Table S2. List of excluded papers and reasons for exclusion from quantitative evaluation.

Ref	Year	Title	Reason of exclusion	Full text
[9]	2021	GENERATOR Breast DataMart—The Novel Breast Cancer Data Discovery System for Research and Monitoring: Preliminary Results and Future Perspectives	No AI	No
[22]	2018	Performance of commercially available deformable image registration platforms for contour propagation using patient-based computational phantoms: A multi-institutional study	No RT workflow	No
[44]	2021	Automatic contouring of normal tissues with deep learning for preclinical radiation studies	No RT workflow	No
[66]	2021	Development, validation, and pilot MRI safety study of a high-resolution, open source, whole body pediatric numerical simulation model.	No RT workflow	No
[67]	2020	Head and neck cancer patient images for determining auto-segmentation accuracy in T2-weighted magnetic resonance imaging through expert manual segmentations	No RT workflow	No
[68]	2019	Advances in Auto-Segmentation	Review	No
[69]	2021	Review of Deep Learning Based Automatic Segmentation for Lung Cancer Radiotherapy	Review	No
[97]	2019	Artificial Intelligence in Radiotherapy Treatment Planning: Present and Future	Review	No
[98]	2020	Strategies for effective physics plan and chart review in radiation therapy: Report of AAPM Task Group 275.	No AI	No
[99]	2018	Machine learning and modeling: Data, validation, communication challenges	General Recommendations	No
[100]	2021	Medical Physics Practice Guideline (MPPG) 11.a: Plan and chart review in external beam radiotherapy and brachytherapy	No AI	No
[102]	2021	Applications of machine and deep learning to patient-specific IMRT/VMAT quality assurance	Review	No
[123]	2020	A Machine Learning method for relabeling arbitrary DICOM structure sets to TG-263 defined labels,	Harmonization/Standardization	No
[124]	2020	Integrated natural language processing and machine learning models for standardizing radiotherapy structure names	Harmonization/Standardization	No
[125]	2019	Standardization of imaging features for radiomics analysis,	Harmonization/Standardization	No
[127]	2020	Cautiously optimistic: A survey of radiation oncology professionals' perceptions of automation in radiotherapy planning	Survey	No
[131]	2021	A survey of clinicians on the use of artificial intelligence in ophthalmology, dermatology, radiology and radiation oncology	Survey	No
[132]	2021	Barriers and facilitators to the adoption of artificial intelligence in radiation oncology: A New Zealand study	Survey	No
[133]	2021	Expanding the medical physicist curricular and professional programme to include Artificial Intelligence	Review	No
[134]	2018	Establishing a New Clinical Role for Medical Physicists: A Prospective Phase II Trial	No AI	No
[996]	2018	Machine Learning and Data Analytics in Pervasive Health,	Editorial/Book	No

[997]	2018	Artificial Intelligence in Radiation Oncology Imaging	Editorial/Book	No
[998]	2018	The Future of Artificial Intelligence in Radiation Oncology	Editorial/Book	No
[999]	2018	Fully automated, multi-criterial planning for Volumetric Modulated Arc Therapy - An international multi-center validation for prostate cancer	No AI	No
[1000]	2018	[Application and prospect of artificial intelligence in cancer diagnosis and treatment]	No English	No
[1001]	2018	A convolutional neural network to filter artifacts in spectroscopic MRI	No RT workflow	No
[1002]	2018	Radiotherapy and CD40 activation separately augment immunity to checkpoint blockade in cancer	No RT workflow	No
[1003]	2018	A new standardized data collection system for interdisciplinary thyroid cancer management: Thyroid COBRA	No RT workflow	No
[1004]	2018	The radiation oncology ontology (ROO): Publishing linked data in radiation oncology using semantic web and ontology techniques	No RT workflow	No
[1005]	2018	On the Fuzziness of Machine Learning, Neural Networks, and Artificial Intelligence in Radiation Oncology	Review	No
[1006]	2018	Machine learning in radiation oncology: Opportunities, requirements, and needs	Review	No
[1007]	2018	Exploring Applications of Radiomics in Magnetic Resonance Imaging of Head and Neck Cancer: A Systematic Review,	Review	No
[1008]	2018	Using Big Data Analytics to Advance Precision Radiation Oncology	Review	No
[1009]	2018	Challenges and Promises of PET Radiomics	Review	No
[1010]	2018	Treatment data and technical process challenges for practical big data efforts in radiation oncology,	Overview	Yes
[1011]	2018	Practical data collection and extraction for big data applications in radiotherapy,	Overview	Yes
[1012]	2019	Application of artificial intelligence (AI) in Radiotherapy workflow: Paradigm shift in Precision Radiotherapy using Machine Learning	Comment/Commentary/Letter	No
[1013]	2019	26th International Conference on Information Processing in Medical Imaging, IPMI 2019	Conference	No
[1014]	2019	Correction to An image-based deep learning framework for individualising radiotherapy dose: a retrospective analysis of outcome prediction (Lancet Digital Health (2019) 1(3)(e136–47)(S2589-7500(19)30058-5)(10.1016/S2589-7500(19)30058-5))	Correction/Corrigendum	No
[1015]	2019	Medical Imaging 2019: Computer-Aided Diagnosis	Editorial/Book	No
[1016]	2019	Medical Imaging 2019: Image Perception, Observer Performance, and Technology Assessment	Editorial/Book	No
[1017]	2019	Medical Imaging 2019: Image-Guided Procedures, Robotic Interventions, and Modeling	Editorial/Book	No
[1018]	2019	A future of automated image contouring with machine learning in radiation therapy	Editorial/Book	No
[1019]	2019	Erratum to: Machine learning algorithms for outcome prediction in (chemo)radiotherapy: An empirical comparison of classifiers (Medical Physics, (2018), 45, 7, (3449-3459), 10.1002/mp.12967)	Erratum/Retracted	No
[1020]	2019	Artificial Intelligence in Radiotherapy: A Philosophical Perspective	Ethical/Philosophical	No
[1021]	2019	Natural language processing for populating lung cancer clinical research data	Harmonization/Standardization	No

[1022]	2019	A novel deep learning framework for standardizing the label of OARs in CT	Harmonization/Standardization	No
[1023]	2019	[Looking back 2018--focused on colorectal cancer].	No English	No
[1024]	2019	Active contour algorithm with discriminant analysis for delineating tumors in positron emission tomography	No RT workflow	No
[1025]	2019	Prediction of drug target sensitivity in cancer cell lines using apache spark	No RT workflow	No
[1026]	2019	Deep learning-assisted literature mining for in vitro radiosensitivity data,	No RT workflow	No
[1027]	2019	Quantitative nuclear histomorphometric features are predictive of Oncotype DX risk categories in ductal carcinoma in situ: Preliminary findings	No RT workflow	No
[1028]	2019	PPAR and GST polymorphisms may predict changes in intellectual functioning in medulloblastoma survivors	No RT workflow	No
[1029]	2019	The Pransky interview: Dr Ken Goldberg, Professor, Industrial Engineering and Operations Research, UC Berkeley Inventor and Artist	No RT workflow	No
[1030]	2019	31 gene expression-based signatures serve as indicators of prognosis for patients with glioma	No RT workflow	No
[1031]	2019	Identification of anticancer peptides based on Random Relevance Vector Machines	No RT workflow	No
[1032]	2019	Use of metrics to quantify IMRT and VMAT treatment plan complexity: A systematic review and perspectives	Review	No
[1033]	2019	Radiomics with artificial intelligence for precision medicine in radiation therapy	Review	No
[1034]	2019	Basis and perspectives of artificial intelligence in radiation therapy [Intelligence artificielle et radiothérapie : quelles bases et quelles perspectives ?]	Review	No
[1035]	2019	Preparing for Artificial Intelligence: Systems-Level Implications for the Medical Imaging and Radiation Therapy Professions	Review	No
[1036]	2019	Clinical Documentation and Patient Care Using Artificial Intelligence in Radiation Oncology	Review	No
[1037]	2019	Use of Big Data for Quality Assurance in Radiation Therapy	Review	No
[1038]	2019	Artificial Intelligence and the Medical Radiation Profession: How Our Advocacy Must Inform Future Practice	Review	No
[1039]	2019	Using Artificial Intelligence to Improve the Quality and Safety of Radiation Therapy	Review	No
[1040]	2019	Future of Radiotherapy in Nasopharyngeal Carcinoma.	Review	No
[1041]	2019	Comprehensive Review of Automatic Lung Segmentation Techniques on Pulmonary CT Images	Review	No
[1042]	2019	Multiorgan detection: Deep learning based techniques and research directions	Overview	Yes
[1043]	2020	Interpreting clinical significance of machine learning approaches and radiomics in radiation oncology trials	Comment/Commentary/Letter	No
[1044]	2020	Artificial intelligence and soft skills in radiation oncology: Data versus wisdom	Commentary/Letter	No
[1045]	2020	10th International Workshop on Multimodal Learning for Clinical Decision Support, ML-CDS 2020, and the 9th International Workshop on Clinical Image-Based Procedures, CLIP 2020, held in conjunction with the	Conference	No

		23rd International Conference on Medical Image Computing and Computer Assisted Intervention, MICCAI 2020		
[1046]	2020	3rd International Workshop on Predictive Intelligence in Medicine, PRIME 2020, held in conjunction with the Medical Image Computing and Computer Assisted Intervention, MICCAI 2020	Conference	No
[1047]	2020	4th International Conference on Health Care Systems Engineering, HCSE 2019	Conference	No
[1048]	2020	9th IAPR TC3 International Workshop on Artificial Neural Networks in Pattern Recognition, ANNPR 2020	Conference	No
[1049]	2020	9th International Workshop on Biomedical Image Registration, WBIR 2020	Conference	No
[1050]	2020	Patients' perspectives on radiation in health care,	Conference	No
[1051]	2020	Design and Quality for Biomedical Technologies XIII 2020	Editorial/Book	No
[1052]	2020	Medical Imaging 2020: Biomedical Applications in Molecular, Structural, and Functional Imaging	Editorial/Book	No
[1053]	2020	Through Predictive Personalized Medicine	Editorial/Book	No
[1054]	2020	Artificial intelligence and radiomics for radiation oncology	Editorial/Book	No
[1055]	2020	Future directions on the merge of quantitative imaging and artificial intelligence in radiation oncology	Editorial/Book	No
[1056]	2020	Editorial: Magnetic Resonance Imaging for Radiation Therapy,	Editorial/Book	No
[1057]	2020	Erratum to: Reddy JP, Lindsay WD, Berlind CG, Ahern CA, Holmes A, Smith BD, Phan J, Frank SJ, Gunn GB, Rosenthal DI, Morrison WH, Garden AS, Chronowski GM, Shah SJ, Mayo LL, and Fuller CD. Applying a Machine Learning Approach to Predict Acute Radiation Toxicities for Head and Neck Cancer Patients. (International Journal of Radiation Oncology, Biology, Physics (2019) 105(1S) (S69), (S0360301619313550), (10.1016/j.ijrobp.2019.06.520))	Erratum/Retracted	No
[1058]	2020	Erratum: Evaluation of deep learning to augment image-guided radiotherapy for head and neck and prostate cancers (JAMA Netw Open (2020) 3: 11 (e2027426) DOI: 10.1001/jamanetworkopen.2020.27426)	Erratum/Retracted	No
[1059]	2020	RETRACTED: An Encoder-Decoder Based Deep Learning AI agent for Spatial Dose Distribution Prediction: A Study of Complex Head-and-Neck IMRT Application	Erratum/Retracted	No
[1060]	2020	Medical imaging professionals and related specialties : a questioning is essential!]	No English	No
[1061]	2020	[Automatic segmentation of head and neck organs at risk based on three-dimensional U-NET deep convolutional neural network],	No English	No
[1062]	2020	[News in radiotherapy of solid tumors]	No English	No
[1063]	2020	[Using stacked neural network to improve the auto-segmentation accuracy of Graves' ophthalmopathy target volumes for radiotherapy],	No English	No
[1064]	2020	Applying radiomics and dosimetry features to predict 2-year survival of esophageal cancer patients treated with radiotherapy [应用放射组学和剂量学特征预测食管癌放射治疗后的两年生存情况*]	No English	No
[1065]	2021	Multimodal brain image registration with integrated attention augmentation and dual similarity guidance [集成注意力增强和双重相似性引导的多模态脑部图像配准]	No English	No

