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Biology-guided Radiotherapy (BgRT) Treatment Planning Feasibility Study for Head-and-Neck, Abdomen, and Pelvis
N. Kovalchuk, L. Vtizthum, D. Pham, C. Chuang, M. Gensheimer, A. Da Silva, B. Han, D. Chang, M. Surucu
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BgRT Motion Management Maintains Target Dose Coverage for Respiratory and Non-Respiratory Motion
P. Olcott, S. Khan, G. Bal, J. Schmall, S. Xu, Y. Voronenko, L. Shao, O.M. Oderinde, M. Surucu, M. Narayanan, G. Kuduvalli
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Characterizing Metastatic Non-Small Cell Lung Cancer Presenting to an Academic Medical Center in an Era of Changing Treatment Paradigms
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Combined Biology-guided Radiotherapy and Lutetium PSMA Treatment in Metastatic Prostate Cancer
M. Gaudreault, D. Chang, N. Hardcastle, P. Jackson, T. Kron, M.S. Hofman, S. Siva
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Deep Learning Based Patient-Specific Auto-Segmentation of Target and Organs at Risk on Daily Fan-Beam CT Images*
Y. Chen, S. Butler, L. Yu, Y. Zhou, L. Shen, N. Kovalchuk, H. Bagshaw, M. Gensheimer, L. Xing, B. Han
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Disease Burden on PET Predicts Outcomes for Advanced NSCLC Patients Treated with First-Line Immunotherapy
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**Patients in this study were not treated with SCINTIX® biology-guided radiotherapy.*

Evaluating Accuracy of Biology-guided Radiotherapy Using QUASAR 4D Motion Phantom
G. Bal, P. Olcott, D. Zaks, S. Kahn, J. Burns, J. Schmall, L. Shao, T. Laurence, O. Oderinde, M. Surucu, M. Narayanan, G. Kuduvalli
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Evaluation of Repeatability and Reproducibility of Radiomic Features Produced by the Fan-Beam KV-CT on a Novel Ring Gantry-Based PET/CT Linear Accelerator Using Two IBSI-Compliant Software Packages
T. Ketcherside, A. Sundquist, C. Han, W. Watkins, L. Court, C. Huntzinger, Q. Chen, T. Williams, A. Liu
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Feasibility and Dosimetric Benefits of Adaptive Planning in Prostate Cancer Radiotherapy Using a Novel Treatment Planning Machine with Integrated Dual kVCT/PET Imaging Systems
O.M. Oderinde, C. Han, Z. Sun, T. Cornwell, K. Feghali, A. Amini, S. Sampath, A. Liu, S.M. Shirvani
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Feasibility of Single Fraction Brain Metastases Radiotherapy in a Novel Ring Gantry Treatment System
O.M. Oderinde, C. Schuman, M.K. Owens, M. Surucu, A. Da Silva, S.M. Shirvani
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Feasibility Study of Using a Built-in KVCT Imaging System on a Novel Radiotherapy Machine with Integrated Dual-Imaging Systems for Radiotherapy Treatment Planning
C. Han, O. Oderinde, Z. Sun, A. Maniyedath, S. Shirvani, A. Liu
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Imaging Performance of the Onboard Kilo-Voltage Fan-Beam Computed Tomography for Ring Gantry Therapy Unit
G. Gibbard, J. Tan, Y. Park, M. Lin, K. Wang, W. Lu, R. Reynolds, A. Godley, A. Pompos, S. Jiang, B. Cai, T. Zhuang
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IMRT and SBRT Treatment Planning Study for the First Clinical Biology-guided Radiotherapy System
D. Pham, E.A. Simiele, D. Breitkreutz, D.P. Capaldi, B. Han, M. Surucu, O.M. Oderinde, L. Vitzthum, M.F. Gensheimer, A.L. Chin, H.P. Bagshaw, L. Xing, D.T. Chang, N. Kovalchuk
