

**In-Vivo Patient QA**  
Featuring SunCHECK® Patient

PO-GePV-P-75

[Intrafraction Motion Assessment Using Fn of SunCHECK PerFRACTION™](#)

Rui He, et al., University of Mississippi Medical Center, Jackson, MS

- **Purpose:**
  - "...intrafraction motion related dose variation is performed using Fx N of SunCHECK PerFRACTION for Breast IMRT cases"
- **Methods:**
  - "Heart, lung and skin drawn on a phantom (CIRS) image set. ...Then this plan was delivered sequentially six time as six fractions and the results were analyzed using Fn of SunCHECK PerFRACTION. ...with different shift in one direction as a preliminary study of 0 cm, 0.2 cm, 0.4 cm, 0.6 cm, 0.8 cm and 1 cm."
- **Results:**
  - "The overall gamma pass rates are obviously dropped down from 88.32% at no shift to 61.65% at the shift of 1 cm. The slowly drop down of the overall gamma pass rates were seen as 87.16 % and 84.66% at the shifts of 0.2 cm and 0.4 cm. The dose variations of PTV and OARs can be seen."
- **Conclusion:**
  - "This study provided us some guidance to assessment the intra-fraction motion and the motion related delivered dose variations."

PO-GePV-T-409

[Search for a Proper CBCT-ED Curve for CBCT-Based Dose Calculation in an EPID-Based Dosimetry Software](#)

Peng Qi, PhD, et al., Cleveland Clinic, Cleveland, OH

- Used CBCT and Log Files for in-vivo analysis; 118 fractions calculated for 20 patients of brain, Head & Neck, Lung, L-Spine
- Optimized CBCT-ED curve which improved Lung cases gamma pass rates, however Brain, Head & Neck, L-Spine were unchanged.
- **Results:**
  - "While switching from the default and new CBCT-ED curve, the pass rates of 3D gamma showed good agreement (99.74% vs 99.34%, 97.79% vs 97.69%, and 98.19% vs 98.47%) for the brain, H&N, and L-spine cases but significant improvement for the lung cases (from 91.52% to 98.97%,  $p < 0.05$  by t-test)."

PO-GePV-T-351

[Correlation between Delivery Errors Detected By Integrated Epid Images and In Vivo Dosimetric Errors for Pretreatment Patient-Specific QA](#)

Jun Takatsu, MS, et al., Juntendo University, Tokyo, Japan

- **Conclusion:**
  - "AAPM TG-218 indicated that dose verification using the perpendicular composite (ex. EPID) runs the risk of masking some delivery errors. However, we discovered that EPID is more sensitive to detecting delivery errors correlated with in vivo dosimetric errors."

**Patient QA**  
Featuring ArcCHECK®

MO-115-lePD-F2-3

[Robust Planning Strategy for CBCT Guided Online Adaptive Lung SABR Treatment](#)

Yesenia A. Gonzalez, PhD, et al., UT Southwestern Medical Center, Dallas, TX

MO-115-lePD-F3-2

[Using Aggregated Patient Specific QA Data to Assess Linac Performance](#)

Badal R. Juneja, PhD, et al., MD Anderson Cancer Center at Cooper, Camden, NJ

PO-GePV-D-78

[Prediction of the Chamber-Measured Point Dose for Patient-Specific Quality Assurance Using Machine Learning](#)

Aitang Xing, PhD, et al., Liverpool Hospital, Liverpool, NSW, Australia

PO-GePV-P-41

[Verification of Overlapping Multi-Isocenter Irradiations By Internal and External Measures](#)

Markus Bach, Strahlentherapie Köln, Cologne, Germany

PO-GePV-P-55

[Establishment of Quality Control System of Taichi Accelerator on the Basis of AAPM TG-119](#)

Tingtian Pang, et al., Peking Union Medical College Hospital, Beijing, China

PO-GePV-T-219

[Unification of GPR Criteria Using Bland-Altman Analysis Considering the Systematic Errors of Measurement, Calculation, and Prediction-Based PSQA Methods of VMAT for Lung Cancer](#)

