Andre Dekker

List of Publications by Citations

217 papers	15,020 citations	52 h-index	121 g-index
281 ext. papers	19,443 ext. citations	2.8 avg, IF	6.2 L-index

#	Paper	IF	Citations
217	Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach. *Nature Communications*, **2014**, 5, 4006	17.4	2330
216	Radiomics: extracting more information from medical images using advanced feature analysis. *European Journal of Cancer*, **2012**, 48, 441-6	7.5	2278
215	Radiomics: the bridge between medical imaging and personalized medicine. *Nature Reviews Clinical Oncology*, **2017**, 14, 749-762	19.4	1576
214	Radiomics: the process and the challenges. *Magnetic Resonance Imaging*, **2012**, 30, 1234-48	3.3	1156
213	Three-dimensional photoacoustic imaging of blood vessels in tissue. *Optics Letters*, **1998**, 23, 648-50	3	350
212	Identification of residual metabolic-active areas within individual NSCLC tumours using a pre-radiotherapy (18)Fluorodeoxyglucose-PET-CT scan. *Radiotherapy and Oncology*, **2009**, 91, 386-92	5.3	318
211	Repeatability and Reproducibility of Radiomic Features: A Systematic Review. *International Journal of Radiation Oncology Biology Physics*, **2018**, 102, 1143-1158	4	318
210	Stability of FDG-PET Radiomics features: an integrated analysis of test-retest and inter-observer variability. *Acta Oncologica*, **2013**, 52, 1391-7	3.2	284
209	Predicting outcomes in radiation oncology--multifactorial decision support systems. *Nature Reviews Clinical Oncology*, **2013**, 10, 27-40	19.4	270
208	PET-CT-based auto-contouring in non-small-cell lung cancer correlates with pathology and reduces interobserver variability in the delineation of the primary tumor and involved nodal volumes. *International Journal of Radiation Oncology Biology Physics*, **2007**, 68, 771-8	4	239
207	Characterisation and classification of oligometastatic disease: a European Society for Radiotherapy and Oncology and European Organisation for Research and Treatment of Cancer consensus recommendation. *Lancet Oncology, The*, **2020**, 21, e18-e28	21.7	232
206	Epicardial left ventricular lead placement for cardiac resynchronization therapy: optimal pace site selection with pressure-volume loops. *Journal of Thoracic and Cardiovascular Surgery*, **2004**, 127, 1641-7	1.5	171
205	Quantitative computed tomographic descriptors associate tumor shape complexity and intratumor heterogeneity with prognosis in lung adenocarcinoma. *PLoS ONE*, **2015**, 10, e0118261	3.7	167
204	Clinical evaluation of atlas and deep learning based automatic contouring for lung cancer. *Radiotherapy and Oncology*, **2018**, 126, 312-317	5.3	160
203	'Rapid Learning health care in oncology' - an approach towards decision support systems enabling customised radiotherapy'. *Radiotherapy and Oncology*, **2013**, 109, 159-64	5.3	147
202	Accurate automatic delineation of heterogeneous functional volumes in positron emission tomography for oncology applications. *International Journal of Radiation Oncology Biology Physics*, **2010**, 77, 301-8	4	141
201	Vulnerabilities of radiomic signature development: The need for safeguards. *Radiotherapy and Oncology*, **2019**, 130, 2-9	5.3	137

200	Machine learning algorithms for outcome prediction in (chemo)radiotherapy: An empirical comparison of classifiers. *Medical Physics*, **2018**, 45, 3449-3459	4.4	123
199	Automated Delineation of Lung Tumors from CT Images Using a Single Click Ensemble Segmentation Approach. *Pattern Recognition*, **2013**, 46, 692-702	7.7	112
198	Distributed learning: Developing a predictive model based on data from multiple hospitals without data leaving the hospital - A real life proof of concept. *Radiotherapy and Oncology*, **2016**, 121, 459-467	5.3	99
197	Autosegmentation for thoracic radiation treatment planning: A grand challenge at AAPM 2017. *Medical Physics*, **2018**, 45, 4568-4581	4.4	96
