

Chest Radiology

RADIOLOGICAL SOCIETY OF NORTH AMERICA

105[™] Scientific Assembly and Annual Meeting

Meeting.RSNA.org #RSNA19

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.

The Commission on Accreditation of Medical Physics Education Program (CAMPEP) has approved the direct transfer of *AMA PRA Category 1 Credit*™ to MPCEC on a credit-for-credit basis for medical physicists.

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 Symposiums 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*.

Walk Through the Week

Sunday, Dec. 1, 2019

Case of the Day Chest Sunday Case of the Day Session ED003-SU...... Case of Day, Learning Center 10:30 AM-12:00 PM **Educational Courses** RSNA Al Deep Learning Lab: Beginner Class: Classification Task (Intro) Session SPAI11 AI Showcase North Building Level 2 10:45 AM-12:15 PM Scientific Papers Sessions Chest (ILD/COPD/Airways) Session SSA05..... E350 Vascular/Interventional (Lung Cancer Science) 12:30-1:00 PM Posters and Exhibits: Discussions Chest Sunday Poster Discussions Session CHS-SUA. CH Community, Learning Center 1:00-3:00 PM **Educational Courses** Interventional Oncology Series: Interventional Therapies for Primary and Metastatic Lung Tumors 1:00-1:30 PM Posters and Exhibits: Discussions Chest Sunday Poster Discussions Session CHS-SUB. CH Community, Learning Center 2:00-3:30 PM **Educational Courses** Lung Cancer Screening (Interactive Session) 4:00-5:45 PM Plenary Sessions Sunday Afternoon Plenary Session

Session PS12 Arie Crown Theater

Monday, Dec. 2, 2019 Case of the Day Chest Monday Case of the Day Session ED003-MOCase of Day, Learning Center	2:00-3:30 PM Corporate Symposium Enhancing Patient Care in CTEPH through Imaging Innovation: Presented by Bayer and Siemens Healthineers Session CS26
7:15-8:15 AM Educational Courses Controversy Session: Are We Over Diagnosing Pulmonary Emboli? Session SPSC20	3:00-4:00 PM Scientific Papers Sessions Chest (Radiomics and Machine Learning) Session SSE05
Educational Courses Pediatric Series: Chest/Cardiovascular Imaging Course RC213	Tuesday, Dec. 3, 2019
8:30–10:00 AM Educational Courses Practical HRCT of the Lung (Interactive Session)	Case of the Day Chest Tuesday Case of the Day Session ED003-TU
Course RC201	8:30-10:00 AM Educational Courses HRCT of Interstitial Lung Disease: Interactive Read with the Experts (Interactive Session)
RSNA AI Deep Learning Lab: Beginner Class: Classification Task (Intro) Session SPAI21 AI Showcase North Building Level 2	Course RC301
10:30 AM-12:00 PM Scientific Papers Sessions Chest (Radiomics - Malignancy)	Educational Courses Interventional Series: Venous Disease Course RC314
Session SSC03E451A 12:15-12:45 PM Posters and Exhibits: Discussions	10:30 AM-12:00 PM Educational Courses Case-based Review of Nuclear Medicine: PET/CT Workshop- Chest (In Conjunction with SNMMI) (Interactive Session)
Chest Monday Poster Discussions Session CHS-MOA CH Community, Learning Center 12:30–1:30 PM	Course MSCC32 E450B Essentials of Chest Imaging Course MSES32 S100AB
Lunch and Learns Lunch and Learn: Dynamic Digital Radiology: A New Modality in Action: Presented by Konica Minolta (RSVP-required) Session LL12S404AB	BOOST: Lung, Mediastinum, Pleura-Anatomy and Treatment Planning (Interactive Session) Course MSR036
12:45–1:15 PM Posters and Exhibits: Discussions Chest Monday Poster Discussions Session CHS-MOB CH Community, Learning Center	10:30 AM-12:00 PM Scientific Papers Sessions Science Session with Keynote: Chest (Pulmonary Vasculature and Angiography/Dual Energy CT) Session SSG03S404CD