Tomohiro Ono, PhD, et al., Department of Radiation Oncology and Image-applied Therapy, Kyoto University Graduate School of Medicine, Kyoto, Kyoto, Japan

PO-GePV-T-355

[Evaluation of Patient-Specific IMRT QA in Online Adaptive Radiotherapy Using Cumulative Signal Difference and Gamma Analysis](#)

Mena Bushra, Vanderbilt University, Nashville, TN and Manuel A. Morales Paliza, PhD, Vanderbilt University Medical Center, Nashville, TN

PO-GePV-T-382

[Accuracy of the Gamma Analysis for Head-and-Neck Volumetric-Arc Radiation Therapy](#)

Akito Saito, PhD, et al., Department of Radiation Oncology, Hiroshima University, Hiroshima, Hiroshima, Japan

PO-GePV-T-387

[Validation of a Secondary Dose Check Tool for Tomotherapy](#)

Bin Yang, PhD, et al., Medical Physics Department, Hong Kong Sanatorium & Hospital, Hong Kong, China

**Patient QA**  
Featuring ArcCHECK®

PO-GePV-T-388

[Comparison of VMAT Beam Complexity with Different MLC Collimator Rotation and Their Impact on PSQA Pass Rates](#)

David T. To, et al., William Beaumont University Hospital - Corewell East, Royal Oak, MI

PO-GePV-T-389

[Total Marrow Irradiation with Dynamic Feathering and Verification with ArcCHECK](#)

Wenzheng Feng, MS, Hackensack Meridian Health, Neptune, NJ and Joseph Hanley, PhD, Hackensack Meridian Health, Edison, NJ

• **Conclusion:**

- "ArcCheck phantom can be used to test the effectiveness of the dynamic feathering for TMI treatments"

PO-GePV-T-391

[Analyzing ArcCHECK Patient Specific Quality Assurance Failures in Stereotactic Body Radiation Therapy with Gafchromic Film: Device vs. Treatment Delivery Limitations](#)

Dilini S Pinnaduwege, PhD, et al., Dignity Health Cancer Institute, St. Joseph's Hospital & Medical Center, Phoenix, AZ

PO-GePV-T-477

[VMAT QA: Composite Versus Beam-By-Beam Analysis](#)

Saeed Ahmed, PhD, et al., University of Kansas Medical School, Kansas City, KS

PO-GePV-T-503

[Comparison and Validation of Raystation Photon Monte Carlo \(MC\) Beam Model Versus Collapsed Cone \(CC\)](#)

Frederick Orin Grelle, et al., Department of Radiation Oncology- University of Toledo Health Science Campus, Toledo, OH

TU-430-BReP-F3-3

[Improving ArcCHECK-Based VMAT QA Results for Small-Field SBRT Plans by Reducing Acuros Xb Spatial Discretization Errors with Split-Arc Method](#)

Chuan He, Ankit Pant and Anh H. Le, PhD, Roswell Park Comprehensive Cancer Center, Buffalo, NY

PO-GePV-T-333

[Using the Trajectory Log Files for Patient-Specific QA of IMRT/VMAT Plans: Is Prime Time Finally Coming?](#)

Guoqiang Cui, PhD, et al., Duke University Medical Center, Durham, NC

### Patient QA

Featuring ArcCHECK® for Reflexion

PO-GePV-T-1  
[Feasibility of Adapting a Deterministic Boltzmann Solver for Patient Specific QA on Reflexion X1 Treatment Geometry](#)  
Ray Yang, et al., *Reflexion Medical, Hayward, CA*

PO-GePV-T-174  
[A Verification Study of the Accuracy of Biology-Guided Radiotherapy \(BgRT\) When the PET Contrast Deviates from the Treatment Plan](#)  
Bin Han, PhD, et al., *Department of Radiation Oncology, Stanford University, Stanford, CA*