196	Intra-patient variability of tumor volume and tumor motion during conventionally fractionated radiotherapy for locally advanced non-small-cell lung cancer: a prospective clinical study. *International Journal of Radiation Oncology Biology Physics*, **2006**, 66, 748-53	4	88
195	Time trends in the maximal uptake of FDG on PET scan during thoracic radiotherapy. A prospective study in locally advanced non-small cell lung cancer (NSCLC) patients. *Radiotherapy and Oncology*, **2007**, 82, 145-52	5.3	85
194	Test-Retest Data for Radiomics Feature Stability Analysis: Generalizable or Study-Specific?. *Tomography*, **2016**, 2, 361-365	3.1	85
193	Routine individualised patient dosimetry using electronic portal imaging devices. *Radiotherapy and Oncology*, **2007**, 83, 65-75	5.3	83
192	Increased organ sparing using shape-based treatment plan optimization for intensity modulated radiation therapy of pancreatic adenocarcinoma. *Radiotherapy and Oncology*, **2012**, 102, 38-44	5.3	82
191	A global calibration model for a-Si EPIDs used for transit dosimetry. *Medical Physics*, **2007**, 34, 3872-84	4.4	81
190	Decision support systems for personalized and participative radiation oncology. *Advanced Drug Delivery Reviews*, **2017**, 109, 131-153	18.5	79
189	The next step in patient-specific QA: 3D dose verification of conformal and intensity-modulated RT based on EPID dosimetry and Monte Carlo dose calculations. *Radiotherapy and Oncology*, **2008**, 86, 86-92	5.3	77
188	Infrastructure and distributed learning methodology for privacy-preserving multi-centric rapid learning health care: euroCAT. *Clinical and Translational Radiation Oncology*, **2017**, 4, 24-31	4.6	74
187	A semiautomatic CT-based ensemble segmentation of lung tumors: comparison with oncologists' delineations and with the surgical specimen. *Radiotherapy and Oncology*, **2012**, 105, 167-73	5.3	73
186	Stability of 18F-deoxyglucose uptake locations within tumor during radiotherapy for NSCLC: a prospective study. *International Journal of Radiation Oncology Biology Physics*, **2008**, 71, 1402-7	4	69
185	Comparison of Bayesian network and support vector machine models for two-year survival prediction in lung cancer patients treated with radiotherapy. *Medical Physics*, **2010**, 37, 1401-7	4.4	68
184	Fractal-based radiomic approach to predict complete pathological response after chemo-radiotherapy in rectal cancer. *Radiologia Medica*, **2018**, 123, 286-295	6.5	68
183	18FDG-PET based radiation planning of mediastinal lymph nodes in limited disease small cell lung cancer changes radiotherapy fields: a planning study. *Radiotherapy and Oncology*, **2008**, 87, 49-54	5.3	66

182	3D in vivo dosimetry using megavoltage cone-beam CT and EPID dosimetry. *International Journal of Radiation Oncology Biology Physics*, **2009**, 73, 1580-7	4	64
181	The ESTRO Breur Lecture 2009. From population to voxel-based radiotherapy: exploiting intra-tumour and intra-organ heterogeneity for advanced treatment of non-small cell lung cancer. *Radiotherapy and Oncology*, **2010**, 96, 145-52	5.3	63
180	Creating a data exchange strategy for radiotherapy research: towards federated databases and anonymised public datasets. *Radiotherapy and Oncology*, **2014**, 113, 303-9	5.3	62
179	Evaluation of nonrigid registration models for interfraction dose accumulation in radiotherapy. *Medical Physics*, **2009**, 36, 4268-76	4.4	62
178	Radiation dose prescription for non-small-cell lung cancer according to normal tissue dose constraints: an in silico clinical trial. *International Journal of Radiation Oncology Biology Physics*, **2008**, 71, 1103-10	4	61
177	Developing and Validating a Survival Prediction Model for NSCLC Patients Through Distributed Learning Across 3 Countries. *International Journal of Radiation Oncology Biology Physics*, **2017**, 99, 344-352	4	60
176	A Monte Carlo based three-dimensional dose reconstruction method derived from portal dose images. *Medical Physics*, **2006**, 33, 2426-34	4.4	60