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Radiation Oncology (Lung, Mediastinum, Pleura) Session SSG15	3:00-4:00 PM Scientific Papers Sessions
10:30-10:50 AM Showcase Presentations	Chest (Artificial Intelligence/Machine Learning - Lung Malignancy) Session SSJ05
RSNA AI Theater: AI-powered Precision Diagnostics: Beyond Expert Level Imaging Biomakers for Chest and Breast Imaging: Presented by Lunit Session AI31 AI Showcase North Building Level 2	4:30-6:00 PM Educational Courses
11:30-11:50 AM	Interstitial Lung Disease in the Community: A Practical Approach Course RC401
Showcase Presentations RSNA AI Theater: Putting Medical AI to Work - Delivering Intelligent, Efficient and Validated Solutions to the Workflow of	Diseases of the Thoraco-abdominal Aorta Course RC412
Radiology: Presented by VUNO, Inc. Session Al33 Al Showcase North Building Level 2	Wednesday, Dec. 4, 2019
12:15-12:45 PM Posters and Exhibits: Discussions Chest Tuesday Poster Discussions Session CHS-TUA CH Community, Learning Center	Case of the Day Chest Wednesday Case of the Day Session ED003-WECase of Day, Learning Center
12:30-1:30 PM	7:15-8:15 AM Educational Courses
Lunch and Learns Lunch and Learn: Imaging AI for Advanced COPD Care: Presented by Konica Minolta (RSVP-required)	Body Imaging Case Challenge (Case-based Competition) Session SPDL40E451B
Session LL22	8:30-10:00 AM
12:45–1:15 PM Posters and Exhibits: Discussions	Educational Courses Occupational Lung Disease (Interactive Session) Course RC501
Chest Tuesday Poster Discussions Session CHS-TUB CH Community, Learning Center	Rapid Fire: 80 Cardiac Cases in 80 Minutes Course RC503
1:30-2:30 PM Educational Courses	Emerging Technology: Dual-energy and Spectral CT Update 2019
BOOST: Lung, Mediastinum & Pleura Course MSR037	Course RC517
3:00-4:15 PM Educational Courses BOOST: Lung, Mediastinum, Pleura-Case-based Multidisciplinary Review (Interactive Session) Course MSR038	10:30 AM – 12:00 PM Educational Courses Case-based Review of Pediatric Radiology (Interactive Session) Course MSCP42
3:00-4:30 PM	10:30 AM-12:00 PM
Educational Courses RSNA AI Deep Learning Lab: Beginner Class: Classification Task (Intro)	Scientific Papers Sessions Chest (Lung Cancer Screening) Session SSK05
Session SPAI33 AI Showcase North Building Level 2	Science Session with Keynote: Emergency Radiology (Pulmonary Emboli - Current Cutting Edge, and the Future) Session SSK06