TU-1015-372-4  
[Patient Specific Quality Assurance Verification of Biology-Guided Radiotherapy Plans from the First-in-Human Clinical Trial](#)  
Murat Surucu, PhD, et al., *Department of Radiation Oncology, Stanford University, Stanford, CA*

TU-1030-IePD-F4-1  
[Investigating the Effects of Changes in Biodistribution for Biology Guided Radiotherapy \(BgRT\)](#)  
Girish Bal, PhD, et al., *Reflexion Medical, Hayward, CA*

WE-930-IePD-F3-5  
[Evaluation of Simultaneous Integrated Boost Plans to PET-Avid Regions in Biology-Guided Radiotherapy](#)  
Girish Bal, PhD, et al., *Reflexion Medical, Hayward, CA*

### Patient QA

Featuring ArcCHECK® -MR

PO-GePV-T-80  
[Quantification of the Radiation Attenuation of a MR-Linac Couch](#)  
Chen-Yu Huang, PhD, et al., *Hong Kong Sanatorium and Hospital, Hong Kong, China*

WE-1000-IePD-F7-3  
[Design and Evaluation of an ArcCHECK-MR QA Platform for Flexible and Fast Setup on Elekta Unity MR-Linac](#)  
Kyung Lim Yun, et al., *Allegheny Health Network, Pittsburgh, PA*

### Stereotactic Patient QA

Featuring SRS MapCHECK®

TH-205-372-2  
[Quality Assurance Validation of Exactrac-Guided Brainlab Cone-Based Functional and Multileaf Collimator-Based Multimet Elements Stereotactic Radiosurgery on an Elekta Versa HD Platform](#)  
Joseph P. Dugas, PhD, et al., *Willis-Knighton Cancer Center, Shreveport, LA*  
• **Conclusion:**

- o "Submillimeter accuracy is achievable for both MLC-based and cone-based single-target SRS. For targets off-axis by 5cm or more, larger margins are warranted. Clinically, 1.5mm margins are used for such lesions. In all cases, patient specific QA demonstrates acceptable treatment accuracy."

PO-GePV-P-9  
[A Clinical Study of Functional Cone-Based SRS on an Elekta Versa HD Linear Accelerator](#)  
Bethany L. Broekhoven, et al., *Willis-Knighton Cancer Center, Shreveport, LA*

PO-GePV-T-139  
[Patient-Specific QC of Stereotactic Partial Breast Irradiations with Gammapod System: One-Year Experience at Udine Hospital](#)  
Eugenia Moretti, et al., *ASU FC Medical Physics, Udine, UD, Italy*

PO-GePV-T-181  
[Optimization and Validation of Small Field Multi-Leaf Collimator Output Factors on an Elekta Versa HD for SRS Planning and Treatments](#)  
Bethany L. Broekhoven, et al., *Willis-Knighton Cancer Center, Shreveport, LA*

PO-GePV-T-335  
[Retrospective Analysis of Patient-Specific Quality Assurance of SRS Plans](#)  
Jie Ding, PhD, et al., *Department of Radiation Oncology, University of Maryland School of Medicine, Baltimore, MD*

PO-GePV-T-414  
[Clinical Significance of Switching from a Pencil Beam Algorithm to Monte Carlo Based SRS Treatment Plans Using Brainlab Elements](#)  
Steven M. Kirsner, MS, Richard Seier, MS and Garrett C. Baltz, MS, *Scripps Health, San Diego*

### Stereotactic Patient QA

Featuring SRS MapCHECK®

PO-GePV-T-422  
[Cyberknife Precision IMRT QA Comparison between Myqa SRS Phantom and SRS Mapcheck](#)  
Wenzheng Feng, MS, *Hackensack Meridian Health, Neptune, NJ*, Jing Feng, MS, *Philadelphia Cyberknife, Philadelphia, PA* and Jun Yang, PhD, *Radiation Physics Solutions, Philadelphia*  
• **Conclusion:**

- o "The recommended target size criteria is: PTV<4~5cm for SRS MapCHECK and PTV>3~4cm for myQA SRS phantom."