175	A prospective study comparing the predictions of doctors versus models for treatment outcome of lung cancer patients: a step toward individualized care and shared decision making. *Radiotherapy and Oncology*, **2014**, 112, 37-43	5.3	58
174	Magnetic Resonance, Vendor-independent, Intensity Histogram Analysis Predicting Pathologic Complete Response After Radiochemotherapy of Rectal Cancer. *International Journal of Radiation Oncology Biology Physics*, **2018**, 102, 765-774	4	55
173	[18]fluorodeoxyglucose uptake patterns in lung before radiotherapy identify areas more susceptible to radiation-induced lung toxicity in non-small-cell lung cancer patients. *International Journal of Radiation Oncology Biology Physics*, **2011**, 81, 698-705	4	55
172	Tumour delineation and cumulative dose computation in radiotherapy based on deformable registration of respiratory correlated CT images of lung cancer patients. *Radiotherapy and Oncology* , **2007**, 85, 232-8	5.3	55
171	International data-sharing for radiotherapy research: an open-source based infrastructure for multicentric clinical data mining. *Radiotherapy and Oncology*, **2014**, 110, 370-374	5.3	54
170	Radiogenomics: the search for genetic predictors of radiotherapy response. *Future Oncology*, **2014**, 10, 2391-406	3.6	54
169	Individualized radical radiotherapy of non-small-cell lung cancer based on normal tissue dose constraints: a feasibility study. *International Journal of Radiation Oncology Biology Physics*, **2008**, 71, 1394-401	4	53
168	Phased attenuation correction in respiration correlated computed tomography/positron emitted tomography. *Medical Physics*, **2006**, 33, 1840-7	4.4	53
167	Suction due to left ventricular assist: implications for device control and management. *Artificial Organs*, **2007**, 31, 542-9	2.6	52
166	Benefits of a clinical data warehouse with data mining tools to collect data for a radiotherapy trial. *Radiotherapy and Oncology*, **2013**, 108, 174-9	5.3	51
165	Miniature intracardiac assist device provides more effective cardiac unloading and circulatory support during severe left heart failure than intraaortic balloon pumping. *Chest*, **2004**, 126, 896-902	5.3	50

164	Increased (18)F-deoxyglucose uptake in the lung during the first weeks of radiotherapy is correlated with subsequent Radiation-Induced Lung Toxicity (RILT): a prospective pilot study. *Radiotherapy and Oncology*, **2009**, 91, 415-20	5.3	49
163	Modern clinical research: How rapid learning health care and cohort multiple randomised clinical trials complement traditional evidence based medicine. *Acta Oncologica*, **2015**, 54, 1289-300	3.2	47
162	Distributed learning on 20 000+ lung cancer patients - The Personal Health Train. *Radiotherapy and Oncology*, **2020**, 144, 189-200	5.3	47
161	Development and evaluation of an online three-level proton vs photon decision support prototype for head and neck cancer - Comparison of dose, toxicity and cost-effectiveness. *Radiotherapy and Oncology*, **2016**, 118, 281-5	5.3	46
160	Nomogram predicting response after chemoradiotherapy in rectal cancer using sequential PETCT imaging: a multicentric prospective study with external validation. *Radiotherapy and Oncology*, **2014** , 113, 215-22	5.3	46
159	Metabolic control probability in tumour subvolumes or how to guide tumour dose redistribution in non-small cell lung cancer (NSCLC): an exploratory clinical study. *Radiotherapy and Oncology*, **2009**, 91, 393-8	5.3	46
158	Machine learning and modeling: Data, validation, communication challenges. *Medical Physics*, **2018**, 45, e834-e840	4.4	46
157	Intra-voxel heterogeneity influences the dose prescription for dose-painting with radiotherapy: a modelling study. *Physics in Medicine and Biology*, **2009**, 54, 2179-96	3.8	45
156	The integration of PET-CT scans from different hospitals into radiotherapy treatment planning. *Radiotherapy and Oncology*, **2008**, 87, 142-6	5.3	40
155	Respiratory-gated CT as a tool for the simulation of breathing artifacts in PET and PET/CT. *Medical Physics*, **2008**, 35, 576-85	4.4	39