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11:00-11:20 AM	Thursday, Dec. 5, 2019
Showcase Presentations	· · · · · · · · · · · · · · · · · · ·
RSNA AI Theater: Implementing AI in Clinical Practice - When	Case of the Day
Technology Hits Reality: Presented by Aidence	Chest Thursday Case of the Day
Session AI42 AI Showcase North Building Level 2	Session ED003-TH Case of Day, Learning Center
12:15-12:45 PM	8:30-10:00 AM
Posters and Exhibits: Discussions	Educational Courses
Chest Wednesday Poster Discussions	Pulmonary Vascular Imaging
Session CHS-WEA CH Community, Learning Center	Course RC601
12:45-1:15 PM	Best Cases from the AIRP (In Conjunction with the American
Posters and Exhibits: Discussions	Institute for Radiologic Pathology) (Interactive Session)
Chest Wednesday Poster Discussions	Course RC624S404CD
Session CHS-WEB CH Community, Learning Center	10:30 AM-12:00 PM
	Scientific Papers Sessions
1:30-3:00 PM	Chest (Interventional/Systemic Vasculature)
Educational Courses	Session SSQ04E451A
Case-based Review of Thoracic Radiology	
(Interactive Session)	Science Session with Keynote: Chest (Thoracic MRI)
Course MSCT41	Session SSQ05
3:00-4:30 PM	12:15-12:45 PM
Educational Courses	Posters and Exhibits: Discussions
RSNA Al Deep Learning Lab: Beginner Class: Classification	Chest Thursday Poster Discussions
Task (Intro)	Session CHS-THA CH Community, Learning Center
Session SPAI43 AI Showcase North Building Level 2	12:45-1:15 PM
3:00-4:00 PM	Posters and Exhibits: Discussions
Scientific Papers Sessions	Chest Thursday Poster Discussions
Chest (Dual-energy CT - Malignancy)	Session CHS-THB CH Community, Learning Center
Session SSM05	,,,,,,
	1:30-1:50 PM
Chest (Infection/Incidental Lung Nodule) Session SSM06	Showcase Presentations
Session SSMOO	RSNA AI Theater: AI for Diagnosis, AI for the World: Presented
3:30-5:00 PM	by LPIXEL, Inc.
Educational Courses	Session Al57 Al Showcase North Building Level 2
Case-based Review of Thoracic Radiology	4:20 C:00 PM
(Interactive Session)	4:30-6:00 PM
Course MSCT42 S406A	Educational Courses
	Imaging and Management of Patients with Lung Cancer
4:30-5:30 PM	Course RC701
Educational Courses	
BOOST: Lung Stereotactic Body Radiotherapy	Friday, Dec. 6, 2019
(SBRT)-eContouring Course MSR049	
Course MSKU49 SIU3CD	8:30 AM-12:00 PM
	Educational Courses
	International Symposium on Cardiothoracic Imaging
	Session SPIS61

8:30–10:00 AM Educational Courses Practical MR Imaging Course RC801	Smoking-Related Lung Diseases: HRCT Findings, Clinical and Pathological Correlations CH216-ED-SUA7
Scientific Papers Sessions Chest (Artificial Intelligence - Machine Learning) Session SST02	1:00–1:30 PM Scientific Posters Clinical Utility of Measuring Tumor Respiratory Displacement Distance to Detect Parietal Pleura Invasion in Patients with Primary Lung Cancer CH247-SD-SUB3
Posters and Exhibits Discussions	CT-Based Quantification of Emphysema Correlates with Vertebral Fracture: Data from CT Lung Cancer Screening Beyond 10 Years CH246-SD-SUB2
(CME is available when the author is present for discussion during the lunch period)	Versatile CT Pulmonary Angiography Protocol Performed at Maximum Inspiration CH245-SD-SUB1
Sunday, Dec. 1, 2019 12:30-1:00 PM	Visual and Quantitative Assessment of Regional Xenon- Ventilation Using Dual-Energy Computed Tomography in Asthma-COPD Overlap Syndrome: A Comparison with COPD CH277-SD-SUB4
Scientific Posters Lung Tumor Segmentation for Volume Measurement Using Coupling-Net in Chest CT Images of Lung Cancer Patients CH243-SD-SUA2	1:00-1:30 PM Education Exhibits Handbook of 3D Printing for Cardiothoracic Radiologists: The Ultimate Guide CH215-ED-SUB7
Wall Tumors CH244-SD-SUA3	Radiomics and Radiogenomics in Thoracic Imaging: Techniques and Clinical Applications CH218-ED-SUB6. Station #6 Thoracic Imaging Manifestations of Treated Lymphoma: Response Evaluation, Post-Therapeutic Sequelae and
The Value of Fast Scanning Protocol on 16cm Wide-Detector Scanner in Chest CT for Patients with Severe Chronic Obstructive Pulmonary Disease CH276-SD-SUA4	Complications CH217-ED-SUB5
12:30-1:00 PM Education Exhibits Essentials of Thoracic Neurogenic Tumors CH212-ED-SUA8. Station #8 Finding Hemo: Imaging in Hemoptysis CH213-ED-SUA5. Station #5	12:15–12:45 PM Scientific Posters Comparison of Emphysema Scores on Low and Ultra-Low Radiation Dose CT Images Using Different Reconstruction Methods CH249-SD-MOA2