PO-GePV-T-437  
[Sensitivity of the SRS Mapcheck® to Collimator Angle Errors in Patient-Specific QA of Lung SBRT Treatment](#)  
Yongsook C. Lee, PhD, *Miami Cancer Institute, Miami, FL*

PO-GePV-T-130  
[Performance of a Commercial 3D-Gamma Calculation Method for SRS PSQA Versus High-Resolution Measurements with a Detector Array](#)  
Joseph Anthony Spano, et al., *University of Chicago Medical Center, Chicago, IL*

### Stereotactic & MR QA

Featuring STEEV & SRS MR Distortion Phantoms

PO-GePV-T-220  
[Hyperarc SRS Commissioning and End-to-End QA Using an Anthropomorphic Phantom Loaded with Extended Range Radiochromic Film](#)  
Seng Boh Gary Lim, PhD, et al., *Memorial Sloan Kettering Cancer Center, New York, NY*

SU-200-361-5  
[An Evaluation of a New Rapid CBCT System with Anthropomorphic Dynamic Phantoms](#)  
Didier R.P.R.M. Lustermaans, et al., *Department of Radiation Oncology (MAASTRO), GROW – School for Oncology and Reproduction, Maastricht University Medical Centre+, Maastricht, Limburg, Netherlands, Gent, Belgium*

PO-GePV-M-112  
[A Comparison Study of 0.35T MR-Linac Image Quality with Diagnostic 1.5T and 3.0T MR Image Quality](#)  
Sunyoung Jang, PhD, et al., *Penn State University, Hershey, PA*

**Patient QA**

Featuring ArcCHECK® and PerFRACTION™

PO-GePV-T-351  
[Correlation between Delivery Errors Detected by Integrated EPID Images and In Vivo Dosimetric Errors for Pretreatment Patient-Specific QA](#)  
Jun Takatsu, MS et al., Juntendo University, Tokyo, Japan

**Stereotactic Patient QA**

Featuring ArcCHECK® and Daily QA™ 3

PO-GePV-T-486  
[The Effect of Daily Output Fluctuations on Patient-Specific IMRT/VMAT/SBRT QA](#)  
Emmanuel O Osunkwor, PhD, et al., HUMC, Hackensack, NJ

- **Purpose:**
  - "To examine the impact of daily output fluctuations on patient-specific quality assurance (PSQA) for Intensity Modulated Radiotherapy (IMRT), Volumetric Modulated Arc Therapy (VMAT), and Stereotactic Body Radiotherapy (SBRT)"

**Patient QA**

Featuring MapCHECK® 3

PO-GePV-T-458  
[Single Fraction Spine SBRT Delivered Dose Comparison between Philips Pinnacle and Elekta Monaco Using a MapCHECK3 Diode Array](#)  
Grant Debevec, et al., LSU, Baton Rouge, LA

**Machine QA**

Featuring SunCHECK® Machine & IC PROFILER™

MO-115-IePD-F3-4  
[Clinical Implementation of the ICP As an Accurate Tool to Measure Linear Accelerator Beam Output Constancy](#)  
Sameer Taneja and David L. Barbee, PhD, NYU Langone Health, New York, NY

- **Methods:**
  - "A total of 1985 monthly linear accelerator output measurements were performed using three ICP arrays with quad wedges using SunCHECK Machine on six linear accelerators from October 2018 to November 2022. IC measurements were completed simultaneously. ICP accuracy was evaluated by comparing outputs measured by the IC and ICP."
- **Results:**
  - "The difference between IC and ICP output measurements over the full dataset (N=1985) was 0.16% with a standard deviation of 0.61%. ...When gain settings were standardized to 1, the bias and standard deviations were reduced to -0.02% and 0.38% (P<0.001), respectively. Calibrations and re-baselining did not affect ICP accuracy."
- **Conclusion:**
  - "With careful implementation, ICP measurements showed excellent agreement with IC measurements, with a standard deviation of 0.4%, which is well within the uncertainty of IC and ICP measurements. As a result, the ICP is currently being implemented as the primary measurement device for monthly output constancy with IC supplementing for output adjustment."