154	Cardiac comorbidity is an independent risk factor for radiation-induced lung toxicity in lung cancer patients. *Radiotherapy and Oncology*, **2013**, 109, 100-6	5.3	38
153	Treatment verification in the presence of inhomogeneities using EPID-based three-dimensional dose reconstruction. *Medical Physics*, **2007**, 34, 2816-26	4.4	38
152	Prognostic value of metabolic metrics extracted from baseline positron emission tomography images in non-small cell lung cancer. *Acta Oncologica*, **2013**, 52, 1398-404	3.2	37
151	A ventricular-vascular coupling model in presence of aortic stenosis. *American Journal of Physiology - Heart and Circulatory Physiology*, **2005**, 288, H1874-84	5.2	37
150	Individualised isotoxic accelerated radiotherapy and chemotherapy are associated with improved long-term survival of patients with stage III NSCLC: a prospective population-based study. *Radiotherapy and Oncology*, **2012**, 102, 228-33	5.3	35
149	Learning from scanners: Bias reduction and feature correction in radiomics. *Clinical and Translational Radiation Oncology*, **2019**, 19, 33-38	4.6	32
148	Rapid learning in practice: a lung cancer survival decision support system in routine patient care data. *Radiotherapy and Oncology*, **2014**, 113, 47-53	5.3	32
147	An umbrella protocol for standardized data collection (SDC) in rectal cancer: a prospective uniform naming and procedure convention to support personalized medicine. *Radiotherapy and Oncology*, **2014**, 112, 59-62	5.3	31

146	Artificial intelligence-based clinical decision support in modern medical physics: Selection, acceptance, commissioning, and quality assurance. *Medical Physics*, **2020**, 47, e228-e235	4.4	30
145	3D dose delivery verification using repeated cone-beam imaging and EPID dosimetry for stereotactic body radiotherapy of non-small cell lung cancer. *Radiotherapy and Oncology*, **2010**, 94, 188-94	5.3	30
144	In vivo dosimetry using a linear Mosfet-array dosimeter to determine the urethra dose in 125I permanent prostate implants. *International Journal of Radiation Oncology Biology Physics*, **2009**, 73, 314-21	4	30
143	Transition from a simple to a more advanced dose calculation algorithm for radiotherapy of non-small cell lung cancer (NSCLC): implications for clinical implementation in an individualized dose-escalation protocol. *Radiotherapy and Oncology*, **2008**, 88, 326-34	5.3	29
142	Distributed Analytics on Sensitive Medical Data: The Personal Health Train. *Data Intelligence*, **2020**, 2, 96-107	3	29
141	The radiation oncology ontology (ROO): Publishing linked data in radiation oncology using semantic web and ontology techniques. *Medical Physics*, **2018**, 45, e854-e862	4.4	29
140	Tumor delineation based on time-activity curve differences assessed with dynamic fluorodeoxyglucose positron emission tomography-computed tomography in rectal cancer patients. *International Journal of Radiation Oncology Biology Physics*, **2009**, 73, 456-65	4	28
139	Robot-assisted epicardial ablation of the pulmonary veins: is a completed isolation necessary?. *European Heart Journal*, **2005**, 26, 1321-6	9.5	28
138	Comparative evaluation of autocontouring in clinical practice: A practical method using the Turing test. *Medical Physics*, **2018**, 45, 5105-5115	4.4	28
137	Stereotactic Radiosurgery in the Management of Patients With Brain Metastases of Non-Small Cell Lung Cancer: Indications, Decision Tools and Future Directions. *Frontiers in Oncology*, **2018**, 8, 154	5.3	26
136	Dyspnea evolution after high-dose radiotherapy in patients with non-small cell lung cancer. *Radiotherapy and Oncology*, **2009**, 91, 353-9	5.3	26
135	Calibration of megavoltage cone-beam CT for radiotherapy dose calculations: correction of cupping artifacts and conversion of CT numbers to electron density. *Medical Physics*, **2008**, 35, 849-65	4.4	26
134	Standardized data collection to build prediction models in oncology: a prototype for rectal cancer. *Future Oncology*, **2016**, 12, 119-36	3.6	25