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Independent Beam Modeling for the RefleXion X1 System
M. Chen, J. Tan, G. Gibbard, Y. Park, T. Zhuang, M. Lin, K. Wang, X. Jia, B. Cai, W. Lu
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Intensity Modulated Radiotherapy on a Novel Ring Gantry-Based Linac with Integrated Dual PET-CT Imaging Systems: Dosimetric Plan Comparison and Initial Clinical Delivery Experience
C. Han, B. Liu, A. Tam, K. Qing, W.T. Watkins, T.M. Williams, A. Liu
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Investigation of Computation Time and Storage Saving Using Generative Adversarial Network (GAN) Source Models for Dose Simulation of a Binary MLC Linac
M. Shi, S. Cui, C. Chuang, O. Oderinde, N. Kovalchuk, K. Bush, M. Surucu, L. Xing, B. Han
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One Year Quality Assurance Experience of the First RefleXion System
B. Han, M. Shi, S. Cui, C. Chuang, N. Kovalchuk, L. Xing, M. Surucu
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Process Based Tolerance and Action Limits for IMRT/SBRT Delivery on a Novel Biology-guided Radiotherapy System
M. Ashraf, N. Kovalchuk, J. Fu, M. Shi, S. Cui, B. Han, M. Surucu
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Repeatability and Reproducibility of Radiomic Features Produced over Time by the Fan-Beam kV-CT on a Novel Ring Gantry-Based PET/CT Linear
T. Ketcherside, A. Sundquist, C. Han, W.T. Watkins, L.E. Court, C. Huntzinger, T.M. Williams, A. Liu
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Robustness of Biology-guided Radiotherapy Delivery to PET Biodistribution Changes within Target
S. Khan, M. Narayanan, P. Olcott, O.M. Oderinde, G. Bal, J. Schmall, S. Xu, Y. Voronenko, L. Shao, G. Kuduvalli, M. Surucu
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State of the Art of Adaptive Radiotherapy
R. Mak, R. Kashani, K. Mittauer, B. Han
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Systematic Study of Patient-Specific Organs at Risk Auto-Segmentation on Daily kVCT Images for Adaptive Head and Neck Radiotherapy
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Utility of Biology-guided Radiotherapy to *De Novo* Metastases Diagnosed During Staging of High-Risk Biopsy-Proven Prostate Cancer
M. Gaudreault, D. Chang, N. Hardcastle, P. Jackson, T. Kron, G.G. Hanna, M.S. Hofman, S. Siva
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A Motion Phantom Study on Reflexion X1: The Dosimetric Impacts of Stereotactic Radiation Therapy Delivery Technique and Motion
D.P.I. Capaldi, E.A. Simiele, M.K. Owens, B.Han, M. Surucu, L. Xing, L. Vitzthum, D. Chang, N. Kovalchuk
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Characterization of the Entire Metastatic Spectrum for Non-Small Cell Lung Cancer in the Immunotherapy Era
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Characterization of Single-Dose Radiotherapy (SDRT) Performance in a New High-Speed Ring Gantry-Based LINAC System
O.M. Oderinde, S. Khan, A. Da Silva, S. Tian, X. Yang, K. Higgins, S. Shirvani, G. Kuduvalli
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Comparison of a First-in-Class LINAC-Integrated PET System and a Diagnostic PET/CT Scanner
M. Surucu, A. Maniyedath, M. Narayanan, B. Han, N. Kovalchuk, M. Gensheimer, L. Vitzhum, A. Iagaru, V. Ferri, L. Xing, S.M. Shirvani, D.T. Chang
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Comprehensive Metastatic Ablation in Advanced NSCLC Through Biology-guided Radiotherapy – A Path Forward?