[1066]	2020	Auto-segmentation of high-risk primary tumor gross target volume for the radiotherapy of nasopharyngeal carcinoma [鼻咽癌原发肿瘤放疗靶区的自动分割]	No English	No
[1067]	2020	Dose distributions prediction for intensity-modulated radiotherapy of postoperative rectal cancer based on deep learning [基于深度学习的直肠癌术后调强放疗剂量分布预测]	No English	No
[1068]	2021	Tumor segmentation in breast ultrasound combined with Res paths and a dense connection [结合残差路径及密集连接的乳腺超声肿瘤分割]	No English	No
[1069]	2021	Integrated context and multi-scale features in thoracic organs segmentation [融合上下文和多尺度特征的胸部多器官分割]	No English	No
[1070]	2020	BRR-Net: A tandem architectural CNN-RNN for automatic body region localization in CT images	No RT workflow	No
[1071]	2020	External Validation of PATHFx Version 3.0 in Patients Treated Surgically and Nonsurgically for Symptomatic Skeletal Metastases	No RT workflow	No
[1072]	2020	External Validation of an MRI-Derived Radiomics Model to Predict Biochemical Recurrence after Surgery for High-Risk Prostate Cancer,	No RT workflow	No
[1073]	2020	Monitor Ionizing Radiation-Induced Cellular Responses with Raman Spectroscopy, Non-Negative Matrix Factorization, and Non-Negative Least Squares,	No RT workflow	No
[1074]	2020	Optimal multiparametric set-up modelled for best survival outcomes in palliative treatment of liver malignancies: unsupervised machine learning and 3 PM recommendations,	No RT workflow	No
[1075]	2020	Mri-based deep learning segmentation and radiomics of sarcoma in mice	No RT workflow	No
[1076]	2020	A brain-penetrant microtubule-targeting agent that disrupts hallmarks of glioma tumorigenesis,	No RT workflow	No
[1077]	2020	Machine learning as a tool for analysing the impact of environmental parameters on the radon exhalation rate from soil	No RT workflow	No
[1078]	2020	An Advanced Simulation and Reconstruction Framework for a Novel In-beam PET Scanner for Pre-clinical Proton Irradiation	No RT workflow	No
[1079]	2020	Analysis of an Ultra-Short True Time Delay Line Optical Reservoir Computer	No RT workflow	No
[1080]	2020	Multi-scale segmentation in GBM treatment using diffusion tensor imaging,	No RT workflow	No
[1081]	2020	Explainable Spatial Clustering: Leveraging Spatial Data in Radiation Oncology	No RT workflow	No
[1082]	2020	A Radiosensitivity Gene Signature and XPO1 Predict Clinical Outcomes for Glioma Patients.	No RT workflow	No
[1083]	2020	DRACP: a novel method for identification of anticancer peptides	No RT workflow	No
[1084]	2020	Prediction of Anticancer Peptides Using a Low-Dimensional Feature Model	No RT workflow	No
[1085]	2020	The Impact of Artificial Intelligence and Machine Learning in Radiation Therapy: Considerations for Future Curriculum Enhancement	Review	No
[1086]	2020	Introduction to machine and deep learning for medical physicists	Review	No

[1087]	2020	Application and Development Trend of Medical Image Automatic Segmentation Technology in Radiation Therapy	Review	No
[1088]	2020	Advanced Machine Vision Paradigms for Medical Image Analysis	Review	No
[1089]	2020	Advances in radiation treatment planning	Review	No
[1090]	2020	Radiation Therapy Quality Assurance Tasks and Tools: The Many Roles of Machine Learning	Review	No
[1091]	2020	Image-Guided Radiooncology: The Potential of Radiomics in Clinical Application	Review	No
[1092]	2020	Winter is over: The use of Artificial Intelligence to individualise radiation therapy for breast cancer	Review	No
[1093]	2020	The European Organisation for Research and Treatment of Cancer, State of Science in radiation oncology and priorities for clinical trials meeting report	Review	No
[1094]	2020	Evolution, current challenges, and future possibilities in the objective assessment of aesthetic outcome of breast cancer locoregional treatment	Review	No
[1095]	2020	Machine Learning and Glioblastoma: Treatment Response Monitoring Biomarkers in 2021	Review	No
[1096]	2020	Machine learning for radiation outcome modeling and prediction	Review	No
[1097]	2018	Editorial: Machine Learning With Radiation Oncology Big Data	Editorial/Book	No
[1098]	2020	Machine learning applications in radiation oncology: Current use and needs to support clinical implementation	Survey	No
[1099]	2020	Automatic segmentation of organs at risk in radiotherapy using 2D cascade-CNN model [2D级联CNN模型的放疗危及器官自动分割]	No English	No
[1100]	2020	Deep learning methods for image guidance in radiation therapy	Overview	Yes
[1101]	2020	Practical considerations regarding classification learning for clinical diagnosis and therapy advice in oncology	Overview	Yes
[1102]	2021	Making radiotherapy more efficient with FAIR data.	Commentary/Letter	No
[1103]	2021	Response to Chai' letter: What caused the difference in prognosis among different physicians?	Commentary/Letter	No
[1104]	2021	14th International Conference on Complex, Intelligent and Software Intensive Systems, CISIS 2020, held in conjunction with the 14th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, IMIS 2020	Conference	No
[1105]	2021	21st Congress of the International Ergonomics Association, IEA 2021	Conference	No
[1106]	2021	25th Annual Conference on Medical Image Understanding and Analysis, MIUA 2021	Conference	No
[1107]	2021	Anatomical Brain Barriers to Cancer Spread: Segmentation from CT and MR Images Challenge, ABCs 2020, Learn2Reg Challenge, L2R 2020 and Thyroid Nodule Segmentation and Classification in Ultrasound Images Challenge, TN-SCUI 2020 held in conjunction with 23rd International Conference on Medical Image Computing and Computer-Assisted Intervention, MICCAI 2020	Conference	No

[1108]	2021	BIOIMAGING 2021 - 8th International Conference on Bioimaging Part of the 14th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2021	Conference	No
[1109]	2021	Remote AI Supported E-Multidisciplinary Oncology Conference in Breast Cancer as a Technology and Method to Optimize Outcomes in the Peripheries	Conference	No
[1110]	2021	Corrigendum: Development of a Machine Learning Model for Optimal Applicator Selection in High-Dose-Rate Cervical Brachytherapy,	Correction/Corrigendum	No
[1111]	2021	A Glimmer of Hope Within the Mountain of Hype - Reviewing the Role of Artificial Intelligence in Radiotherapy	Editorial/Book	No
[1112]	2021	A Lucrative Model for Identifying Potential Adverse Effects from Biomedical Texts by Augmenting BERT and ELMo	Editorial/Book	No
[1113]	2021	Erratum regarding missing Declaration of Competing Interest statements in previously published articles (Clinical and Translational Radiation Oncology (2020) 22 (69–75), (S2405630820300203), (10.1016/j.ctro.2020.03.007))	Erratum/Retracted	No
[1114]	2021	Erratum: Clinicopathological models for predicting lymph node metastasis in patients with early-stage lung adenocarcinoma: The application of machine learning algorithms (J Thorac Dis (2021) 13 (4033-4042) DOI: 10.21037/jtd-21-98)	Erratum/Retracted	No
[1115]	2021	Ethical evaluation of artificial intelligence applications in radiotherapy using the Four Topics Approach	Ethical/Philosophical	No
[1116]	2021	Safe and Ethical Artificial Intelligence in Radiotherapy - Lessons Learned From the Aviation Industry	Ethical/Philosophical	No
[1117]	2021	Radiotherapy Standardisation and Artificial Intelligence within the National Cancer Institute's Clinical Trials Network	Harmonization/Standardization	No
[1118]	2021	Natural language processing and machine learning to assist radiation oncology incident learning	Harmonization/Standardization	No
[1119]	2021	Multi-view data integration methods for radiotherapy structure name standardization	Harmonization/Standardization	No
[1120]	2021	Clinical Experience in Prostate Ultrahypofractionated Radiation Therapy With an Online Adaptive Method	No AI	No
[1121]	2021	Toward Data-Driven Radiation Oncology Using Standardized Terminology as a Starting Point: Cross-sectional Study	No AI	No
[1122]	2021	Time Analysis of Online Adaptive Magnetic Resonance–Guided Radiation Therapy Workflow According to Anatomical Sites	No AI	No
[1123]	2021	Stress Echo 2030: The Novel ABCDE-(FGLPR) Protocol to Define the Future of Imaging.	No AI	No
[1124]	2021	Prophylactic pentoxifylline and vitamin E use for dental extractions in irradiated patients with head and neck cancer,	No AI	No
[1125]	2021	Accounting for uncertainties in the position of anatomical barriers used to define the clinical target volume	No AI	No
[1126]	2021	Interobserver variability in organ at risk delineation in head and neck cancer	No AI	No
[1127]	2021	[Radiomics and automation in radiotherapy]	No English	No
[1128]	2021	[New developments and perspectives in acromegaly]	No English	No

[1129]	2021	[A Study on Radiation Dermatitis Grading Support System Based on Deep Learning by Hybrid Generation Method],	No English	No
[1130]	2021	[12. Application of Deep Learning in Radiotherapy Imaging],	No English	No
[1131]	2021	Microimaging evidences of hippocampal injury in radiotherapy avoiding hippocampus and its effects on cognition [海马规避放疗中海马损伤的微观影像证据及其对认知的影响]	No English	No
[1132]	2021	Ten-Year Single Institutional Analysis of Geographic and Demographic Characteristics of Patients Treated With Stereotactic Body Radiation Therapy for Localized Prostate Cancer,	No RT workflow	No
[1133]	2021	Radiology During the COVID-19 Pandemic: Mapping Radiology Literature in 2020,	No RT workflow	No
[1134]	2021	Machine-learning algorithm to predict multidisciplinary team treatment recommendations in the management of basal cell carcinoma,	No RT workflow	No
[1135]	2021	xDeep-AcPEP: Deep Learning Method for Anticancer Peptide Activity Prediction Based on Convolutional Neural Network and Multitask Learning,	No RT workflow	No
[1136]	2021	Development and Validation of a Prediction Rule for Growth Hormone Deficiency Without Need for Pharmacological Stimulation Tests in Children With Risk Factors.	No RT workflow	No
[1137]	2021	Development of a dosimeter prototype with machine learning based 3-D dose reconstruction capabilities,	No RT workflow	No
[1138]	2021	THALIS: Human-Machine Analysis of Longitudinal Symptoms in Cancer Therapy,	No RT workflow	No
[1139]	2021	Risk factors for surgical site infection in head and neck cancer,	No RT workflow	No
[1140]	2021	Radiation-induced pneumonitis in the era of the covid-19 pandemic: Artificial intelligence for differential diagnosis	No RT workflow	No
[1141]	2021	Colon Tissues Classification and Localization in Whole Slide Images Using Deep Learning	No RT workflow	No
[1142]	2021	Assessing the robustness of artificial intelligence powered planning tools in radiotherapy clinical settings-a phantom simulation approach	No RT workflow	No
[1143]	2021	Detection of lung nodules in micro-ct imaging using deep learning	No RT workflow	No
[1144]	2021	Towards deep learning detection of lung nodules using micro-CT	No RT workflow	No
[1145]	2021	Identification of Methylation Immune Subtypes and Establishment of a Prognostic Signature for Gliomas Using Immune-Related Genes	No RT workflow	No
[1146]	2021	Deep Learning for Ultrasound Beamforming in Flexible Array Transducer	No RT workflow	No
[1147]	2021	MRI-based machine learning for determining quantitative and qualitative characteristics affecting the survival of glioblastoma multiforme,	No RT workflow	No
[1148]	2021	Viability fingerprint of glioblastoma cell lines: roles of mitotic, proliferative, and epigenetic targets	No RT workflow	No
[1149]	2021	Non-Invasive Radiomics Approach Predict Invasiveness of Adamantinomatous Craniopharyngioma Before Surgery,	No RT workflow	No
[1150]	2021	Deep models of integrated multiscale molecular data decipher the endothelial cell response to ionizing radiation,	No RT workflow	No