133	Time trends in nodal volumes and motion during radiotherapy for patients with stage III non-small-cell lung cancer. *International Journal of Radiation Oncology Biology Physics*, **2008**, 71, 139-44	4	24
132	An "in silico" clinical trial comparing free breathing, slow and respiration correlated computed tomography in lung cancer patients. *Radiotherapy and Oncology*, **2006**, 81, 73-80	5.3	24
131	Validation of three deformable image registration algorithms for the thorax. *Journal of Applied Clinical Medical Physics*, **2013**, 14, 3834	2.3	23
130	A prediction model for early death in non-small cell lung cancer patients following curative-intent chemoradiotherapy. *Acta Oncologica*, **2018**, 57, 226-230	3.2	21
129	Distributed radiomics as a signature validation study using the Personal Health Train infrastructure. *Scientific Data*, **2019**, 6, 218	8.2	20

128	Intra-aortic balloon pumping in acute mitral regurgitation reduces aortic impedance and regurgitant fraction. *Shock*, **2003**, 19, 334-8	3.4	20
127	Towards a modular decision support system for radiomics: A case study on rectal cancer. *Artificial Intelligence in Medicine*, **2019**, 96, 145-153	7.4	20
126	Technical Note: Ontology-guided radiomics analysis workflow (O-RAW). *Medical Physics*, **2019**, 46, 5677-5684	4.4	19
125	An Approach Toward Automatic Classification of Tumor Histopathology of Non-Small Cell Lung Cancer Based on Radiomic Features. *Tomography*, **2016**, 2, 374-377	3.1	19
124	Big Data in radiation therapy: challenges and opportunities. *British Journal of Radiology*, **2017**, 90, 20160689	3.4	18
123	Machine learning helps identifying volume-confounding effects in radiomics. *Physica Medica*, **2020**, 71, 24-30	2.7	18
122	Efficacy of a new intraaortic propeller pump vs the intraaortic balloon pump: an animal study. *Chest* , **2003**, 123, 2089-95	5.3	18
121	The enabler right ventricular circulatory support system for beating heart coronary artery bypass graft surgery. *Annals of Thoracic Surgery*, **1999**, 68, 1558-61	2.7	18
120	Dose recalculation in megavoltage cone-beam CT for treatment evaluation: removal of cupping and truncation artefacts in scans of the thorax and abdomen. *Radiotherapy and Oncology*, **2010**, 94, 359-66	5.3	17
119	Timing to achieve the highest rate of pCR after preoperative radiochemotherapy in rectal cancer: a pooled analysis of 3085 patients from 7 randomized trials. *Radiotherapy and Oncology*, **2021**, 154, 154-160	5.3	17
118	Stability of radiomic features of apparent diffusion coefficient (ADC) maps for locally advanced rectal cancer in response to image pre-processing. *Physica Medica*, **2019**, 61, 44-51	2.7	16
117	External validation of a prognostic model incorporating quantitative PET image features in oesophageal cancer. *Radiotherapy and Oncology*, **2019**, 133, 205-212	5.3	16
116	Sensitivity of radiomic features to inter-observer variability and image pre-processing in Apparent Diffusion Coefficient (ADC) maps of cervix cancer patients. *Radiotherapy and Oncology*, **2020**, 143, 88-94	5.3	16
115	Personalized risk prediction for breast cancer pre-screening using artificial intelligence and thermal radiomics. *Artificial Intelligence in Medicine*, **2020**, 105, 101854	7.4	15
114	Multicenter CT phantoms public dataset for radiomics reproducibility tests. *Medical Physics*, **2019**, 46, 1512-1518	4.4	15
113	Effects of quantum noise in 4D-CT on deformable image registration and derived ventilation data. *Physics in Medicine and Biology*, **2013**, 58, 7661-72	3.8	14
112	Right ventricular support for off-pump coronary artery bypass grafting studied with bi-ventricular pressure--volume loops in sheep. *European Journal of Cardio-thoracic Surgery*, **2001**, 19, 179-84	3	14
111	The Benefits and Challenges of Using Patient Decision Aids to Support Shared Decision Making in Health Care. *JCO Clinical Cancer Informatics*, **2018**, 2, 1-10	5.2	14