**Machine QA**

Featuring IC PROFILER™

PO-GePV-T-121  
[Electron Scatter and Peripheral Dose in Electron Beam Treatment](#)  
Bishwambhar Sengupta, et al., Northwestern Memorial Hospital, Chicago, IL

- PO-GePV-T-48  
[Efficient Routes for Treatment Planning System Commissioning](#)  
Shadab Momin, PhD, et al., Emory University, Atlanta, GA
- "Tests the feasibility of commissioning the treatment planning system (TPS) using a minimal allocation of QA resources while adhering to the MPPG5.a recommendations."
  - Used the 1D Scanner and IC Profiler to achieve a more automated workflow.
  - **Results:**
    - "Overall results show a good agreement of inline and crossline profile measurements with that of calculated with the TPS."
  - **Conclusion:**
    - "Preliminary work demonstrates the feasibility of performing TPS commissioning using only minimal QA equipment."

PO-GePV-T-308  
[Validating the Use of a 2D Ion Chamber Array for Monthly Beam Output Calibration and Constancy Checks](#)  
Shiv P. Srivastava, PhD, et al., Dignity Health Cancer Institute, St. Joseph's Hospital & Medical Center, Phoenix, AZ

PO-GePV-T-386  
[Determination of the Relationship between Conformity Index and Average Error Parameters for Radiation Therapy Beam Profiles](#)  
Philip J. Mone, MS and Dagnachew W. Workie, PhD, Sinai Hospital of Baltimore, Baltimore, MD

MO-345-IePD-F3-4  
[Pulse-By-Pulse Beam Symmetry Monitoring in a Ultra-High Dose Rate \(FLASH\) Linear Accelerator through the Internal Ion Chamber](#)  
Luke Connell, MS, et al., Department of Radiation Physics, The University of Texas MD Anderson Cancer Center, Houston, TX

**Dosimetry**

Featuring SunSCAN™ 3D , Sun Nuclear Detectors, & 3D SCANNER™

PO-GePV-T-352

[Output Factor Measurement Using Thales 3D Scanner and Edge Detector on the Mridian Linac and Comparison Against the Monte Carlo Calculated Output Factors from Multiple Institutions](#)  
Tino Romaguera, DSc, et al., Lynn Cancer Institute, Boca Raton Regional Hospital, Baptist Health South Florida, Boca Raton, FL

PO-GePV-T-21

[Comparing Various Small Field Detectors for Commissioning the Reflexion X1 Treatment Planning System](#)  
Timothy Pok Chi Yeung, PhD, et al., RefleXion Medical, Hayward, CA

PO-GePV-T-430

[Is EDGE Detector™ Suitable for Stereotactic Cone Beam Commissioning](#)  
Guozhen Luo, et al., Vanderbilt University Medical Center, Nashville, TN

- **Methods:**
  - "The Varian cone set consists of 7 different sizes including 4, 5, 7.5, 10, 12.5, 15 and 17.5 mm. The measurements were performed using a SunSCAN™ 3D tank and EDGE. ...The EGSnrc system was used to simulate the beams and calculate dose distributions."
- **Results:**
  - "For the %DDs, high agreements are achieved except for the smallest cones of 4 mm and 5 mm."
- **Conclusion:**
  - "EDGE is capable to measure accurate %dd and dose profiles for small cone beams except for cone size  $\leq$  5 mm. Correction factors obtained from this study can be applied to cone output factors measured using EDGE for accurate dosimetry for Varian cone set range from 4 mm to 17.5 mm."

