

**Department of Radiation Oncology
University of Maryland School of Medicine/Medical Center
AAPM Abstracts 2015**

Total submitted: 41

Total accepted: 41

100% acceptance rate

Oral: 15

Poster: 25

Invited presentation: 1

Authors	Title	Status
1. Becker SJ, Jozsef G, Pressler J, Kondziolka D	How many lesions can be treated with radiosurgery? Whole brain dose from radiosurgery of multiple targets	Poster
2. Chen S, Le Q, Mutaf Y, Yi B, D'Souza W	Dosimetric study of cone-beam CT-based radiation treatment planning using a patient-specific stepwise CT-density table	Poster
3. Chen S, Zhang H, Zhang B, D'Souza W	Differences in treatment plan quality and delivery between two commercial treatment planning systems for volumetric arc-based radiation therapy	Poster
4. Chen S, Zhang H, Zhang B, D'Souza W	A logistic function-based model to predict organ-at-risk (OAR) DVH in IMRT treatment planning	Poster
5. Choi W, Kang M, Wang J, Lu W	Quantitative image feature analysis of multiphase liver CT for hepatocellular carcinoma (HCC) in radiation therapy	Poster
6. Choi W, Xue M, Kang MK, Patel K, Regine W, Klahr P, Wang J, D'Souza W, Lu W	Image quality assessment of contrast-enhanced 4D-CT for pancreatic adenocarcinoma in radiotherapy simulation	Poster
7. D'Souza W, Zhang B, Feigenberg A, D'Souza G, Prado K, Regine W	Compliance with evidence-based treatment planning DVH guidelines in an academic multi-site radiation oncology practice setting	Poster
8. Eldib A, Chibani O, Jin L, Li J, Lin MH, Chen L, Lin T, Ming C, Ma C	Development of an in-house forward planning system for conformal arc therapy	Poster
9. Eley J, Mehta M, Molitoris J, Langner U, Langen K	Practical methods to implement arc therapy using scanned particle beams	Poster
10. Guerrero M, Carlson DJ	A radiobiological model of reoxygenation and fractionation effects	Poster
11. Hu E, Lee M, Lasio G, Chen S, Yi B	CBCT reconstruction of a full couch using rigid registration and pre-scanned couch image and its clinical application	Poster
12. Kalavagunta C, Lasio G, Yi B, Zhou J, Lin M	Characterization of pacemaker/ICD dose in SAVI HDR brachytherapy	Poster

13. Kalavagunta C, Lin M, Snider J, Xu H, Schrum A, Vadnais P, Marter K, Suntharalingam M, Prado K	A radiochromic film based quantitative assessment of thermoplastic mask bolus effect in head and neck IMRT/VMAT	Poster
14. Kirlik G, D'Souza W, Naslund M, Wong J, Gullapalli R, Zhang H	Prostate cancer foci detection and aggressiveness identification using multi-parametric MRI/MRS and supervised learning	Oral
15. Kirlik G, Zhang H	Generating well-dispersed representations of the pareto front for multi-criteria optimization in radiation treatment planning	Oral
16. Langen K, Guerrero M, Killefer M, Xu H, Zhou J, Zhang B, Chen S	Commissioning of a Commercial 3D Dose Calculation Program	Poster
17. Lasio G, Hu E, Zhou J, Lee M, Yi B	Reconstruction artifact reduction in x-ray cone beam CT using a treatment couch model	Oral
18. Lee M, Hu E, Yi B	Patient specific IMRT verification using a phosphor-screen based geometric QA system: A preliminary study	Poster
19. Li L, Lu W, Tan S	Coupling PET image restoration and segmentation using variational method with multiple regularizations	Oral
20. Lin MH, Choi E, Chuong M, Saboury B, Moeslein F, D'Souza W, Guerrero M	Molecular-imaging based assessment of liver complications for yttrium-90 microsphere treatments: Can existing NTCP models explain clinical outcomes?	Oral
21. Lin MH, Feigenberg S	End-to-end effectiveness analysis of 3D surface image guided voluntary breath-holding radiotherapy for left breast	Poster
22. Liu Y, Badea C, Mistry N, D'Souza W	Influence of image registration algorithms and noise levels on the accuracy of fractional regional ventilation	Oral
23. Liu Y, Diwanji T, Zhang B, Zhuo J, Gullapalli R, Morales R, D'Souza W	DCE-MRI before and during treatment for prediction of concurrent chemotherapy and radiation therapy response in head and neck cancer	Oral
24. Lu W, Wang J, Zhang H	Review: Computerized PET/CT image analysis in the evaluation of tumor response to therapy	Poster
25. Mutaf Y, Hoban P, Niu Y, Yi B, Yu C, Prado K	Absolute dose calibration of the first stereotactic breast radiotherapy device: GammaPod	Oral
26. Polf JC, Avery S, Mackin D, Beddar	Imaging of prompt gamma rays emitted during delivery of clinical proton beams with a Compton camera: feasibility studies for range verification	Oral
27. Polf JC, Lin MH	In-vivo range verification and tissue response to proton radiotherapy using prompt gamma volume histograms	Oral