110	Can Atlas-Based Auto-Segmentation Ever Be Perfect? Insights From Extreme Value Theory. *IEEE Transactions on Medical Imaging*, **2019**, 38, 99-106	11.7	13
109	VATE: VAlidation of high TEchnology based on large database analysis by learning machine. *Colorectal Cancer*, **2014**, 3, 435-450	0.8	13
108	Informatics methods to enable sharing of quantitative imaging research data. *Magnetic Resonance Imaging*, **2012**, 30, 1249-56	3.3	13
107	In vivo dosimetry with a linear MOSFET array to evaluate the urethra dose during permanent implant brachytherapy using iodine-125. *International Journal of Radiation Oncology Biology Physics*, **2009**, 75, 1266-72	4	12
106	Prediction of DVH parameter changes due to setup errors for breast cancer treatment based on 2D portal dosimetry. *Medical Physics*, **2009**, 36, 83-94	4.4	12
105	Validation of a rectal cancer outcome prediction model with a cohort of Chinese patients. *Oncotarget*, **2015**, 6, 38327-35	3.3	12
104	Minimum Data Elements for Radiation Oncology: An American Society for Radiation Oncology Consensus Paper. *Practical Radiation Oncology*, **2019**, 9, 395-401	2.8	11
103	Distributed Learning to Protect Privacy in Multi-centric Clinical Studies. *Lecture Notes in Computer Science*, **2015**, 65-75	0.9	11
102	Point/counterpoint. GPU technology is the hope for near real-time Monte Carlo dose calculations. *Medical Physics*, **2015**, 42, 1474-6	4.4	11
101	Can we optimize chemo-radiation and surgery in locally advanced stage III non-small cell lung cancer based on evidence from randomized clinical trials? A hypothesis-generating study. *Radiotherapy and Oncology*, **2009**, 93, 389-95	5.3	11
100	Physiologic-insensitive left ventricular assist predisposes right-sided circulatory failure: a pilot simulation and validation study. *Artificial Organs*, **2004**, 28, 933-9	2.6	10
99	The Impact of Clinical Trial Quality Assurance on Outcome in Head and Neck Radiotherapy Treatment. *Frontiers in Oncology*, **2019**, 9, 792	5.3	9
98	FAIR-compliant clinical, radiomics and DICOM metadata of RIDER, interobserver, Lung1 and head-Neck1 TCIA collections. *Medical Physics*, **2020**, 47, 5931-5940	4.4	9
97	A method to combine target volume data from 3D and 4D planned thoracic radiotherapy patient cohorts for machine learning applications. *Radiotherapy and Oncology*, **2018**, 126, 355-361	5.3	9
96	Phased versus midventilation attenuation-corrected respiration-correlated PET for patients with non-small cell lung cancer. *Journal of Nuclear Medicine Technology*, **2009**, 37, 208-14	1.1	9
95	Minimal invasive epicardial lead implantation: optimizing cardiac resynchronization with a new mapping device for epicardial lead placement. *European Journal of Cardio-thoracic Surgery*, **2004**, 25, 894-6	3	9
94	Towards a semantic PACS: Using Semantic Web technology to represent imaging data. *Studies in Health Technology and Informatics*, **2014**, 205, 166-70	0.5	9
93	CT images with expert manual contours of thoracic cancer for benchmarking auto-segmentation accuracy. *Medical Physics*, **2020**, 47, 3250-3255	4.4	8

92	Development and validation of a patient decision aid for prostate Cancer therapy: from paternalistic towards participative shared decision making. *BMC Medical Informatics and Decision Making*, **2019**, 19, 130	3.6	8
91	Dependence of ventilation image derived from 4D CT on deformable image registration and ventilation algorithms. *Journal of Applied Clinical Medical Physics*, **2013**, 14, 4247	2.3	8
90	A Privacy-Preserving Infrastructure for Analyzing Personal Health Data in a Vertically Partitioned Scenario. *Studies in Health Technology and Informatics*, **2019**, 264, 373-377	0.5	8
89	[OA071] O-RAW: Ontology-guided radiomics analysis workflow. *Physica Medica*, **2018**, 52, 27-28	2.7	7
88	What is the impact of innovation on output in healthcare with a special focus on treatment innovations in radiotherapy? A literature review. *British Journal of Radiology*, **2017**, 90, 20170251	3.4	7