[1151]	2021	Deep-Learning-Based Automatic Segmentation of Head and Neck Organs for Radiation Therapy in Dogs	No RT workflow	No
[1152]	2021	Detection of prostate cancer using deep learning framework	No RT workflow	No
[1153]	2021	LCP-Net: A local context-perception deep neural network for medical image segmentation	No RT workflow	No
[1154]	2021	A roadmap for research in medical physics via academic medical centers: The DIVERT Model	No RT workflow	No
[1155]	2021	Improving the therapeutic ratio of radiotherapy against radioresistant cancers: Leveraging on novel artificial intelligence-based approaches for drug combination discovery	No RT workflow	No
[1156]	2021	CeCILE - An Artificial Intelligence Based Cell-Detection for the Evaluation of Radiation Effects in Eucaryotic Cells.	No RT workflow	No
[1157]	2021	Domain classification and analysis of national institutes of health-funded medical physics research	No RT workflow	No
[1158]	2021	Real-time 3D motion estimation from undersampled MRI using multi-resolution neural networks.	No RT workflow	No
[1159]	2021	Detection of acquired radioresistance in breast cancer cell lines using Raman spectroscopy and machine learning	No RT workflow	No
[1160]	2021	Interactive contouring through contextual deep learning,	No RT workflow	No
[1161]	2021	DeepFoci: Deep learning-based algorithm for fast automatic analysis of DNA double-strand break ionizing radiation-induced foci	No RT workflow	No
[1162]	2021	A Data-Adaptive Loss Function for Incomplete Data and Incremental Learning in Semantic Image Segmentation	No RT workflow	No
[1163]	2021	Machine Learning to Predict Tamoxifen Nonadherence Among US Commercially Insured Patients With Metastatic Breast Cancer	No RT workflow	No
[1164]	2021	Progress in breast conserving treatment: Margin assessment, irradiation, ablation	No RT workflow	No
[1165]	2021	A sentence classification framework to identify geometric errors in radiation therapy from relevant literature	No RT workflow	No
[1166]	2021	Radiation dose calculation in 3D heterogeneous media using artificial neural networks	No RT workflow	No
[1167]	2021	Deep semantic segmentation of natural and medical images: a review	Review	No
[1168]	2021	Application of deep learning to auto-delineation of target volumes and organs at risk in radiotherapy [Application de l'apprentissage profond à la délinéation automatique des volumes cibles et des organes à risque en radiothérapie]	Review	No
[1169]	2021	Radiomics in Oncology: A 10-Year Bibliometric Analysis	Review	No
[1170]	2021	Prospective clinical deployment of machine learning in radiation oncology	Review	No
[1171]	2021	National Cancer Institute Workshop on Artificial Intelligence in Radiation Oncology: Training the Next Generation	Review	No
[1172]	2021	A systematic review and meta-analysis of the prognostic value of radiomics based models in non-small cell lung cancer treated with curative radiotherapy	Review	No

[1173]	2021	Consensus study on the health system and patient-related barriers for lung cancer management in South Africa	Review	No
[1174]	2021	Artificial intelligence: Deep learning in oncological radiomics and challenges of interpretability and data harmonization	Review	No
[1175]	2021	RE: Perceptions of Canadian radiation oncologists, radiation physicists, radiation therapists and radiation trainees about the impact of artificial intelligence in radiation oncology – National survey	Review	No
[1176]	2021	Artificial intelligence in medical imaging and radiation oncology: Opportunities and challenges	Review	No
[1177]	2021	Radiomics for Predicting Lung Cancer Outcomes Following Radiotherapy: A Systematic Review,	Review	No
[1178]	2021	Perceptions of Canadian radiation oncologists, radiation physicists, radiation therapists and radiation trainees about the impact of artificial intelligence in radiation oncology – national survey	Review	No
[1179]	2021	Automatic segmentation of pelvic cancers using deep learning: State-of-the-art approaches and challenges	Review	No
[1180]	2021	Beauty Is in the AI of the Beholder: Are We Ready for the Clinical Integration of Artificial Intelligence in Radiography? An Exploratory Analysis of Perceived AI Knowledge, Skills, Confidence, and Education Perspectives of UK Radiographers	Survey	No
[1181]	2021	Brain tumor segmentation based on magnetic resonance images [基于核磁共振图像的脑肿瘤分割方法研究	No English	No
[1182]	2021	Moving Forward in the Next Decade: Radiation Oncology Sciences for Patient-Centered Cancer Care,	Commentary/Letter	Yes
[1183]	2021	Artificial Intelligence in Diagnostic Imaging and Radiation Therapy	No RT workflow	Yes
[1184]	2021	Ethics and standards in the use of artificial intelligence in medicine on behalf of the Royal Australian and New Zealand College of Radiologists	Overview	Yes
[1185]	2018	Comment on 'Deep convolutional neural network with transfer learning for rectum toxicity prediction in cervical cancer radiotherapy: a feasibility study',	Comment/Commentary/Letter	No
[1186]	2018	3rd International Workshop on Reconstruction and Analysis of Moving Body Organs, RAMBO 2018, 4th International Workshop on Breast Image Analysis, BIA 2018, and 1st International Workshop on Thoracic Image Analysis, TIA 2018, held in conjunction with 21st International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2018	Conference	No
[1187]	2018	Predicting emergency visits and hospital admissions during radiation and chemoradiation: An internally validated pretreatment machine learning algorithm	Conference	No

References

9. Marazzi, F.; Tagliaferri, L.; Masiello, V.; Moschella, F.; Colloca, G.F.; Corvari, B.; Sanchez, A.M.; Capocchiano, N.D.; Pastorino, R.; Iacomini, C.; et al. GENERATOR Breast DataMart-The Novel Breast Cancer Data Discovery System for Research and Monitoring: Preliminary Results and Future Perspectives. *J Pers Med* **2021**, *11*, doi:10.3390/jpm11020065.

22. Loi, G.; Fusella, M.; Lanzi, E.; Cagni, E.; Garibaldi, C.; Iacoviello, G.; Lucio, F.; Menghi, E.; Miceli, R.; Orlandini, L.C.; et al. Performance of commercially available deformable image registration platforms for contour propagation using patient-based computational phantoms: A multi-institutional study. *Med Phys* **2018**, *45*, 748-757, doi:10.1002/mp.12737.

44. Lappas, G.; Wolfs, C.J.A.; Staut, N.; Lieuwes, N.G.; Biemans, R.; van Hoof, S.J.; Dubois, L.J.; Verhaegen, F. Automatic contouring of normal tissues with deep learning for preclinical radiation studies. *Phys Med Biol* **2022**, doi:10.1088/1361-6560/ac4da3.

66. Jeong, H.A.-O.; Ntolkeras, G.; Alhilani, M.A.-O.; Atefi, S.R.; Zöllei, L.; Fujimoto, K.; Pourvaziri, A.; Lev, M.H.; Grant, P.E.; Bonmassar, G. Development, validation, and pilot MRI safety study of a high-resolution, open source, whole body pediatric numerical simulation model.

67. Cardenas, C.E.; Mohamed, A.S.R.; Yang, J.; Gooding, M.; Veeraraghavan, H.; Kalpathy-Cramer, J.; Ng, S.P.; Ding, Y.; Wang, J.; Lai, S.Y.; et al. Head and neck cancer patient images for determining auto-segmentation accuracy in T2-weighted magnetic resonance imaging through expert manual segmentations.

68. Cardenas, C.E.; Yang, J.; Anderson, B.M.; Court, L.E.; Brock, K.B. Advances in Auto-Segmentation. *Semin Radiat Oncol* **2019**, *29*, 185-197, doi:10.1016/j.semradonc.2019.02.001.

69. Liu, X.; Li, K.W.; Yang, R.; Geng, L.S. Review of Deep Learning Based Automatic Segmentation for Lung Cancer Radiotherapy.

97. Wang, C.; Zhu, X.; Hong, J.C.; Zheng, D. Artificial Intelligence in Radiotherapy Treatment Planning: Present and Future. *Technol Cancer Res Treat* **2019**, *18*, 1533033819873922, doi:10.1177/1533033819873922.

98. Ford, E.; Conroy, L.; Dong, L.; de Los Santos, L.F.; Greener, A.; Gwe-Ya Kim, G.; Johnson, J.; Johnson, P.; Mechalakos, J.G.; Napolitano, B.; et al. Strategies for effective physics plan and chart review in radiation therapy: Report of AAPM Task Group 275. *Med Phys* **2020**, *47*, e236-e272, doi:10.1002/mp.14030.

99. El Naqa, I.; Ruan, D.; Valdes, G.; Dekker, A.; McNutt, T.; Ge, Y.; Wu, Q.J.; Oh, J.H.; Thor, M.; Smith, W.; et al. Machine learning and modeling: Data, validation, communication challenges. *Medical Physics* **2018**, *45*, e834-e840, doi:10.1002/mp.12811.

100. Xia, P.; Sintay, B.J.; Colussi, V.C.; Chuang, C.; Lo, Y.-C.; Schofield, D.; Wells, M.; Zhou, S. Medical Physics Practice Guideline (MPPG) 11.a: Plan and chart review in external beam radiotherapy and brachytherapy. *Journal of Applied Clinical Medical Physics* **2021**, *22*, 4-19, doi:https://doi.org/10.1002/acm2.13366.

102. Osman, A.A.-O.X.; Maalej, N.M. Applications of machine and deep learning to patient-specific IMRT/VMAT quality assurance.

123. Sleeman Iv, W.C.; Nalluri, J.; Syed, K.; Ghosh, P.; Krawczyk, B.; Hagan, M.; Palta, J.; Kapoor, R. A Machine Learning method for relabeling arbitrary DICOM structure sets to TG-263 defined labels. *J Biomed Inform* **2020**, *109*, 103527, doi:10.1016/j.jbi.2020.103527.

124. Syed, K.; Iv, W.S.; Ivey, K.; Hagan, M.; Palta, J.; Kapoor, R.; Ghosh, P. Integrated Natural Language Processing and Machine Learning Models for Standardizing Radiotherapy Structure Names. *Healthcare (Basel)* **2020**, *8*, doi:10.3390/healthcare8020120.

125. Haga, A.; Takahashi, W.; Aoki, S.; Nawa, K.; Yamashita, H.; Abe, O.; Nakagawa, K. Standardization of imaging features for radiomics analysis. *J Med Invest* **2019**, *66*, 35-37, doi:10.2152/jmi.66.35.

127. Batumalai, V.; Jameson, M.G.; King, O.; Walker, R.; Slater, C.; Dundas, K.; Dinsdale, G.; Wallis, A.; Ochoa, C.; Gray, R.; et al. Cautiously optimistic: A survey of radiation oncology professionals' perceptions of automation in radiotherapy planning. *Tech Innov Patient Support Radiat Oncol* **2020**, *16*, 58-64, doi:10.1016/j.tipsro.2020.10.003.

131. Vayena, E.A.-O.; Blasimme, A.A.-O.; Cohen, I.G. Machine learning in medicine: Addressing ethical challenges.

132. Scheetz, J.; Rothschild, P.; McGuinness, M.; Hadoux, X.; Soyer, H.P.; Janda, M.; Condon, J.J.J.; Oakden-Rayner, L.; Palmer, L.J.; Keel, S.; et al. A survey of clinicians on the use of artificial intelligence in ophthalmology, dermatology, radiology and radiation oncology. *Scientific Reports* **2021**, *11*, doi:10.1038/s41598-021-84698-5.

133. Victor Mugabe, K. Barriers and facilitators to the adoption of artificial intelligence in radiation oncology: A New Zealand study. *Technical Innovations and Patient Support in Radiation Oncology* **2021**, *18*, 16-21, doi:10.1016/j.tipsro.2021.03.004.

134. Zanca, F.; Hernandez-Giron, I.; Avanzo, M.; Guidi, G.; Crijns, W.; Diaz, O.; Kagadis, G.C.; Rampado, O.; Lønne, P.I.; Ken, S.; et al. Expanding the medical physicist curricular and professional programme to include Artificial Intelligence. *Phys Med* **2021**, *83*, 174-183, doi:10.1016/j.ejmp.2021.01.069.

