume Reduction in Radiotherapy of Lung Cancer: The Prospective Randomized Multinational PET-Plan Trial
RO211-SD-WEA2  . . . . . . . . . . . . . . . . . . . . . . Station #2
Investigation of the Volume of Prostate, Bladder and Rectal Wall Variation During External Beam Radiotherapy
RO210-SD-WEA1  . . . . . . . . . . . . . . . . . . . . . . Station #1
Prospective Assessment of Diffusion-Weighted Magnetic Resonance Imaging as a Biomarker of Radiation-Induced Dysgeusia in Head and Neck Cancer
RO218-SD-WEA3  . . . . . . . . . . . . . . . . . . . . . . Station #3

12:45–1:15 PM
Scientific Posters
Bi-parametric MRI Prior to Primary Radiotherapy for Prostate Cancer in a Resource Limited Setting: Implications for Risk Group Stratification and Treatment
RO212-SD-WEB1  . . . . . . . . . . . . . . . . . . . . . . Station #1
Hafnium Oxide Nanoparticles Activated by Radiotherapy Induce an Anti-Tumor Immune Response
RO219-SD-WEB3  . . . . . . . . . . . . . . . . . . . . . . Station #3
Ultrashort Echo-Time Dynamic Contrast Enhancement MRI of Vascular Perfusion and Permeability Changes in Multiple Organs in a Preclinical Model of Irradiation
RO213-SD-WEB2  . . . . . . . . . . . . . . . . . . . . . . Station #2

Thursday, Dec. 5, 2019

12:15–12:45 PM
Scientific Posters
Intra-Fractional Dose Variation of Organs at Risk in High Dose Rate Image-Guided Brachytherapy for Cervical Cancer
RO214-SD-THA1  . . . . . . . . . . . . . . . . . . . . . . Station #1

12:45–1:15 PM
Scientific Posters
Outcomes After Treatment for Recurrence in Patients with Locally Advanced Cervical Cancer Treated with Radiotherapy
RO215-SD-THB1  . . . . . . . . . . . . . . . . . . . . . . Station #1
## Education Exhibits

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<th>Space No.</th>
<th>Exhibit Title</th>
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<tr>
<td>RO001-EB-X</td>
<td>Paradigm Shift of Treatment Strategy for Differentiated and Anaplastic Thyroid Cancer: A New Era of Multidisciplinary Treatment of Surgery, Radioiodine, External Radiation, and Molecular Targeting Agents</td>
</tr>
<tr>
<td>RO100-ED-X</td>
<td>Radiation Therapy-related Side Effects: Imaging the Collateral Damage</td>
</tr>
<tr>
<td>RO101-ED-X</td>
<td>Development of a Standardized Method for Radiation Therapy Contouring of the Piriform Cortex</td>
</tr>
<tr>
<td>RO102-ED-X</td>
<td>The Biological and Cytogenetic Effects of Ionizing Radiation from CT Scans</td>
</tr>
<tr>
<td>RO103-ED-X</td>
<td>Evaluation of an Advanced FOV Extending Algorithm (DLEFOV) Based on Deep Learning</td>
</tr>
<tr>
<td>RO104-ED-X</td>
<td>In Vivo Measurement of Brain Tissue Response After Irradiation Using MR-based Conductivity Imaging Method</td>
</tr>
<tr>
<td>RO105-ED-X</td>
<td>Complete Insight to Prostate Cancer: Giving Our Patients the Advantage of MP (Multiparametric) MRI and F18-PSMA (Prostate Specific Membrane Antigen) PET/CT</td>
</tr>
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