PO-GePV-T-311

[Comparison of Measurements to Elekta's Agl Model Beam Match Criteria during Acceptance Testing of 10 Versa HDs](#)  
Andrew Grice, MS, et al., GenesisCare, Ft. Meyers, FL

PO-GePV-T-224

[Automation of AAPM MPPG 5.b Validation Tests Using Raystation Scripting API: A Practical Guide for Commissioning and Routine Clinical QA](#)  
Michael Fan, MSc, et al., University of New Mexico Comprehensive Cancer Center, Albuquerque, NM

**Dosimetry**

Featuring Proton Therapy Dosimetry Head

SU-100-361-8

[Investigation of Real-Time In Vivo Range Verification for Proton Therapy Using N-12 Imaging](#)  
Brian Zapien-Campos, MSc, et al., Particle Therapy Research Center (PARTREC), University Medical Center Groningen, University of Groningen, Groningen, Netherlands

**Motion Management & MRgRT QA**

Featuring Enhanced Dynamic Platform;  
Dynamic Thorax, Dynamic Cardiac & Zeus Phantoms

SU-400-351-2

[First Clinical Verification of Low-Cost 4D-CT Anthropomorphic Breathing Thorax Phantom with Deformable Lungs](#)  
Magdalena Bazalova-Carter, PhD, et al., University of Victoria, Victoria, Canada

PO-GePV-T-84

[A Novel Phantom for Patient Specific QA and End-to-End Analysis for Real-Time Target Tracking Radiotherapy with Focus on the Accuray Radixact Synchrony System](#)  
Roland Teboh Forbang, PhD, et al., HUMC, Hackensack, NJ

WE-1000-IePD-F7-5

[A Novel Phantom Design for Comprehensive Multi-Modality Respiratory Gating QA](#)  
Lee E. Stunja, MS, et al., Penn State Health Milton S. Hershey Medical Center, Hershey, PA

TH-200-361-5

[Reducing Moving Metal Artefacts during Interventional Thoracic Cone-Beam CT: Motion Compensated Non-Circular Orbits](#)  
Tess Reynolds, PhD, et al., University of Sydney, Sydney, NSW, Australia

SU-300-IePD-F8-1

[Is the Automatically Selected Kvp Optimal for Coronary Computed Tomography Angiography \(CCTA\)?](#)  
Alok Shankar, PhD, et al., Cedars-Sinai Medical Center, Los Angeles, CA

MO-930-IePD-F8-1

[Detectability of Coronary Artery Calcification in Lung Screening Scans in a Dynamic Cardiac Phantom Study](#)  
Chao Guo, PhD, MS, et al., Cedars-Sinai Medical Center, Los Angeles, CA

**Machine QA**

Featuring Advanced Electron Density Phantom

PO-GePV-P-75

[Intrafraction Motion Assessment Using Fn of SunCHECK PerFRACTION™](#)  
Rui He, et al., University of Mississippi Medical Center, Jackson, MS

PO-GePV-T-409

[Search for a Proper CBCT-ED Curve for CBCT-Based Dose Calculation in an EPID-Based Dosimetry Software](#)  
Peng Qi, PhD, et al., Cleveland Clinic, Cleveland, OH

TU-145-361-6

[Liver Fat Quantification with an Edge-on-Irradiated Silicon Photon-Counting CT in a Virtual Imaging Trial](#)  
Raj Kumar Panta PhD, et al., Center for Virtual Imaging Trials, Duke University

WE-1000-IePD-F6-3

[Methodology for Computed Tomography Characterization of Commercially Available 3D Printing Materials for Use in Radiology/Radiation Oncology](#)  
Gage H. Redler, PhD, et al., Moffitt Cancer Center, Tampa, FL



**Diagnostic Imaging QA – CT**

Featuring Multi-Energy CT Phantom

PO-GePV-T-215  
[Dosimetric Impact of Using Dual-Energy CT Imaging for Proton Stopping Power Ratio Estimation](#)  
*Hugh HC Lee, PhD, et al., Washington University in St. Louis, St. Louis, MO*