996. Oliver, N.; Mayora, O.; Marschollek, M. Machine Learning and Data Analytics in Pervasive Health. *Methods Inf Med* **2018**, *57*, 194-196, doi:10.1055/s-0038-1673243.

997. Thompson, R.F.; Valdes, G.; Fuller, C.D.; Carpenter, C.M.; Morin, O.; Aneja, S.; Lindsay, W.D.; Aerts, H.J.W.L.; Agrimson, B.; Deville, C., Jr.; et al. Artificial Intelligence in Radiation Oncology Imaging. *International Journal of Radiation Oncology Biology Physics* **2018**, *102*, 1159-1161, doi:10.1016/j.ijrobp.2018.05.070.

998. Thompson, R.F.; Valdes, G.; Fuller, C.D.; Carpenter, C.M.; Morin, O.; Aneja, S.; Lindsay, W.D.; Aerts, H.J.W.L.; Agrimson, B.; Deville, C.; et al. The Future of Artificial Intelligence in Radiation Oncology. *International Journal of Radiation Oncology Biology Physics* **2018**, *102*, 247-248, doi:10.1016/j.ijrobp.2018.05.072.

999. Heijmen, B.; Voet, P.; Fransen, D.; Penninkhof, J.; Milder, M.; Akhiat, H.; Bonomo, P.; Casati, M.; Georg, D.; Goldner, G.; et al. Fully automated, multi-criterial planning for Volumetric Modulated Arc Therapy - An international multi-center validation for prostate cancer. *Radiother Oncol* **2018**, *128*, 343-348, doi:10.1016/j.radonc.2018.06.023.

1000. Shen, T.L.; Fu, X.L. [Application and prospect of artificial intelligence in cancer diagnosis and treatment]. *Zhonghua Zhong Liu Za Zhi* **2018**, *40*, 881-884, doi:10.3760/cma.j.issn.0253-3766.2018.12.001.

1001. Gurbani, S.S.; Schreibmann, E.; Maudsley, A.A.; Cordova, J.S.; Soher, B.J.; Poptani, H.; Verma, G.; Barker, P.B.; Shim, H.; Cooper, L.A.D. A convolutional neural network to filter artifacts in spectroscopic MRI. *Magnetic Resonance in Medicine* **2018**, *80*, 1765-1775, doi:10.1002/mrm.27166.

1002. Rech, A.J.; Dada, H.; Kotzin, J.J.; Henao-Mejia, J.; Minn, A.J.; Victor, C.T.S.; Vonderheide, R.H. Radiotherapy and CD40 activation separately augment immunity to checkpoint blockade in cancer. *Cancer Research* **2018**, *78*, 4282-4291, doi:10.1158/0008-5472.CAN-17-3821.

1003. Tagliaferri, L.; Gobitti, C.; Colloca, G.F.; Boldrini, L.; Farina, E.; Furlan, C.; Paiar, F.; Vianello, F.; Basso, M.; Cerizza, L.; et al. A new standardized data collection system for interdisciplinary thyroid cancer management: Thyroid COBRA. *European Journal of Internal Medicine* **2018**, *53*, 73-78, doi:10.1016/j.ejim.2018.02.012.

1004. Traverso, A.; van Soest, J.; Wee, L.; Dekker, A. The radiation oncology ontology (ROO): Publishing linked data in radiation oncology using semantic web and ontology techniques. *Medical Physics* **2018**, *45*, e854-e862, doi:10.1002/mp.12879.

1005. El Naqa, I.; Brock, K.; Yu, Y.; Langen, K.; Klein, E.E. On the Fuzziness of Machine Learning, Neural Networks, and Artificial Intelligence in Radiation Oncology. *International journal of radiation oncology, biology, physics* **2018**, *100*, 1-4, doi:10.1016/j.ijrobp.2017.06.011.

1006. Feng, M.; Valdes, G.; Dixit, N.; Solberg, T.D. Machine learning in radiation oncology: Opportunities, requirements, and needs. *Frontiers in Oncology* **2018**, *8*, doi:10.3389/fonc.2018.00110.

1007. Jethanandani, A.; Lin, T.A.; Volpe, S.; Elhalawani, H.; Mohamed, A.S.R.; Yang, P.; Fuller, C.D. Exploring Applications of Radiomics in Magnetic Resonance Imaging of Head and Neck Cancer: A Systematic Review. *Front Oncol* **2018**, *8*, 131, doi:10.3389/fonc.2018.00131.

1008. McNutt, T.R.; Benedict, S.H.; Low, D.A.; Moore, K.; Shpitser, I.; Jiang, W.; Lakshminarayanan, P.; Cheng, Z.; Han, P.; Hui, X.; et al. Using Big Data Analytics to Advance Precision Radiation Oncology. *International Journal of Radiation Oncology Biology Physics* **2018**, *101*, 285-291, doi:10.1016/j.ijrobp.2018.02.028.

1009. Cook, G.J.R.; Azad, G.; Owczarczyk, K.; Siddique, M.; Goh, V. Challenges and Promises of PET Radiomics. *International Journal of Radiation Oncology Biology Physics* **2018**, *102*, 1083-1089, doi:10.1016/j.ijrobp.2017.12.268.

1010. Mayo, C.S.; Phillips, M.; McNutt, T.R.; Palta, J.; Dekker, A.; Miller, R.C.; Xiao, Y.; Moran, J.M.; Matuszak, M.M.; Gabriel, P.; et al. Treatment data and technical process challenges for practical big data efforts in radiation oncology. *Med Phys* **2018**, *45*, e793-e810, doi:10.1002/mp.13114.

1011. McNutt, T.R.; Bowers, M.; Cheng, Z.; Han, P.; Hui, X.; Moore, J.; Robertson, S.; Mayo, C.; Voong, R.; Quon, H. Practical data collection and extraction for big data applications in radiotherapy. *Med Phys* **2018**, *45*, e863-e869, doi:10.1002/mp.12817.

1012. Boon, I.S.; Au Yong, T.P.T.; Boon, C.S. Application of artificial intelligence (AI) in Radiotherapy workflow: Paradigm shift in Precision Radiotherapy using Machine Learning. *Br J Radiol* **2019**, *92*, 20190716, doi:10.1259/bjr.20190716.

1013. 26th International Conference on Information Processing in Medical Imaging, IPMI 2019. **2019**, *11492 LNCS*.

1014. Correction to An image-based deep learning framework for individualising radiotherapy dose: a retrospective analysis of outcome prediction (Lancet Digital Health (2019) 1(3)(e136–47)(S2589-7500(19)30058-5)(10.1016/S2589-7500(19)30058-5)). *The Lancet Digital Health* **2019**, *1*, e160, doi:10.1016/S2589-7500(19)30080-9.

1015. Medical Imaging 2019: Computer-Aided Diagnosis. 2019.

1016. Medical Imaging 2019: Image Perception, Observer Performance, and Technology Assessment. 2019.

1017. Medical Imaging 2019: Image-Guided Procedures, Robotic Interventions, and Modeling. 2019.

1018. Jackson, P.; Kron, T.; Hardcastle, N. A future of automated image contouring with machine learning in radiation therapy. *Journal of Medical Radiation Sciences* **2019**, *66*, 223-225, doi:10.1002/jmrs.365.

1019. Deist, T.M.; Dankers, F.J.W.M.; Valdes, G.; Wijsman, R.; Hsu, I.C.; Oberije, C.; Lustberg, T.; van Soest, J.; Hoebers, F.; Jochems, A.; et al. Erratum to: Machine learning algorithms for outcome prediction in (chemo)radiotherapy: An empirical comparison of classifiers (Medical Physics, (2018), 45, 7, (3449-3459), 10.1002/mp.12967). *Medical Physics* **2019**, *46*, 1080-1087, doi:10.1002/mp.13329.

1020. Bridge, P.; Bridge, R. Artificial Intelligence in Radiotherapy: A Philosophical Perspective. *J Med Imaging Radiat Sci* **2019**, *50*, S27-S31, doi:10.1016/j.jmir.2019.09.003.

1021. Wang, L.; Luo, L.; Wang, Y.; Wampfler, J.; Yang, P.; Liu, H. Natural language processing for populating lung cancer clinical research data. *BMC Med Inform Decis Mak* **2019**, *19*, 239, doi:10.1186/s12911-019-0931-8.

1022. Yang, Q.; Chao, H.; Nguyen, D.; Jiang, S. A novel deep learning framework for standardizing the label of OARs in CT. **2019**, *11850 LNCS*, 52-60, doi:10.1007/978-3-030-32486-5_7.

1023. Cai, J.; Wang, L. [Looking back 2018--focused on colorectal cancer]. *Zhonghua Wei Chang Wai Ke Za Zhi* **2019**, *22*, 9-16.

1024. Comelli, A.; Stefano, A.; Bignardi, S.; Russo, G.; Sabini, M.G.; Ippolito, M.; Barone, S.; Yezzi, A. Active contour algorithm with discriminant analysis for delineating tumors in positron emission tomography. *Artificial Intelligence in Medicine* **2019**, *94*, 67-78, doi:10.1016/j.artmed.2019.01.002.

1025. Hussain, S.; Ferzund, J.; Ul-Haq, R. Prediction of drug target sensitivity in cancer cell lines using apache spark. *Journal of Computational Biology* **2019**, *26*, 882-889, doi:10.1089/cmb.2018.0102.

1026. Komatsu, S.; Oike, T.; Komatsu, Y.; Kubota, Y.; Sakai, M.; Matsui, T.; Nuryadi, E.; Permata, T.B.M.; Sato, H.; Kawamura, H.; et al. Deep learning-assisted literature mining for in vitro radiosensitivity data. *Radiother Oncol* **2019**, *139*, 87-93, doi:10.1016/j.radonc.2019.07.003.

1027. Li, H.; Whitney, J.; Bera, K.; Gilmore, H.; Thorat, M.A.; Badve, S.; Madabhushi, A. Quantitative nuclear histomorphometric features are predictive of Oncotype DX risk categories in ductal carcinoma in situ: Preliminary findings. *Breast Cancer Research* **2019**, *21*, doi:10.1186/s13058-019-1200-6.

1028. Oyefiade, A.; Erdman, L.; Goldenberg, A.; Malkin, D.; Bouffet, E.; Taylor, M.D.; Ramaswamy, V.; Scantlebury, N.; Law, N.; Mabbott, D.J. PPAR and GST polymorphisms may predict changes in intellectual functioning in medulloblastoma survivors. *Journal of Neuro-Oncology* **2019**, *142*, 39-48, doi:10.1007/s11060-018-03083-x.

1029. Pransky, J. The Pransky interview: Dr Ken Goldberg, Professor, Industrial Engineering and Operations Research, UC Berkeley; Inventor and Artist. *Industrial Robot* **2019**, *46*, 188-191, doi:10.1108/IR-02-2019-0026.

1030. Yan, Z.; Yang, J.; Fan, L.; Xu, D.; Hu, Y. 31 gene expression-based signatures serve as indicators of prognosis for patients with glioma. *Oncology Letters* **2019**, *18*, 291-297, doi:10.3892/ol.2019.10327.

1031. Zhao, T.; Liang, C.; Zang, T.; Hu, Y. Identification of anticancer peptides based on Random Relevance Vector Machines. 2019; pp. 1822-1827.

1032. Antoine, M.; Ralite, F.; Soustiel, C.; Marsac, T.; Sargos, P.; Cugny, A.; Caron, J. Use of metrics to quantify IMRT and VMAT treatment plan complexity: A systematic review and perspectives. *Physica Medica* **2019**, *64*, 98-108, doi:10.1016/j.ejmp.2019.05.024.

1033. Arimura, H.; Soufi, M.; Kamezawa, H.; Ninomiya, K.; Yamada, M. Radiomics with artificial intelligence for precision medicine in radiation therapy. *Journal of Radiation Research* **2019**, *60*, 150-157, doi:10.1093/jrr/rry077.

1034. Burgun, A. Basis and perspectives of artificial intelligence in radiation therapy. *Cancer/Radiotherapie* **2019**, *23*, 913-916, doi:10.1016/j.canrad.2019.08.005.