12:45-1:15 PM Education Exhibits
Evaluation of Post-Thoracic Radiotherapy, CT Features of Thoracic Complications and Recurrence: What Every Radiologist Needs to Know CH223-ED-MOB8
Pulmonary Hypertension on Chest Computed Tomography: Imaging Findings from Typical to Rare Cases and Quantitative Indices Including Updated Methods by Dual Energy Scanner CH222-ED-MOB7 Station #7 Tuesday, Dec. 3, 2019
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12:15–12:45 PM Scientific Posters Improving Image Quality of Bronchial Arteries with the Combination of Low Energy Images in Dual-Energy Spectral CT and Adaptive Statistical Iterative Reconstruction Improving Image Quality of Bronchial Arteries with the Combination of Low Energy
CH254-SD-TUA1. Station #1 Lung Cancer Screening in an Underserved Asian American Population CH256-SD-TUA3. Station #3
The Diagnostic Value of Pulmonary Embolism (PE) Using Iodine-Based Material Decomposition Images with a 16cm Wide-Detector Dual-Energy Spectral CT CH284-SD-TUA4
The Value of Intravoxel Incoherent Motion Diffusion-Weighted Imaging in Predicting the Pathologic Response to Neoadjuvant Chemotherapy in Locally Advanced Esophageal Squamous Cell Carcinoma CH255-SD-TUA2 Station #2
Tumor Invasiveness and Malignant Prediction in GGO Lung Nodules using Deep Learning Methods CH285-SD-TUA5

Lung Cysts: Uncommon and Rare Etiologies with Clinical and	Dual-Energy CT Imaging in the Assessment of Non-Small Cell
Pathological Correlation	Lung Cancer Treated with Bevacizumab: A Mouse Model
CH225-ED-TUA8 Station #8	Study CH288-SD-WEA4 Station #4
Precision Cancer Therapies in Lung Cancer: Current Status	
and Role of the Image CH226-ED-TUA7	Dual-Energy CT in Patients Treated with Radiotherapy and Chemotherapy for Central Lung Cancer: A New Method for Monitoring Tumor Response
12:45–1:15 PM	CH261-SD-WEA2 Station #2
Scientific Posters A Study of CT Spectral Imaging in Patients with Aortic Dissection using 256-Row Detector CT CH257-SD-TUB1	Effects of The First Deep Learning CT Reconstruction Technique (AiCE) Using Thinner Slices Versus State-of- the-Art Adaptive Dose Reduction 3D (AIDR 3D) on Image Quality and Dose Management in CT Pulmonary Angiography CH260-SD-WEA1
Energy Spectral CT CH258-SD-TUB2Station #2	Natural Courses of Stable Subsolid Nodules for the Initial
Performance and Outcomes of Suspicious Lung-RADS Categorization CH259-SD-TUB3Station #3	5-Years: How Many Fractions of the Nodules Have Grown Since Then and Do These Growths Have an Impact on the Patients' Outcome? CH289-SD-WEA5
The Robustness of Lung Nodule Computer-Aided Detection (CAD) Performance in Low-Dose CT Across Heterogeneous Acquisition and Reconstruction Conditions CH287-SD-TUB5	Radiomic Machine Interpretations Can Improve Lung Nodule Diagnostic Sensitivity for Human Readers: Preliminary Findings in a Multi-Site Multi-Reader Study CH290-SD-WEA6
Volume Doubling Time of Primary Lung Cancers in Interstitial Lung Disease	12:15-12:45 PM
CH286-SD-TUB4 Station #4	Education Exhibits A Resident's Guide to Understanding the New 2018 ACR White
12:45–1:15 PM	Paper for the Management of Incidental Mediastinal and Cardiovascular Findings on Thoracic CT
Education Exhibits It's Not Just Crack That's Whack: Cardiothoracic Complications	CH230-ED-WEA7 Station #7
of the Opioid Epidemic	Brief Report on Radiological Changes Following
CH228-ED-TUB6 Station #6	Radiofrequency Ablation of Lung Metastasis: A Pictorial Essay
Pearls and Pitfalls in Interpreting Thoracic CTA for Acute	CH231-ED-WEA8 Station #8
Aortic Pathology	Crossing and Filling the Pleural Space: Pitfalls in Post
CH229-ED-TUB7 Station #7	Thoracic Surgery CT Interpretation
Primary Thoracic Lymphomas: Spectrum of Imaging and Histopathologic Manifestations	CH232-ED-WEA9 Station #9
CH006-EB-TUB Hardcopy Backboard	12:45-1:15 PM Scientific Posters
	Comparison in Pulmonary Small Vessel Area and Association
Wednesday, Dec. 4, 2019 12:15-12:45 PM	with Pulmonary Emphysema between Lower and Standard Energy Data Acquisition: Quantitative Assessment with Dual-Energy Computed Tomography CH291-SD-WEB4
Scientific Posters	
Clinical Value of Ultra-HRCT in Pulmonary Nodules:	CT Guided Microcoil Placement for Video-Assisted Thoracoscopic Surgical (VATS) Resection of Small Pulmonary
Comparison of 0.5-mm 512-Matrix HRCT with 2-mm 1024-Matrix HRCT	Nodules: A Single Cancer Experience
CH262-SD-WEA3 Station #3	CH263-SD-WEB1 Station #1