SU-200-361-6  
[Dual-Energy Calibration for Electron Density and Proton Stopping Power Ratio in a High-Performance CBCT Imaging System](#)  
*Hugh HC Lee, PhD, et al., Washington University in St. Louis, St. Louis, MO*

SU-400-IePD-F8-4  
[Verification of Dual-Energy CT Calcium Quantification Accuracy in a Phantom System](#)  
*Cayla A. Wood, PhD, et al., The University of Texas MD Anderson Cancer Center, Houston, TX*

TU-930-IePD-F5-3  
[Metal Artifact Correction and Extended Field-of-View Evaluation for a New Fast CBCT System](#)  
*Didier R.P.R.M. Lusterms, et al., Department of Radiation Oncology (MAASTRO), GROW – School for Oncology and Reproduction, Maastricht University Medical Centre+, Maastricht, Limburg, Netherlands*

**Diagnostic Imaging QA – CT**

Featuring Electron Density Phantom

PO-GePV-T-293  
[Validation and Calibration of Stopping Power Ratio from Dual Energy CT for Proton Treatment Planning](#)  
*Yu Chen, PhD, et al., MedStar Georgetown University Hospital, Washington, DC*

**Diagnostic Imaging - Ultrasound QA**

Featuring Multi-Purpose Multi-Tissue Ultrasound Phantom & Triple Modality 3D Abdominal Phantom

SU-500-360-7  
[Phantom Evaluation of Ultrasound-Guided Attenuation Parameter Imaging and Quality Assurance](#)  
*Zaiyang Long, Ph1, et al., Mayo Clinic, Rochester, MN*

MO-345-IePD-F5-1  
[Development of an Acoustic Matching Layer to Couple Transducer and Target for Thermoacoustic Range Verification during Proton Therapy](#)  
*William Emmet Bethard, BS, Acoustic Range Estimates, LLC, Chicago, IL*

TU-1000-IePD-F2-4  
[Improved Image Super-Resolution Reconstruction Using Implicit Neural Representation with Prior Embedding for Real-Time Cine MRI of the MR-Guided Radiotherapy System: A Feasibility Study](#)  
*Yu Gao, et al., Department of Radiation Oncology, Stanford University, Stanford, CA*

**Training**

Featuring Female Ultrasound Training Pelvis

PO-GePV-T-55  
[Design and Validation of a Novel Anthropomorphic Phantom for the Commissioning of MRI-Only Workflows in HDR Brachytherapy of the Cervix](#)  
*Jorge E. Alpuche Aviles, et al., CancerCare Manitoba, Winnipeg, MB, Canada*

**Fluoroscopy**

Featuring Radiography Fluoroscopy QA Phantom

TU-345-IePD-F9-1  
[Novel Radiofrequency Localization for Dose Reduction in Interventional Fluoroscopy Procedures](#)  
*Farhad Jafari, et al., University of Minnesota, Minneapolis, MN*

**Diagnostic Imaging - Mammo QA**

Featuring Mammography & Digital Breast Tomosynthesis QC Phantoms

TU-1030-IePD-F1-5  
[Visual Evaluation of Detectability in Mammography, Tomosynthesis, and Synthetic 2D](#)  
*Loretta M. Johnson, PhD, et al., UAB Medical Center, Birmingham, AL*

TU-115-IePD-F1-5  
[Evaluating the Effectiveness of Transfer Learning in an Automated Mammogram Image Quality Assessment Model](#)  
*Pei-Shan Ho, MSc, et al., Department of Engineering & System Science, National Tsing Hua University, Taiwan*



**Occupational Dosimetry**  
 Featuring Mirion Technologies' DMC 3000™ Personal Electronic Dosimeter\*

PO-GePV-I  
[Evaluation and Implementation of a Portable Radiation Shielding System in Cardiac Catheterization \(Cath\) Labs](#)  
*Troy D. Jacobs, et al., Willis-Knighton Cancer Center, Shreveport, LA*

\*DMC 3000 is manufactured by Sun Nuclear parent company, Mirion