1035. French, J.; Chen, L. Preparing for Artificial Intelligence: Systems-Level Implications for the Medical Imaging and Radiation Therapy Professions. *Journal of Medical Imaging and Radiation Sciences* **2019**, *50*, S20-S23, doi:10.1016/j.jmir.2019.09.002.

1036.   Luh, J.Y.; Thompson, R.F.; Lin, S. Clinical Documentation and Patient Care Using Artificial Intelligence in Radiation Oncology. *Journal of the American College of Radiology* **2019**, *16*, 1343-1346, doi:10.1016/j.jacr.2019.05.044.

1037.   McNutt, T.R.; Moore, K.L.; Wu, B.; Wright, J.L. Use of Big Data for Quality Assurance in Radiation Therapy. *Semin Radiat Oncol* **2019**, *29*, 326-332, doi:10.1016/j.semradonc.2019.05.006.

1038.   Murphy, A.; Liszewski, B. Artificial Intelligence and the Medical Radiation Profession: How Our Advocacy Must Inform Future Practice. *Journal of Medical Imaging and Radiation Sciences* **2019**, *50*, S15-S19, doi:10.1016/j.jmir.2019.09.001.

1039.   Pillai, M.; Adapa, K.; Das, S.K.; Mazur, L.; Dooley, J.; Marks, L.B.; Thompson, R.F.; Chera, B.S. Using Artificial Intelligence to Improve the Quality and Safety of Radiation Therapy. *J Am Coll Radiol* **2019**, *16*, 1267-1272, doi:10.1016/j.jacr.2019.06.001.

1040.   Sun, X.S.; Li, X.Y.; Chen, Q.Y.; Tang, L.Q.; Mai, H.Q. Future of Radiotherapy in Nasopharyngeal Carcinoma. *Br J Radiol* **2019**, *92*, 20190209, doi:10.1259/bjr.20190209.

1041.   Shaziya, H.; Shyamala, K.; Zaheer, R. Comprehensive Review of Automatic Lung Segmentation Techniques on Pulmonary CT Images. 2019; pp. 540-545.

1042.   Kaur, H.; Kaur, N.; Neeru, N. Multiorgan detection: Deep learning based techniques and research directions. *International Journal of Innovative Technology and Exploring Engineering* **2019**, *9*, 4590-4594, doi:10.35940/ijitee.A7116.119119.

1043.   Boon, I.S.; Yap, M.H.; Au Yong, T.P.T.; Boon, C.S. Interpreting clinical significance of machine learning approaches and radiomics in radiation oncology trials. *Radiotherapy and Oncology* **2020**, *152*, 78-79, doi:10.1016/j.radonc.2020.07.042.

1044.   Boon, I.S.; Lim, J.S.; Yap, M.H.; Au Yong, T.P.T.; Boon, C.S. Artificial intelligence and soft skills in radiation oncology: Data versus wisdom. *Journal of Medical Imaging and Radiation Sciences* **2020**, *51*, S114-S115, doi:10.1016/j.jmir.2020.08.011.

1045.   10th International Workshop on Multimodal Learning for Clinical Decision Support, ML-CDS 2020, and the 9th International Workshop on Clinical Image-Based Procedures, CLIP 2020, held in conjunction with the 23rd International Conference on Medical Image Computing and Computer Assisted Intervention, MICCAI 2020. **2020**, *12445 LNCS*.

1046.   3rd International Workshop on Predictive Intelligence in Medicine, PRIME 2020, held in conjunction with the Medical Image Computing and Computer Assisted Intervention, MICCAI 2020. **2020**, *12329 LNCS*.

1047.   4th International Conference on Health Care Systems Engineering, HCSE 2019. 2020.

1048.   9th IAPR TC3 International Workshop on Artificial Neural Networks in Pattern Recognition, ANNPR 2020. **2020**, *12294 LNAI*.

1049.   9th International Workshop on Biomedical Image Registration, WBIR 2020. **2020**, *12120 LNCS*.

1050.   Hunt, L.A. Patients' perspectives on radiation in health care. *Ann ICRP* **2020**, *49*, 154-157, doi:10.1177/0146645320931972.

1051.   Design and Quality for Biomedical Technologies XIII 2020. 2020.

1052.   Medical Imaging 2020: Biomedical Applications in Molecular, Structural, and Functional Imaging. 2020.

1053.   Giglia, G.; Gambino, G.; Sardo, P. Through Predictive Personalized Medicine. *Brain Sci* **2020**, *10*, doi:10.3390/brainsci10090594.

1054.   Kocher, M. Artificial intelligence and radiomics for radiation oncology. *Strahlenther Onkol* **2020**, *196*, 847, doi:10.1007/s00066-020-01676-y.

1055.   Redalen, K.R.; Thorwarth, D. Future directions on the merge of quantitative imaging and artificial intelligence in radiation oncology. *Physics and Imaging in Radiation Oncology* **2020**, *15*, 44-45, doi:10.1016/j.phro.2020.06.007.

1056.   Wen, N.; Cao, Y.; Cai, J. Editorial: Magnetic Resonance Imaging for Radiation Therapy. *Front Oncol* **2020**, *10*, 483, doi:10.3389/fonc.2020.00483.

1057.   Erratum to: Reddy JP, Lindsay WD, Berlind CG, Ahern CA, Holmes A, Smith BD, Phan J, Frank SJ, Gunn GB, Rosenthal DI, Morrison WH, Garden AS, Chronowski GM, Shah SJ, Mayo LL, and Fuller CD. Applying a Machine Learning Approach to Predict Acute Radiation Toxicities for Head and Neck Cancer Patients. (International Journal of Radiation Oncology, Biology, Physics (2019) 105(1S) (S69), (S0360301619313550), (10.1016/j.ijrobp.2019.06.520)). *International Journal of Radiation Oncology Biology Physics* **2020**, *106*, 223, doi:10.1016/j.ijrobp.2019.10.015.

1058.   Erratum: Evaluation of deep learning to augment image-guided radiotherapy for head and neck and prostate cancers (JAMA Netw Open (2020) 3: 11 (e2027426) DOI: 10.1001/jamanetworkopen.2020.27426). *JAMA Network Open* **2020**, *3*, doi:10.1001/jamanetworkopen.2020.32624.

1059.	Liu, C.; Lafata, K.; Chang, Y.; Yin, F.F.; Wang, C. RETRACTED: An Encoder-Decoder Based Deep Learning AI agent for Spatial Dose Distribution Prediction: A Study of Complex Head-and-Neck IMRT Application. *International journal of radiation oncology, biology, physics* **2020**, *108*, S128, doi:10.1016/j.ijrobp.2020.07.854.

1060.	Coucke, P.A.; Deleuse, P. [Medical imaging professionals and related specialties : a questioning is essential!]. *Rev Med Liege* **2020**, *75*, 249-255.

1061.	Dai, X.; Wang, X.; Du, L.; Ma, N.; Xu, S.; Cai, B.; Wang, S.; Wang, Z.; Qu, B. [Automatic segmentation of head and neck organs at risk based on three-dimensional U-NET deep convolutional neural network]. *Sheng Wu Yi Xue Gong Cheng Xue Za Zhi* **2020**, *37*, 136-141, doi:10.7507/1001-5515.201903052.

1062.	Giraud, N.; Giraud, P. [News in radiotherapy of solid tumors]. *Rev Prat* **2020**, *70*, 594-598.

1063.	Jiang, J.; Zhou, L.; He, Y.; Jiang, X.; Fu, Y. [Using stacked neural network to improve the auto-segmentation accuracy of Graves' ophthalmopathy target volumes for radiotherapy]. *Sheng Wu Yi Xue Gong Cheng Xue Za Zhi* **2020**, *37*, 670-675, doi:10.7507/1001-5515.202002025.

1064.	Yang, C.; Feng, Y.; Li, M.; Guo, L.; Wang, W. Applying radiomics and dosimetry features to predict 2-year survival of esophageal cancer patients treated with radiotherapy. *Chinese Journal of Clinical Oncology* **2020**, *47*, 334-337, doi:10.3969/j.issn.1000-8179.2020.07.312.

1065.	Tian, L.; Cheng, X.; Tang, K.; Zhang, J.; Wang, L. Multimodal brain image registration with integrated attention augmentation and dual similarity guidance. *Journal of Image and Graphics* **2021**, *26*, 2219-2232, doi:10.11834/jig.200657.

1066.	Xue, X.; Hao, X.; Shi, J.; Ding, Y.; Wei, W.; An, H. Auto-segmentation of high-risk primary tumor gross target volume for the radiotherapy of nasopharyngeal carcinoma. *Journal of Image and Graphics* **2020**, *25*, 2151-2158, doi:10.11834/jig.200243.

1067.	Zhou, J.; Peng, Z.; Wang, P.; Chang, Y.; Sheng, L.; Wu, A.; Qian, L.; Pei, X. Dose distributions prediction for intensity-modulated radiotherapy of postoperative rectal cancer based on deep learning. *Chinese Journal of Radiological Medicine and Protection* **2020**, *40*, 679-684, doi:10.3760/cma.j.issn.0254-5098.2020.09.005.

1068.	Chen, Y.; Chen, S.; Yao, L. Tumor segmentation in breast ultrasound combined with Res paths and a dense connection. *Journal of Image and Graphics* **2021**, *26*, 633-643, doi:10.11834/jig.200078.

1069.	Ji, S.; Xiao, Z. Integrated context and multi-scale features in thoracic organs segmentation. *Journal of Image and Graphics* **2021**, *26*, 2135-2145, doi:10.11834/jig.200558.

1070.	Agrawal, V.; Udupa, J.; Tong, Y.; Torigian, D. BRR-Net: A tandem architectural CNN-RNN for automatic body region localization in CT images. *Med Phys* **2020**, *47*, 5020-5031, doi:10.1002/mp.14439.

1071.	Anderson, A.B.; Wedin, R.; Fabbri, N.; Boland, P.; Healey, J.; Forsberg, J.A. External Validation of PATHFx Version 3.0 in Patients Treated Surgically and Nonsurgically for Symptomatic Skeletal Metastases. *Clinical Orthopaedics and Related Research* **2020**, *478*, 808-818, doi:10.1097/CORR.0000000000001081.

1072.	Bourbonne, V.; Fournier, G.; Vallières, M.; Lucia, F.; Doucet, L.; Tissot, V.; Cuvelier, G.; Hue, S.; Le Penn Du, H.; Perdriel, L.; et al. External Validation of an MRI-Derived Radiomics Model to Predict Biochemical Recurrence after Surgery for High-Risk Prostate Cancer. *Cancers (Basel)* **2020**, *12*, doi:10.3390/cancers12040814.

1073.	Deng, X.; Ali-Adeeb, R.; Andrews, J.L.; Shreeves, P.; Lum, J.J.; Brolo, A.; Jirasek, A. Monitor Ionizing Radiation-Induced Cellular Responses with Raman Spectroscopy, Non-Negative Matrix Factorization, and Non-Negative Least Squares. *Appl Spectrosc* **2020**, *74*, 701-711, doi:10.1177/0003702820906221.

1074.	Goldstein, E.; Yeghiazaryan, K.; Ahmad, A.; Giordano, F.A.; Fröhlich, H.; Golubnitschaja, O. Optimal multiparametric set-up modelled for best survival outcomes in palliative treatment of liver malignancies: unsupervised machine learning and 3 PM recommendations. *Epma j* **2020**, *11*, 505-515, doi:10.1007/s13167-020-00221-2.

1075.	Holbrook, M.D.; Blocker, S.J.; Mowery, Y.M.; Badea, A.; Qi, Y.; Xu, E.S.; Kirsch, D.G.; Johnson, G.A.; Badea, C.T. Mri-based deep learning segmentation and radiomics of sarcoma in mice. *Tomography* **2020**, *6*, 23-33, doi:10.18383/j.tom.2019.00021.

1076.	Horne, E.A.; Diaz, P.; Cimino, P.J.; Jung, E.; Xu, C.; Hamel, E.; Wagenbach, M.; Kumasaka, D.; Wageling, N.B.; Azorín, D.D.; et al. A brain-penetrant microtubule-targeting agent that disrupts hallmarks of glioma tumorigenesis. *Neurooncol Adv* **2021**, *3*, vdaa165, doi:10.1093/noajnl/vdaa165.