CT Morphological Features of the Mediastinal Drowning Sign in Pulmonary Diffuse Lymphangiomatosis CH292-SD-WEB5 Station #5 Evaluating Real-World Performance of a Chest X-Ray TB Screening AI Tool versus Radiologists and Bacteriological Confirmatory Tests CH265-SD-WEB3 Station #3	Texture Analysis Based on Apparent Diffusion Coefficient Maps: Potential Imaging Biomarkers in the Prediction of Epidermal Growth Factor Receptor Mutations for Advanced Non-Small Cell Lung Cancer CH278-SD-THA4. Station #4 The Diagnostic Accuracy and Complication of Percutaneous Transthoracic Needle Lung Biopsy in Patients with Idiopathic Pulmonary Fibrosis
Implication of Tuberculosis Sequelae on Lung-RADS Categorization and Lung Cancer Risk in a Tuberculosis- Endemic Country: Results of a Nationwide Lung Cancer Screening Project (K-LUCAS)	CH280-SD-THA6 Station #6 12:15-12:45 PM
CH293-SD-WEB6 Station #6	Education Exhibits Dual-Energy Imaging in Cardiothoracic Pathologies: A Primer
Pilot Study: Dual Energy CT (DECT) for Evaluation of Tumor Response to Immune Checkpoint Inhibitor Immunotherapy for	for Radiologists and Clinicians CH237-ED-THA8Station #8
Stage 4 Non-Small Cell Lung Cancer (NSCLC) Patients CH264-SD-WEB2	Potentially Critical Thoracic Complications in the Oncologic Patient: Spectrum of CT Findings and Imaging-Based
12:45–1:15 PM	Diagnostical Approach CH236-ED-THA7Station #7
Education Exhibits Atypical Pneumonias: What is Atypical After All? CH233-ED-WEB7	Thoracic Imaging in the Targeted Therapy Cancer: A Practical Guide of Immunotherapy-Related Manifestations CH238-ED-THA9
Evaluation of Lung Transplant Complications on a Timeline: What the Radiologist Should Know CH234-ED-WEB8	12:45 – 1:15 PM Scientific Posters A Deep Learning Model to Aid in Pneumothorax Detection and Analysis Via Chest X-Ray: A Retrospective Cohort Study of the NIH-based Chest X-Ray Dataset CH269-SD-THB1
Thursday, Dec. 5, 2019	Application of Artificial Intelligence For the Prediction of Lung Cancer Survival Using Diffusion-Weighted Images CH283-SD-THB6
12:15–12:45 PM Scientific Posters Correlation Analysis of Dual-Energy Computered Tomography Iodine Uptake Parameters and Chest Computered Tomography Perfusion Parameters in Lung Cancer Patients	Ferumoxytol-Enhanced MR Venography of the Central Veins of the Thorax to Evaluate Stenoses and Occlusions in Patients with Renal Failure CH281-SD-THB4
CH267-SD-THA2	Multi-Task, Multiscale Convolutional Neural Network for Active/Inactive Pulmonary Tuberculosis Classification on Chest X-ray Images CH271-SD-THB3
Learning Algorithm CH268-SD-THA3	Reducing Metal Artifacts in Chest Biopsy Procedure with
Leveraging Interobserver Variability for Sensitive Pathology Detection in Chest X-Rays	Dual-Energy Spectral CT-Generated Monochromatic Images CH282-SD-THB5
CH279-SD-THA5Station #5	Volume Change in Pulmonary Solid Nodules During
Safety Impact of Patient Positioning on Pneumothorax Rates After Lung Biopsy at a Single Community Hospital CH266-SD-THA1	Respiration: Investigation with Dynamic-Ventilation Computed Tomography Image Data CH270-SD-THB2Station #2