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O.M. Oderinde, Y. Voronenko, S. Tian, X. Yang, K. A. Higgins, A. Da Silva, and S.M. Shirvani
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Evaluation of PSMA-PET Biology-guided Radiotherapy Sequential Boost to the PSMA-avid Subvolume in the Prostate Region in Low-Volume Advanced Prostate Cancer
M. Gaudreault, D. Chang, N. Hardcastle, P. Jackson, T. Kron, M.S. Hofman, G.G. Hanna, S.M. Shirvani, and S. Siva
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Feasibility of Using FDG in the Stereotactic Ablative Setting for Tracked Dose Delivery with BgRT: Results from a Prospective Study of Serial Inter-Fraction PET/CTs
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First Beam QA and Commissioning Report of a Novel Biology-guided Radiotherapy System
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First Beam Commissioning Report of a Novel Medical Linear Accelerator Designed for Biologically Guided Radiotherapy
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Improving Workflow Efficiency and Safety for RefleXion X1 Treatment Planning Process Via Eclipse API Scripting
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IMRT Treatment Planning Study for the First Clinical Biology-guided Radiotherapy System
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Initial Evaluation of Biology-guided Radiotherapy (BgRT) Plans Generated Using PET Acquired on the First Installation of New System
M. Surucu, M. Narayanan, B. Han, S. Khan, A. Da Silva, A. Maniyedath, T. Yeung, S.M. Shirvani, G. Kuduvalli, M. Gensheimer, L. Vitzthum, A. Iagaru, L. Xing, D.T. Chang, N. Kovalchuk
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New Dosimetric Standard for Radiotherapy: Bounded Dose Volumetric Histogram Derived From Gamma Criteria
P. Olcott, Y. Voronenko, A. Da Silva, O.M. Oderinde
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Physical Confirmation of Biology-guided Radiotherapy Directed at Static Targets with Varying Shapes and Background Contrast Environments
M. Narayanan, D. Zaks, P. Olcott, Y. Voronenko, S. Xu, M. Haytmyradov, D. Rigie, L. Shao, J. Burns, O.M. Oderinde, S.M. Shirvani, and G. Kuduvalli
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Physical Validation of Biology-guided Radiotherapy for Delivering a Tracked Dose Distribution to a Moving PET-Avid Target
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Preliminary Treatment Planning System Commissioning Results for the First Clinical Biology-guided Radiotherapy Machine
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Quantification of Peripheral Dose in the New Ring-gantry RefleXion X1 Radiotherapy Machine
O.M. Oderinde, S. Khan, M Narayanan, A. Maniyedath, S. Shirvani, G. Kuduvalli
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Small Field Dosimetry of a Novel Biology-guided Radiotherapy System
B. Han, N. Kovalchuk, M. Shi, K. Bush, D. Capaldi, D. Breitkreutz, E. Simiele, L. Xing, M. Surucu, C. Chuang
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The Technical Design and Concept of a PET/CT Linac for Biology-guided Radiotherapy
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Characterization of the IMRT and SBRT Performance of a Novel Biology-guided Radiotherapy (BgRT) Machine Using ArcCHECK
D. Zaks, M. Narayanan, R. Bassalow, O. Volotskova, Y. Voronenko, D. Pal, D. Rigie, Jon Burns, A. Purwar, P. Olcott, G. Kuduvalli
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Characterization of the IMRT Performance of a Novel Biology-guided Radiotherapy (BgRT) Machine Using the TG-119 Methodology
A. Purwar, M. Narayanan, S. Khan, D. Zaks, J. White, C. Huntzinger, S.M. Shirvani, S. Mazin, G. Kuduvalli
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Expanding the Definition of Oligometastatic in Lung Adenocarcinoma
A. Amini, B. Chau, I. Mambetsariev, C. Huntzinger, S.M. Shirvani, K. Reckamp, E. Massarelli, J.Y.C. Wong, R. Salgia
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FDG-PET Metrics in Advanced Non-Small Cell Lung Cancer (NSCLC): A Modern Review and Meta-Analysis
A.C. Berkowitz, B. Halmos, H. Cheng, C. Huntzinger, N. Ohri
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Feasibility of Biology-guided Radiotherapy for Pancreatic Tumors: An Assessment of Normalized Target SUV
R.R. Patel, T. Pan, S.M. Shirvani, C. Huntzinger, A. Da Silva, V. Verma, A. Koong, E. Koay, J.W. Welsh
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