1077.	Hosoda, M.; Tokonami, S.; Suzuki, T.; Janik, M. Machine learning as a tool for analysing the impact of environmental parameters on the radon exhalation rate from soil. *Radiation Measurements* **2020**, *138*, doi:10.1016/j.radmeas.2020.106402.

1078.	Lovatti, G.; Nitta, M.; Safari, M.; Gianoli, C.; Pinto, M.; Zoglauer, A.; Kang, H.G.; Yamaya, T.; Thirolf, P.G.; Dedes, G.; et al. An Advanced Simulation and Reconstruction Framework for a Novel In-beam PET Scanner for Pre-clinical Proton Irradiation. 2020.

1079. McDonald, N.; Hollingsworth, A.; Beninati, S.; Lim, C.; Ji, W.; Shi, C.; Agiorgousis, M.L.; Zhang, S.; Huang, Z.R. Analysis of an Ultra-Short True Time Delay Line Optical Reservoir Computer. *Journal of Lightwave Technology* **2020**, *38*, 3584-3591, doi:10.1109/JLT.2020.2975165.

1080. Rahmat, R.; Saednia, K.; Haji Hosseini Khani, M.R.; Rahmati, M.; Jena, R.; Price, S.J. Multi-scale segmentation in GBM treatment using diffusion tensor imaging. *Comput Biol Med* **2020**, *123*, 103815, doi:10.1016/j.compbiomed.2020.103815.

1081. Wentzel, A.; Canahuate, G.; Van Dijk, L.V.; Mohamed, A.S.R.; Fuller, C.D.; Marai, G.E. Explainable Spatial Clustering: Leveraging Spatial Data in Radiation Oncology. 2020; pp. 281-285.

1082. Wu, S.; Qiao, Q.; Li, G. A Radiosensitivity Gene Signature and XPO1 Predict Clinical Outcomes for Glioma Patients. *Front Oncol* **2020**, *10*, 871, doi:10.3389/fonc.2020.00871.

1083. Zhao, T.; Hu, Y.; Zang, T. DRACP: a novel method for identification of anticancer peptides. *BMC Bioinformatics* **2020**, *21*, doi:10.1186/s12859-020-03812-y.

1084. Li, Q.; Zhou, W.; Wang, D.; Wang, S.; Li, Q. Prediction of Anticancer Peptides Using a Low-Dimensional Feature Model. *Frontiers in Bioengineering and Biotechnology* **2020**, *8*, doi:10.3389/fbioe.2020.00892.

1085. Chamunyonga, C.; Edwards, C.; Caldwell, P.; Rutledge, P.; Burbery, J. The Impact of Artificial Intelligence and Machine Learning in Radiation Therapy: Considerations for Future Curriculum Enhancement. *Journal of Medical Imaging and Radiation Sciences* **2020**, *51*, 214-220, doi:10.1016/j.jmir.2020.01.008.

1086. Cui, S.; Tseng, H.H.; Pakela, J.; Ten Haken, R.K.; El Naqa, I. Introduction to machine and deep learning for medical physicists. *Medical Physics* **2020**, *47*, e127-e147, doi:10.1002/mp.14140.

1087. Fu, Y.; Yu, H. Application and Development Trend of Medical Image Automatic Segmentation Technology in Radiation Therapy. *Zhongguo yi liao qi xie za zhi = Chinese journal of medical instrumentation* **2020**, *44*, 420-424, doi:10.3969/j.issn.1671-7104.2020.05.009.

1088. Gandhi, T.; Bhattacharyya, S.; De, S.; Konar, D.; Dey, S. *Advanced Machine Vision Paradigms for Medical Image Analysis*; Elsevier: 2020; pp. 1-289.

1089. Ishikawa, K.; Uehara, T.; Matsuura, T.; Nishimura, Y. Advances in radiation treatment planning. *Japanese Journal of Head and Neck Cancer* **2020**, *46*, 243-247, doi:10.5981/jjhnc.46.243.

1090. Kalet, A.M.; Luk, S.M.H.; Phillips, M.H. Radiation Therapy Quality Assurance Tasks and Tools: The Many Roles of Machine Learning. *Medical Physics* **2020**, *47*, e168-e177, doi:10.1002/mp.13445.

1091. Peeken, J.C.; Wiestler, B.; Combs, S.E. Image-Guided Radiooncology: The Potential of Radiomics in Clinical Application. *Recent Results in Cancer Research* **2020**, *216*, 773-794, doi:10.1007/978-3-030-42618-7_24.

1092. Poortmans, P.M.P.; Takanen, S.; Marta, G.N.; Meattini, I.; Kaidar-Person, O. Winter is over: The use of Artificial Intelligence to individualise radiation therapy for breast cancer. *Breast* **2020**, *49*, 194-200, doi:10.1016/j.breast.2019.11.011.

1093. Thomas, G.; Eisenhauer, E.; Bristow, R.G.; Grau, C.; Hurkmans, C.; Ost, P.; Guckenberger, M.; Deutsch, E.; Lacombe, D.; Weber, D.C.; et al. The European Organisation for Research and Treatment of Cancer, State of Science in radiation oncology and priorities for clinical trials meeting report. *European Journal of Cancer* **2020**, *131*, 76-88, doi:10.1016/j.ejca.2020.02.050.

1094. Cardoso, J.S.; Silva, W.; Cardoso, M.J. Evolution, current challenges, and future possibilities in the objective assessment of aesthetic outcome of breast cancer locoregional treatment. *Breast* **2020**, *49*, 123-130, doi:10.1016/j.breast.2019.11.006.

1095. Booth, T.C.; Akpinar, B.; Roman, A.; Shuaib, H.; Luis, A.; Chelliah, A.; Al Busaidi, A.; Mirchandani, A.; Alparslan, B.; Mansoor, N.; et al. Machine Learning and Glioblastoma: Treatment Response Monitoring Biomarkers in 2021. **2020**, *12449 LNCS*, 212-228, doi:10.1007/978-3-030-66843-3_21.

1096. Luo, Y.; Chen, S.; Valdes, G. Machine learning for radiation outcome modeling and prediction. *Medical Physics* **2020**, *47*, e178-e184, doi:10.1002/mp.13570.

1097. Deng, J.; El Naqa, I.; Xing, L. Editorial: Machine Learning With Radiation Oncology Big Data. *Front Oncol* **2018**, *8*, 416, doi:10.3389/fonc.2018.00416.

1098. Brouwer, C.L.; Dinkla, A.M.; Vandewinckele, L.; Crijns, W.; Claessens, M.; Verellen, D.; van Elmpt, W. Machine learning applications in radiation oncology: Current use and needs to support clinical implementation. *Phys Imaging Radiat Oncol* **2020**, *16*, 144-148, doi:10.1016/j.phro.2020.11.002.

1099. Shi, J.; Zhao, M.; Xue, X.; Hao, X.; Jin, X.; An, H.; Zhang, H. Automatic segmentation of organs at risk in radiotherapy using 2D cascade-CNN model. *Journal of Image and Graphics* **2020**, *25*, 2110-2118, doi:10.11834/jig.200281.

1100. Paysan, P.; Peterlik, I.; Roggen, T.; Zhu, L.; Wessels, C.; Schreier, J.; Buchacek, M.; Scheib, S. Deep learning methods for image guidance in radiation therapy. **2020**, *12294 LNAI*, 3-22, doi:10.1007/978-3-030-58309-5_1.

1101. Correa da Silva, F.S.; Costa, F.P.; Iemma, A.F. Practical considerations regarding classification learning for clinical diagnosis and therapy advice in oncology. *ICT Express* **2020**, *6*, 151-154, doi:10.1016/j.icte.2020.03.004.

1102. Kalendralis, P.; Sloep, M.; van Soest, J.; Dekker, A.; Fijten, R. Making radiotherapy more efficient with FAIR data. *Phys Med* **2021**, *82*, 158-162, doi:10.1016/j.ejmp.2021.01.083.

1103. Qiu, X.; Xu, T.; Li, M.; Fei, Z.; Chen, C. Response to Chai' letter: What caused the difference in prognosis among different physicians? *Radiother Oncol* **2021**, *154*, e20-e21, doi:10.1016/j.radonc.2020.07.017.

1104. 14th International Conference on Complex, Intelligent and Software Intensive Systems, CISIS 2020, held in conjunction with the 14th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, IMIS 2020. **2021**, *1194 AISC*.

1105. 21st Congress of the International Ergonomics Association, IEA 2021. **2021**, *219 LNNS*.

1106. 25th Annual Conference on Medical Image Understanding and Analysis, MIUA 2021. **2021**, *12722 LNCS*.

1107. Anatomical Brain Barriers to Cancer Spread: Segmentation from CT and MR Images Challenge, ABCs 2020, Learn2Reg Challenge, L2R 2020 and Thyroid Nodule Segmentation and Classification in Ultrasound Images Challenge, TN-SCUI 2020 held in conjunction with 23rd International Conference on Medical Image Computing and Computer-Assisted Intervention, MICCAI 2020. **2021**, *12587 LNCS*.

1108. BIOIMAGING 2021 - 8th International Conference on Bioimaging; Part of the 14th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2021. 2021.

1109. Mammas, C.S.; Mamma, A.S.; Papaxoinis, G.; Georgiou, I. Remote AI Supported E-Multidisciplinary Oncology Conference in Breast Cancer as a Technology and Method to Optimize Outcomes in the Peripheries. *Stud Health Technol Inform* **2022**, *289*, 309-312, doi:10.3233/shti210921.

1110. Stenhouse, K.; Roumeliotis, M.; Ciunkiewicz, P.; Banerjee, R.; Yanushkevich, S.; McGeachy, P. Corrigendum: Development of a Machine Learning Model for Optimal Applicator Selection in High-Dose-Rate Cervical Brachytherapy. *Front Oncol* **2021**, *11*, 730375, doi:10.3389/fonc.2021.730375.

1111. Jena, R.; Dekker, A.; Kang, J. A Glimmer of Hope Within the Mountain of Hype - Reviewing the Role of Artificial Intelligence in Radiotherapy. *Clin Oncol (R Coll Radiol)* **2022**, *34*, 71-73, doi:10.1016/j.clon.2021.12.001.

1112. Selvarajah, J.; Nawarathna, R.D. A Lucrative Model for Identifying Potential Adverse Effects from Biomedical Texts by Augmenting BERT and ELMo. **2021**, *176 LNNS*, 233-247, doi:10.1007/978-981-33-4355-9_19.

1113. Erratum regarding missing Declaration of Competing Interest statements in previously published articles (Clinical and Translational Radiation Oncology (2020) 22 (69–75), (S2405630820300203), (10.1016/j.ctro.2020.03.007)). *Clinical and Translational Radiation Oncology* **2021**, *27*, 96-97, doi:10.1016/j.ctro.2020.11.008.

1114. Chong, Y.; Wu, Y.; Liu, J. Erratum: Clinicopathological models for predicting lymph node metastasis in patients with early-stage lung adenocarcinoma: The application of machine learning algorithms (J Thorac Dis (2021) 13 (4033-4042) DOI: 10.21037/jtd-21-98). *Journal of Thoracic Disease* **2021**, *13*, 6205-6206, doi:10.21037/jtd-2021-38.

1115. Yirmibesoglu Erkal, E.; Akpınar, A.; Erkal, H. Ethical evaluation of artificial intelligence applications in radiotherapy using the Four Topics Approach. *Artif Intell Med* **2021**, *115*, 102055, doi:10.1016/j.artmed.2021.102055.

1116. Hallows, R.; Glazier, L.; Katz, M.S.; Aznar, M.; Williams, M. Safe and Ethical Artificial Intelligence in Radiotherapy - Lessons Learned From the Aviation Industry. *Clin Oncol (R Coll Radiol)* **2022**, *34*, 99-101, doi:10.1016/j.clon.2021.11.019.