12:45-1:15 PM

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Education Exhibits

Diagnosis of Suspected Pulmonary Embolism in Pregnancy: Review of Clinical Diagnostic Pathways, Key Components, Associated Data, and Guideline Recommendations CH241-ED-THB9Station# 9
Imaging Assessment of Thoracic Vasculitis CH239-ED-THB7Station #7
OnwARDS and UpwARDS TowARDS Understanding Acute Respiratory Distress Syndrome: A Comprehensive Imaging Review
CH240-ED-THB8 Station #8

Education Exhibits

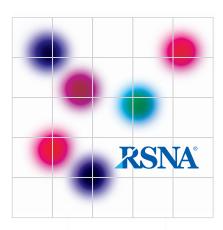
SPACE No.	EXHIBIT TITLE
CH001-EB-X	Planting Seeds Into Lung: CT-Guided Percutaneous Marking to Guide Minimal Invasive Thoracic Surgery
CH002-EB-X	Radiological Appearance of Foreign Bodies in the Thorax
CH003-EB-X	Pleuritic Chest Pain Really Hurts You: What the Radiologist Needs to Know
CH005-EB-X	Thoracic Cardiovascular Complications of Tuberculosis
CH007-EC-X	Micro Lung Cancer Analysis Based on Micro CT Imaging Using Generative Adversarial Network
CH100-ED-X	Incidental Bony and Articular Lesions on a Chest CT: An Algorithmic Approach for the Chest Radiologist
CH101-ED-X	What Every Radiologist Should Know About Ultrasound and Thoracic Neoplasms
CH102-ED-X	Rib Lesions on Chest Imaging: What the Thoracic Radiologist Needs to Know to Look Like a Pro
CH103-ED-X	The End of the Chest X-Ray Era? Lung Ultrasound for the Diagnostic Radiologist
CH104-ED-X	Imaging Features of Nonthrombotic Pulmonary Arterial Embolism
CH105-ED-X	Typical and Atypical Findings of Pleural Diseases
CH106-ED-X	No Matter What, Take a Look of the Heart: Incidental Cardiac Findings on Dual Energy Pulmonary CT Angiography
CH107-ED-X	Cinematic Rendering as a Novel Tool for Anatomy Education: A Pattern-Based Approach to the Anatomy of the Chest
CH108-ED-X	Radiologic Manifestations of Primary Pulmonary Lymphoma: The Great Mimicker
CH109-ED-X	Pitfalls in Interpreting CT Pulmonary Angiograms
CH110-ED-X	The Role of the Imaging in the Pulmonary Volume Reduction by Bronchoscopy