28. Tehrani JN, Yang Y, Werner R, Lu W, Low D, Guo X, Wang J	Sensitivity of tumor motion simulation accuracy to lung biomechanical modeling approaches and parameters	Oral
29. Wang J, Chuong M, Latifi K, Saeed N, Tan S, Choi W, Hoffe S, Shridar R, Moros E, Lu W	Repeated 18F-FDG PET/CTs based feature analysis for the predication of anal cancer recurrence	Poster
30. Wang J, Kang M, Kligerman S, Lu W	Use of esophageal wall thickness in evaluation of the response to chemoradiation therapy for esophageal cancer	Oral
31. Xu H	Coverage-based treatment planning to accommodate organ deformable motions and contouring uncertainties for prostate treatment [invited talk at symposium: New Methods to Ensure Target Coverage]	Inv
32. Xu H, Guerrero M, Yang X, Chen S, Langen K, Prado K, Schinkel C	Clinical implementation of TG71-based electron MU calculation and comparison with a commercial secondary calculation	Poster
33. Xu H, Yang X, Yi B	Is it essential to QA HDR applicators annually in clinic?	Poster
34. Xu H, Yi B, Prado K	Implementation of a standardized monthly quality check for linac output management in a large multi-site clinic	Poster
35. Yi B, Hu E, Mutaf Y, Prado K	Scanning field total body irradiation using dynamic arc with variable dose rate and gantry speed	Oral
36. Yi B, Hu E, Yu C, Lee M, Lasio G	Determination of markerless lung tumor position in real time: a feasibility study using a novel Tomo-Cinegraphy imaging	Poster
37. Yoon J, Jung J, Yeo I, Kim J, Yi B	Feasibility study of 4D image reconstruction by organ motion vector extension based on portal images	Poster
38. Yoon J, Jung J, Yi B, Kim J, Yeo I	Four-dimensional dose reconstruction through retrospective phase determination using cine images of electronic portal imaging device	Oral
39. Zhang B, Yi B, Eley J, Mutaf Y, Rahman S, D'Souza W	Automated systematic quality assurance program for radiation oncology information system upgrades	Oral
40. Zhang H, Wang J, Chuong M, D'Souza W, Latifi K, Saeed N, Tan S, Choi W, Hoffe S, Shridhar R, Moros E, Lu W	Evaluating the role of mid-treatment and post-treatment FDG-PET/CT in predicting progression-free survival and distant metastasis of anal cancer patients treated with chemoradiotherapy	Poster
41. Zhou J, Lasio G, Yi B, Huang J, Chen S, Zhang B, Langen K, Prado K, D'Souza W	The CBCT dose calculation using a patient specific CBCT number to mass density conversion curve based on a novel image registration and organ mapping method in head-and-neck radiation therapy	Poster