1117. Lee, S.H.; Geng, H.; Xiao, Y. Radiotherapy Standardisation and Artificial Intelligence within the National Cancer Institute's Clinical Trials Network. *Clin Oncol (R Coll Radiol)* **2022**, *34*, 128-134, doi:10.1016/j.clon.2021.11.020.

1118. Mathew, F.; Wang, H.; Montgomery, L.; Kildea, J. Natural language processing and machine learning to assist radiation oncology incident learning. *Journal of Applied Clinical Medical Physics* **2021**, *22*, 172-184, doi:10.1002/acm2.13437.

1119. Syed, K.; Sleeman, W.I.; Ivey, K.; Hagan, M.; Palta, J.; Kapoor, R.; Ghosh, P. Integrated natural language processing and machine learning models for standardizing radiotherapy structure names. *Healthcare (Switzerland)* **2020**, *8*, doi:10.3390/healthcare8020120.

1120. Calvo-Ortega, J.F.; Moragues-Femenía, S.; Laosa-Bello, C.; Torices-Caballero, J.; Hermida-López, M.; Casals-Farran, J. Clinical Experience in Prostate Ultrahypofractionated Radiation Therapy With an Online Adaptive Method. *Practical Radiation Oncology* **2021**, doi:10.1016/j.prro.2021.10.001.

1121. Cihoric, N.; Badra, E.V.; Stenger-Weisser, A.; Aebersold, D.M.; Pavic, M. Toward Data-Driven Radiation Oncology Using Standardized Terminology as a Starting Point: Cross-sectional Study. *JMIR Form Res* **2022**, *6*, e27550, doi:10.2196/27550.

1122. Güngör, G.; Serbez, İ.; Temur, B.; Gür, G.; Kayalılar, N.; Mustafayev, T.Z.; Korkmaz, L.; Aydın, G.; Yapıcı, B.; Atalar, B.; et al. Time Analysis of Online Adaptive Magnetic Resonance–Guided Radiation Therapy Workflow According to Anatomical Sites. *Practical Radiation Oncology* **2021**, *11*, e11-e21, doi:10.1016/j.prro.2020.07.003.

1123. Picano, E.; Ciampi, Q.; Cortigiani, L.; Arruda-Olson, A.M.; Borguezan-Daros, C.; de Castro, E.S.P.J.L.; Cocchia, R.; Bossone, E.; Merli, E.; Kane, G.C.; et al. Stress Echo 2030: The Novel ABCDE-(FGLPR) Protocol to Define the Future of Imaging. *J Clin Med* **2021**, *10*, doi:10.3390/jcm10163641.

1124. Samani, M.; Beheshti, S.; Cheng, H.; Sproat, C.; Kwok, J.; Patel, V. Prophylactic pentoxifylline and vitamin E use for dental extractions in irradiated patients with head and neck cancer. *Oral Surg Oral Med Oral Pathol Oral Radiol* **2022**, *133*, e63-e71, doi:10.1016/j.oooo.2021.08.007.

1125. Shusharina, N.; Söderberg, J.; Lidberg, D.; Niyazi, M.; Shih, H.A.; Bortfeld, T. Accounting for uncertainties in the position of anatomical barriers used to define the clinical target volume. *Physics in Medicine and Biology* **2021**, *66*, doi:10.1088/1361-6560/ac0ea3.

1126. van der Veen, J.; Gulyban, A.; Willems, S.; Maes, F.; Nuyts, S. Interobserver variability in organ at risk delineation in head and neck cancer. *Radiat Oncol* **2021**, *16*, 120, doi:10.1186/s13014-020-01677-2.

1127. Coucke, P.A. [Radiomics and automation in radiotherapy]. *Rev Med Liege* **2021**, *76*, 369-374.

1128. Detomas, M.; Reuter, M.; Deutschbein, T. [New developments and perspectives in acromegaly]. *Dtsch Med Wochenschr* **2021**, *146*, 950-954, doi:10.1055/a-1495-2715.

1129. Wada, K.; Watanabe, M.; Shinchi, M.; Noguchi, K.; Mukoyoshi, T.; Matsuyama, M.; Arimura, T.; Ogino, T. [A Study on Radiation Dermatitis Grading Support System Based on Deep Learning by Hybrid Generation Method]. *Nihon Hoshasen Gijutsu Gakkai Zasshi* **2021**, *77*, 787-794, doi:10.6009/jjrt.2021_JSRT_77.8.787.

1130. Wakita, A. [12. Application of Deep Learning in Radiotherapy Imaging]. *Nihon Hoshasen Gijutsu Gakkai Zasshi* **2021**, *77*, 835-839, doi:10.6009/jjrt.2021_JSRT_77.8.835.

1131. Li, Y.; Wang, Y.; Xu, M.; Xie, Y.; Xu, Y.; Zhu, Y.; Chen, Y.; Wang, L.; Ju, S. Microimaging evidences of hippocampal injury in radiotherapy avoiding hippocampus and its effects on cognition. *Chinese Journal of Radiology (China)* **2021**, *55*, 377-382, doi:10.3760/cma.j.cn112149-20200407-00515.

1132. Aghdam, N.; Carrasquilla, M.; Wang, E.; Pepin, A.N.; Danner, M.; Ayoob, M.; Yung, T.; Collins, B.T.; Kumar, D.; Suy, S.; et al. Ten-Year Single Institutional Analysis of Geographic and Demographic Characteristics of Patients Treated With Stereotactic Body Radiation Therapy for Localized Prostate Cancer. *Front Oncol* **2020**, *10*, 616286, doi:10.3389/fonc.2020.616286.

1133. Al-Ryalat, N.; Malkawi, L.; Abu Salhiyeh, A.; Abualteen, F.; Abdallah, G.; Al Omari, B.; AlRyalat, S.A. Radiology During the COVID-19 Pandemic: Mapping Radiology Literature in 2020. *Curr Med Imaging* **2021**, doi:10.2174/1573405618666211230105631.

1134. Andrew, T.W.; Hamnett, N.; Roy, I.; Garioch, J.; Nobes, J.; Moncrieff, M.D. Machine-learning algorithm to predict multidisciplinary team treatment recommendations in the management of basal cell carcinoma. *Br J Cancer* **2022**, *126*, 562-568, doi:10.1038/s41416-021-01506-7.

1135. Chen, J.; Cheong, H.H.; Siu, S.W.I. xDeep-AcPEP: Deep Learning Method for Anticancer Peptide Activity Prediction Based on Convolutional Neural Network and Multitask Learning. *J Chem Inf Model* **2021**, *61*, 3789-3803, doi:10.1021/acs.jcim.1c00181.

1136. Clément, F.; Grinspon, R.P.; Yankelevich, D.; Martín Benítez, S.; De La Ossa Salgado, M.C.; Ropelato, M.G.; Ballerini, M.G.; Keselman, A.C.; Braslavsky, D.; Pennisi, P.; et al. Development and Validation of a Prediction Rule for Growth Hormone Deficiency Without Need for Pharmacological Stimulation Tests in Children With Risk Factors. *Front Endocrinol (Lausanne)* **2020**, *11*, 624684, doi:10.3389/fendo.2020.624684.

1137. Finneman, G.M.; Eichhorn, O.H.; Meskell, N.R.; Caplice, T.W.; Benson, A.D.; Abu-Halawa, A.S.; Ademoski, G.L.; Clark, A.C.; Gayer, D.S.; Hendrickson, K.N.; et al. Development of a dosimeter prototype with machine learning based 3-D dose reconstruction capabilities. *Biomed Phys Eng Express* **2021**, *8*, doi:10.1088/2057-1976/ac396c.

1138. Floricel, C.; Nipu, N.; Biggs, M.; Wentzel, A.; Canahuate, G.; Van Dijk, L.; Mohamed, A.; Fuller, C.D.; Marai, G.E. THALIS: Human-Machine Analysis of Longitudinal Symptoms in Cancer Therapy. *IEEE Trans Vis Comput Graph* **2022**, *28*, 151-161, doi:10.1109/tvcg.2021.3114810.

1139. Gan, C.; Wang, Y.; Tang, Y.; Wang, K.; Sun, B.; Wang, M.; Zhu, F. Risk factors for surgical site infection in head and neck cancer. *Support Care Cancer* **2022**, *30*, 2735-2743, doi:10.1007/s00520-021-06687-8.
1140. Giordano, F.M.; Ippolito, E.; Quattrocchi, C.C.; Greco, C.; Mallio, C.A.; Santo, B.; D'Alessio, P.; Crucitti, P.; Fiore, M.; Zobel, B.B.; et al. Radiation-Induced Pneumonitis in the Era of the COVID-19 Pandemic: Artificial Intelligence for Differential Diagnosis. *Cancers (Basel)* **2021**, *13*, doi:10.3390/cancers13081960.
1141. Gupta, P.; Huang, Y.; Sahoo, P.K.; You, J.F.; Chiang, S.F.; Onthoni, D.D.; Chern, Y.J.; Chao, K.Y.; Chiang, J.M.; Yeh, C.Y.; et al. Colon Tissues Classification and Localization in Whole Slide Images Using Deep Learning. *Diagnostics (Basel)* **2021**, *11*, doi:10.3390/diagnostics11081398.
1142. Hito, M.; Wang, W.; Stephens, H.; Xie, Y.; Li, R.; Yin, F.F.; Ge, Y.; Wu, Q.J.; Wu, Q.; Sheng, Y. Assessing the robustness of artificial intelligence powered planning tools in radiotherapy clinical settings-a phantom simulation approach. *Quant Imaging Med Surg* **2021**, *11*, 4835-4846, doi:10.21037/qims-21-51.
1143. Holbrook, M.D.; Clark, D.P.; Patel, R.; Qi, Y.; Bassil, A.M.; Mowery, Y.M.; Badea, C.T. Detection of lung nodules in micro-ct imaging using deep learning. *Tomography* **2021**, *7*, 358-372, doi:10.3390/tomography7030032.
1144. Holbrook, M.D.; Clark, D.P.; Patel, R.; Qi, Y.; Mowery, Y.M.; Badea, C.T. Towards deep learning detection of lung nodules using micro-CT. 2021.
1145. Hu, Z.; Zhang, H.; Fan, F.; Wang, Z.; Xu, J.; Huang, Y.; Dai, Z.; Cao, H.; Zhang, X.; Liu, Z.; et al. Identification of Methylation Immune Subtypes and Establishment of a Prognostic Signature for Gliomas Using Immune-Related Genes. *Frontiers in Immunology* **2021**, *12*, doi:10.3389/fimmu.2021.737650.
1146. Huang, X.; Lediju Bell, M.A.; Ding, K. Deep Learning for Ultrasound Beamforming in Flexible Array Transducer. *IEEE Transactions on Medical Imaging* **2021**, *40*, 3178-3189, doi:10.1109/TMI.2021.3087450.
1147. Jajroudi, M.; Enferadi, M.; Homayoun, A.A.; Reiazi, R. MRI-based machine learning for determining quantitative and qualitative characteristics affecting the survival of glioblastoma multiforme. *Magn Reson Imaging* **2022**, *85*, 222-227, doi:10.1016/j.mri.2021.10.023.
1148. Lavogina, D.; Laasfeld, T.; Vardja, M.; Lust, H.; Jaal, J. Viability fingerprint of glioblastoma cell lines: roles of mitotic, proliferative, and epigenetic targets. *Scientific Reports* **2021**, *11*, doi:10.1038/s41598-021-99630-0.
1149. Ma, G.; Kang, J.; Qiao, N.; Zhang, B.; Chen, X.; Li, G.; Gao, Z.; Gui, S. Non-Invasive Radiomics Approach Predict Invasiveness of Adamantinomatous Craniopharyngioma Before Surgery. *Front Oncol* **2020**, *10*, 599888, doi:10.3389/fonc.2020.599888.
1150. Morilla, I.; Chan, P.; Caffin, F.; Svilar, L.; Selbonne, S.; Ladaigue, S.; Buard, V.; Tarlet, G.; Micheau, B.; Paget, V.; et al. Deep models of integrated multiscale molecular data decipher the endothelial cell response to ionizing radiation. *iScience* **2022**, *25*, 103685, doi:10.1016/j.isci.2021.103685.
1151. Park, J.; Choi, B.; Ko, J.; Chun, J.; Park, I.; Lee, J.; Kim, J.; Kim, J.; Eom, K.; Kim, J.S. Deep-Learning-Based Automatic Segmentation of Head and Neck Organs for Radiation Therapy in Dogs. *Front Vet Sci* **2021**, *8*, 721612, doi:10.3389/fvets.2021.721612.
1152. Patel, A.; Singh, S.K.; Khamparia, A. Detection of prostate cancer using deep learning framework. 2021.
1153. Peng, D.; Xiong, S.; Peng, W.; Lu, J. LCP-Net: A local context-perception deep neural network for medical image segmentation. *Expert Systems with Applications* **2021**, *168*, doi:10.1016/j.eswa.2020.114234.
1154. Pogue, B.W.; Zhang, R.; Gladstone, D.J. A roadmap for research in medical physics via academic medical centers: The DIVERT Model. *Medical Physics* **2021**, *48*, 3151-3159, doi:10.1002/mp.14849.
1155. Poon, D.J.J.; Tay, L.M.; Ho, D.; Chua, M.L.K.; Chow, E.K.; Yeo, E.L.L. Improving the therapeutic ratio of radiotherapy against radioresistant cancers: Leveraging on novel artificial intelligence-based approaches for drug combination discovery. *Cancer Lett* **2021**, *511*, 56-67, doi:10.1016/j.canlet.2021.04.019.
1156. Rudigkeit, S.; Reindl, J.B.; Matejka, N.; Ramson, R.; Sammer, M.; Dollinger, G.; Reindl, J. CeCILE - An Artificial Intelligence Based Cell-Detection for the Evaluation of Radiation Effects in Eucaryotic Cells. *Front Oncol* **2021**, *11*, 688333, doi:10.3389/fonc.2021.688333.
1157. Scarpelli, M.; Whelan, B.; Farahani, K. Domain classification and analysis of national institutes of health-funded medical physics research. *Med Phys* **2021**, *48*, 605-614, doi:10.1002/mp.14469.
1158. Terpstra, M.L.; Maspero, M.; Bruijnen, T.; Verhoeff, J.J.C.; Lagendijk, J.J.W.; van den Berg, C.A.T. Real-time 3D motion estimation from undersampled MRI using multi-resolution neural networks. *Med Phys* **2021**, *48*, 6597-6613, doi:10.1002/mp.15217.