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CH111-ED-X	Non-Traumatic Chylothorax: Non-Contrast Magnetic Resonance Lymphography	CH128-ED-X	The Retrosternal Clear Space
CH112-ED-X	A Breath of Fresh Air: Multisystem Imaging After Lung Transplantation	CH129-ED-X CH130-ED-X	The Lesser-Known Cystic Lung Diseases Thoracic Fistulas: Learning from
CH113-ED-X	Which Side Are You? Asymmetrical		Abnormal Pathways
	Congenital Anomalies of the Thoracic	CH131-ED-X	Look Up on the Abdominal MRI
CH114-ED-X	Vessels latrogenic and Treatment Related Esophageal Injuries	CH132-ED-X	A Guide to Cystic Mediastinal Lesions: Pictorial Assay of Cystic/Partially Cystic Mediastinal Masses at Our Institution
CH115-ED-X	Fundamental of Dynamic Chest Radiography: Imaging Technique, Respiratory and Circulation Physiology, and Image Perception	CH133-ED-X	Radiological-Pathological Correlation in Diffuse Lung Diseases Using Ultra-High- Resolution Computed Tomography (U-HRCT): From Miller's to Reid's Lobule
CH116-ED-X	Why Not Apply Chest MRI for Lung Cancer?	CH134-ED-X	Mesenchymal Tumors of the Lung: Imaging Findings with Pathological Correlation
CH117-ED-X	Novel Assessment of Pleural Adhesion Using Three-Dimensional Voxel Tracking Technology via the Respiratory-4DCT	CH135-ED-X	The Tiny Lung Syndrome: A Quiz-based Approach to Unilateral Small Lung
CH118-ED-X	Inflammatory Lesions Mimicking Chest Malignancy: CT, Bronchoscopy, and PET Evaluation from an Oncology Referral	CH136-ED-X	The Image Quality and Radiation Dose of Ultra-High-Resolution CT (UHRCT) with Minimum Radiation Dose Setting
CH119-ED-X	Centre Living on the Edge: Incidental Soft Tissue	CH137-ED-X	Clinical Practice and Problems: Measurement of Solid Components on CT in Lung Adenocarcinoma
CH120-ED-X	Findings on Chest Films No Immunity: Thoracic Manifestations of Primary Immunodeficiencies	CH138-ED-X	CT-Guided Pulmonary Nodule Localization: A Roadmap for Surgeons
CH121-ED-X	Diagnostic Approach for Mediastinal Masses from the Imaging and Histological Points of View	CH139-ED-X	Takayasu Arteritis: A Comprehensive Pictorial Review of Routine Findings and Complications
CH122-ED-X	Airway Complications: The Achilles' Heel of Lung Transplantation	CH140-ED-X	Mind the Gap! Accessory and Incomplete Lung Fissures: Clinical and Histopathologic Implications
CH123-ED-X	Thoracic Manifestations of Rheumatoid Arthritis	CH141-ED-X	Common and Uncommon Emergency Complications of Lung Cancer: A Pictorial
CH124-ED-X	What the Radiologists Need to Know: Updated Knowledge on Lymphangioleiomyomatosis	CH142-ED-X	Review Koch's - the Great Mimicker: Atypical Tomographic Features of Thoracic
CH125-ED-X	The Silent Patients: How to Diagnose the Hereditary Thoracic Aortic Aneurysm	CHI/O ED V	Manifestations of Tuberculosis!
CH126-ED-X	Imaging Challenges for Staging and Response Assessment in Malignant	CH143-ED-X	Thoracic Manifestations of Gastrointestinal Diseases, Interventions, and Syndromes
CH127-ED-X	Pleural Mesothelioma: A Primer for Radiologists Lost but Not Forgotten Misplaced and	CH144-ED-X	lodine Density Maps from Dual-Energy Spectral Detector CT in Cardiothoracic Imaging: A Primer for the Radiologist
CIIIZI-ED-V	Lost but Not Forgotten! Misplaced and Retained Surgical and Procedural Devices: A Case-based Approach	CH145-ED-X	Anterior Mediastinal Lymphomas: An Approach for Radiologists