1159. Tipatet, K.S.; Davison-Gates, L.; Tewes, T.J.; Fiagbedzi, E.K.; Elfick, A.; Neu, B.; Downes, A. Detection of acquired radioresistance in breast cancer cell lines using Raman spectroscopy and machine learning. *Analyst* **2021**, *146*, 3709-3716, doi:10.1039/d1an00387a.

1160. Trimpl, M.J.; Boukerroui, D.; Stride, E.P.J.; Vallis, K.A.; Gooding, M.J. Interactive contouring through contextual deep learning. *Med Phys* **2021**, *48*, 2951-2959, doi:10.1002/mp.14852.

1161. Vicar, T.; Gumulec, J.; Kolar, R.; Kopecna, O.; Pagacova, E.; Falkova, I.; Falk, M. DeepFoci: Deep learning-based algorithm for fast automatic analysis of DNA double-strand break ionizing radiation-induced foci. *Computational and Structural Biotechnology Journal* **2021**, *19*, 6465-6480, doi:10.1016/j.csbj.2021.11.019.

1162. Vu, M.H.; Norman, G.; Nyholm, T.; Lofstedt, T. A Data-Adaptive Loss Function for Incomplete Data and Incremental Learning in Semantic Image Segmentation. *IEEE Transactions on Medical Imaging* **2021**, doi:10.1109/TMI.2021.3139161.

1163. Yerrapragada, G.; Siadimas, A.; Babaeian, A.; Sharma, V.; O'Neill, T.J. Machine Learning to Predict Tamoxifen Nonadherence Among US Commercially Insured Patients With Metastatic Breast Cancer. *JCO clinical cancer informatics* **2021**, *5*, 814-825, doi:10.1200/CCI.20.00102.

1164. Yuan, C.; Zhang, J.; Wang, S. Progress in breast conserving treatment: Margin assessment, irradiation, ablation. In *Horizons in Cancer Research. Volume 81*; Nova Science Publishers, Inc.: 2021; pp. 147-173.

1165. Basu, T.; Goldsworthy, S.; Gkoutos, G.V. A sentence classification framework to identify geometric errors in radiation therapy from relevant literature. *Information (Switzerland)* **2021**, *12*, doi:10.3390/info12040139.

1166. Keal, J.; Santos, A.; Penfold, S.; Douglass, M. Radiation dose calculation in 3D heterogeneous media using artificial neural networks. *Med Phys* **2021**, *48*, 2637-2645, doi:10.1002/mp.14780.

1167. Asgari Taghanaki, S.; Abhishek, K.; Cohen, J.P.; Cohen-Adad, J.; Hamarneh, G. Deep semantic segmentation of natural and medical images: a review. *Artificial Intelligence Review* **2021**, *54*, 137-178, doi:10.1007/s10462-020-09854-1.

1168. Chen, M.; Wu, S.; Zhao, W.; Zhou, Y.; Wang, G. Application of deep learning to auto-delineation of target volumes and organs at risk in radiotherapy. *Cancer/Radiotherapie* **2021**, doi:10.1016/j.canrad.2021.08.020.

1169. Ding, H.; Wu, C.; Liao, N.; Zhan, Q.; Sun, W.; Huang, Y.; Jiang, Z.; Li, Y. Radiomics in Oncology: A 10-Year Bibliometric Analysis. *Front Oncol* **2021**, *11*, 689802, doi:10.3389/fonc.2021.689802.

1170. El Naqa, I. Prospective clinical deployment of machine learning in radiation oncology. *Nature Reviews Clinical Oncology* **2021**, *18*, 605-606, doi:10.1038/s41571-021-00541-w.

1171. Kang, J.; Thompson, R.F.; Aneja, S.; Lehman, C.; Trister, A.; Zou, J.; Obcemea, C.; El Naqa, I. National Cancer Institute Workshop on Artificial Intelligence in Radiation Oncology: Training the Next Generation. *Practical Radiation Oncology* **2021**, *11*, 74-83, doi:10.1016/j.prro.2020.06.001.

1172. Kothari, G.; Korte, J.; Lehrer, E.J.; Zaorsky, N.G.; Lazarakis, S.; Kron, T.; Hardcastle, N.; Siva, S. A systematic review and meta-analysis of the prognostic value of radiomics based models in non-small cell lung cancer treated with curative radiotherapy. *Radiotherapy and Oncology* **2021**, *155*, 188-203, doi:10.1016/j.radonc.2020.10.023.

1173. Mapanga, W.; Norris, S.A.; Chen, W.C.; Blanchard, C.; Graham, A.; Baldwin-Ragaven, L.; Boyles, T.; Donde, B.; Greef, L.; Huddle, K.; et al. Consensus study on the health system and patient-related barriers for lung cancer management in South Africa. *PLoS ONE* **2021**, *16*, doi:10.1371/journal.pone.0246716.

1174. Papadimitroulas, P.; Brocki, L.; Christopher Chung, N.; Marchadour, W.; Vermet, F.; Gaubert, L.; Eleftheriadis, V.; Plachouris, D.; Visvikis, D.; Kagadis, G.C.; et al. Artificial intelligence: Deep learning in oncological radiomics and challenges of interpretability and data harmonization. *Physica Medica* **2021**, *83*, 108-121, doi:10.1016/j.ejmp.2021.03.009.

1175. Tay, Y.X.; Chong, L. RE: Perceptions of Canadian radiation oncologists, radiation physicists, radiation therapists and radiation trainees about the impact of artificial intelligence in radiation oncology – National survey. *Journal of Medical Imaging and Radiation Sciences* **2021**, *52*, 316-317, doi:10.1016/j.jmir.2021.02.001.

1176. Thwaites, D.; Moses, D.; Haworth, A.; Barton, M.; Holloway, L. Artificial intelligence in medical imaging and radiation oncology: Opportunities and challenges. *Journal of Medical Imaging and Radiation Oncology* **2021**, *65*, 481-485, doi:10.1111/1754-9485.13275.

1177. Walls, G.M.; Osman, S.O.S.; Brown, K.H.; Butterworth, K.T.; Hanna, G.G.; Hounsell, A.R.; McGarry, C.K.; Leijenaar, R.T.H.; Lambin, P.; Cole, A.J.; et al. Radiomics for Predicting Lung Cancer Outcomes Following Radiotherapy: A Systematic Review. *Clin Oncol (R Coll Radiol)* **2022**, *34*, e107-e122, doi:10.1016/j.clon.2021.10.006.

1178. Wong, K.; Gallant, F.; Szumacher, E. Perceptions of Canadian radiation oncologists, radiation physicists, radiation therapists and radiation trainees about the impact of artificial intelligence in radiation oncology – national survey. *Journal of Medical Imaging and Radiation Sciences* **2021**, *52*, 44-48, doi:10.1016/j.jmir.2020.11.013.

1179. Kalantar, R.; Lin, G.; Winfield, J.M.; Messiou, C.; Lalondrelle, S.; Blackledge, M.D.; Koh, D.M. Automatic segmentation of pelvic cancers using deep learning: State-of-the-art approaches and challenges. *Diagnostics* **2021**, *11*, doi:10.3390/diagnostics11111964.

1180. Rainey, C.; O'Regan, T.; Matthew, J.; Skelton, E.; Woznitza, N.; Chu, K.Y.; Goodman, S.; McConnell, J.; Hughes, C.; Bond, R.; et al. Beauty Is in the AI of the Beholder: Are We Ready for the Clinical Integration of Artificial Intelligence in Radiography? An Exploratory Analysis of Perceived AI Knowledge, Skills, Confidence, and Education Perspectives of UK Radiographers. *Front Digit Health* **2021**, *3*, 739327, doi:10.3389/fdgth.2021.739327.

1181. Ge, T.; Zhan, T.; Li, Q.; Mu, S. Brain tumor segmentation based on magnetic resonance images. *Nanjing Li Gong Daxue Xuebao/Journal of Nanjing University of Science and Technology* **2021**, *45*, 179-188, doi:10.14177/j.cnki.32-1397n.2021.45.02.007.

1182. Coleman, C.N.; Buchsbaum, J.C.; Prasanna, P.G.S.; Capala, J.; Obcemea, C.; Espey, M.G.; Ahmed, M.M.; Hong, J.A.; Vikram, B. Moving Forward in the Next Decade: Radiation Oncology Sciences for Patient-Centered Cancer Care. *JNCI Cancer Spectr* **2021**, *5*, doi:10.1093/jncics/pkab046.

1183. Hirsch, B. Artificial Intelligence in Diagnostic Imaging and Radiation Therapy. *Radiologic Technology* **2021**, *92*, 577-592.

1184. Kenny, L.M.; Nevin, M.; Fitzpatrick, K. Ethics and standards in the use of artificial intelligence in medicine on behalf of the Royal Australian and New Zealand College of Radiologists. *Journal of Medical Imaging and Radiation Oncology* **2021**, *65*, 486-494, doi:10.1111/1754-9485.13289.

1185. Valdes, G.; Interian, Y. Comment on 'Deep convolutional neural network with transfer learning for rectum toxicity prediction in cervical cancer radiotherapy: a feasibility study'. *Phys Med Biol* **2018**, *63*, 068001, doi:10.1088/1361-6560/aaae23.

1186. 3rd International Workshop on Reconstruction and Analysis of Moving Body Organs, RAMBO 2018, 4th International Workshop on Breast Image Analysis, BIA 2018, and 1st International Workshop on Thoracic Image Analysis, TIA 2018, held in conjunction with 21st International Conference on Medical Imaging and Computer-Assisted Intervention, MICCAI 2018. **2018**, *11040 LNCS*.

1187. Hong, J.C.; Niedzwiecki, D.; Palta, M.; Tenenbaum, J.D. Predicting emergency visits and hospital admissions during radiation and chemoradiation: An internally validated pretreatment machine learning algorithm. *JCO Clinical Cancer Informatics* **2018**, *2018*, 1-11, doi:10.1200/CCI.18.00037.