CH146-ED-X	Axillary Anatomy and Non-Oncologic Pathology: Pearls and "Pit"falls for Thoracic Imagers	CH162-ED-X	How Fluent are You in Fleischner Terminology? A Case-based Quiz on Most Commonly Used Terms in Thoracic CT
CH147-ED-X	Smooth Muscle Conditions of the Thorax: Radiologic-Pathologic Correlation	CH163-ED-X	Imaging Characteristics of Pulmonary Toxicity Associated with Cancer
CH148-ED-X	Intrathoracic Abnormal Air: Where Abnormal Air Will Be Located and Where		Immunotherapy: What Every Radiologist Needs to Know
CH149-ED-X	it Comes From A Novel Imaging Protocol for Preoperative	CH164-ED-X	Anatomy of Pericardial Recesses: Implications for Oncologic Imaging
CITITATEDEN	Arteriovenous 3D-CT for Pulmonary Surgery	CH165-ED-X	Is this Line/Tube/Catheter Placed Properly? Probably NOT! Lessons
CH150-ED-X	Dual-Energy CT for Acute Pulmonary Artery Embolism: How "To Do It": Imaging	OUM// ED V	Learned from Malpositioned Devices Seen on Chest Radiographs
CH151-ED-X	Pearls, Benefits, and Pitfalls Multifocal Lung Adenocarcinomas:	CH166-ED-X	Minimal Traumatic Aortic Injury: Disease Spectrum and Role of Imaging
CHIOLED X	Comprehensive Review and the Current Management Strategy	CH167-ED-X	A Radiologic Overview of Thoracic Manifestations in Patients with Chronic Kidney Disease
CH152-ED-X	A Guide to Collateral Pathways in Superior and Inferior Vena Cava Occlusion	CH168-ED-X	Evaluation of Immunotherapy Related Treatment Response in Non-Small Cell
CH153-ED-X	'Etiology for Chest Pain is Not Identified	CHACO ED V	Lung Cancer: RECIST 1.1 and Beyond
	on This Study' - PE MIMIC: A Structured Approach to Where to Look Next on the Acute Chest Pain CT	CH169-ED-X	Looking for the Bubble: Atypical and Unusual Thoracic Extrapulmonary Air
CH154-ED-X	Exhaling: An Overview of Tracheomalacia	CH170-ED-X	Ultrasound-Guided Biopsy Using Image Fusion of Thorax: If You Can See It, You
CH155-ED-X	Diagnosing Acute Mediastinitis in the ER:	CU171 ED V	Can Biopsy It
CH156-ED-X	A Life Threatening Riddle ECMO: Everything We Need to Know	CH171-ED-X	Immunotherapy in the Treatment of Cancer: Assessment of the Response to
CH157-ED-X	Noninfectious Granulomatous Lung		Treatment and Immuno-Related Adverse Events
	Diseases: Organizing the Pieces of the Puzzle	CH172-ED-X	Computed Tomography Findings of IgG4-Related Lung Disease
CH158-ED-X 'Tip of the Iceberg': Tips and Tricks to Estimate Clot Burden and Location Prior to Pulmonary Endarterectomy in Chronic Thromboembolic Pulmonary Hypertension	Estimate Clot Burden and Location Prior	CH173-ED-X	Dual-Energy CT in Thoracic Imaging: Emerging Applications
	Thromboembolic Pulmonary	CH174-ED-X	The Radiologist's Ultimate Guide to Tumors, Tumor Mimics, and Nontraumatic
CH159-ED-X	Imaging Findings of Central Venous Catheters Related Complications: A Pictorial Review	CH175-ED-X	Acquired Abnormalities of the Ribs Role of Radiology in the Management of Pulmonary Embolism
CH160-ED-X	More than One Way to Skin a Cat: Nodule Localization Techniques Using Microcoils	CH176-ED-X	A Plethora of Pulmonary Artery Pseudoaneurysms and Aneurysms
CH161-ED-X	Prior to VATS Wedge Resection Cystic Lung Disease: A Step-by-Step Approach for Residents	CH177-ED-X	From the Bottom of One's Heart: Imaging
			Appearances of Pulmonary Venous Anomalies in Adults

CH178-ED-X	Imaging in Cystic Fibrosis Follow-up:	CH194-ED-X	Pleural Appendages (PA) - A New Cause
	What is the News?		of Lung Nodules
CH179-ED-X	Many Faces of Pulmonary Paracoccidioidomycosis	CH196-ED-X	Hemoptysis: A Practical Guide to Understand Its Causes and Treatments
CH180-ED-X	Thoracic Endemic Fungi in the Era of Teleradiology: The Importance of Patient	CH197-ED-X	What is GAN? Contribution to Radiology Using Cutting Edge Technology
CH181-ED-X	Location, Location Pulmonary Arteriovenous Malformations	CH198-ED-X	Transdiaphragmatic Pathways: Pathology into the Chest from the Abdomen
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