87	Survival Prediction in Lung Cancer Treated with Radiotherapy: Bayesian Networks vs. Support Vector Machines in Handling Missing Data **2009**,		7
86	Synchronously counterpulsating extracorporeal life support enhances myocardial working conditions regardless of systemic perfusion pressure. *European Journal of Cardio-thoracic Surgery*, **2005**, 28, 790-6	3	7
85	Automatic classification of dental artifact status for efficient image veracity checks: effects of image resolution and convolutional neural network depth. *Physics in Medicine and Biology*, **2020**, 65, 015005	3.8	7
84	Predicting outcomes in anal cancer patients using multi-centre data and distributed learning - A proof-of-concept study. *Radiotherapy and Oncology*, **2021**, 159, 183-189	5.3	7
83	Treatment data and technical process challenges for practical big data efforts in radiation oncology. *Medical Physics*, **2018**, 45, e793-e810	4.4	7
82	Using the Personal Health Train for Automated and Privacy-Preserving Analytics on Vertically Partitioned Data. *Studies in Health Technology and Informatics*, **2018**, 247, 581-585	0.5	7
81	User-controlled pipelines for feature integration and head and neck radiation therapy outcome predictions. *Physica Medica*, **2020**, 70, 145-152	2.7	6
80	Ontologies in radiation oncology. *Physica Medica*, **2020**, 72, 103-113	2.7	6
79	How efficient is translational research in radiation oncology? The example of a large Dutch academic radiation oncology department. *British Journal of Radiology*, **2016**, 89, 20160129	3.4	6
78	Electronic Health Record implementation in a large academic radiotherapy department: Temporarily disruptions but long-term benefits. *International Journal of Medical Informatics*, **2019**, 129, 342-348	5.3	6
77	PRODIGE: PRediction models in prOstate cancer for personalized meDIcine challenGE. *Future Oncology*, **2017**, 13, 2171-2181	3.6	6
76	Prospective validation of pathologic complete response models in rectal cancer: Transferability and reproducibility. *Medical Physics*, **2017**, 44, 4961-4967	4.4	6
75	The effect of imputing missing clinical attribute values on training lung cancer survival prediction model performance. *Health Information Science and Systems*, **2017**, 5, 16	5.1	6

74	Point/Counterpoint. Future radiotherapy practice will be based on evidence from retrospective interrogation of linked clinical data sources rather than prospective randomized controlled clinical trials. *Medical Physics*, **2014**, 41, 030601	4.4	6
73	External Validation of Radiation-Induced Dyspnea Models on Esophageal Cancer Radiotherapy Patients. *Frontiers in Oncology*, **2019**, 9, 1411	5.3	6
72	Making radiotherapy more efficient with FAIR data. *Physica Medica*, **2021**, 82, 158-162	2.7	6
71	An Evaluation of Atlas Selection Methods for Atlas-Based Automatic Segmentation in Radiotherapy Treatment Planning. *IEEE Transactions on Medical Imaging*, **2019**, 38, 2654-2664	11.7	5
70	External validation and transfer learning of convolutional neural networks for computed tomography dental artifact classification. *Physics in Medicine and Biology*, **2020**, 65, 035017	3.8	5
69	From multisource data to clinical decision aids in radiation oncology: The need for a clinical data science community. *Radiotherapy and Oncology*, **2020**, 153, 43-54	5.3	5
68	Deep Learning Automated Segmentation for Muscle and Adipose Tissue from Abdominal Computed Tomography in Polytrauma Patients. *Sensors*, **2021**, 21,	3.8	5
67	Current applications of deep-learning in neuro-oncological MRI. *Physica Medica*, **2021**, 83, 161-173	2.7	5
66	Implementation of a rapid learning platform: Predicting 2-year survival in laryngeal carcinoma patients in a clinical setting. *Oncotarget*, **2016**, 7, 37288-37296	3.3	5
65	Prediction of lymph node metastases using pre-treatment PET radiomics of the primary tumour in esophageal adenocarcinoma: an external validation study. *British Journal of Radiology*, **2021**, 94, 20201042	3.4	5
64	External validation of an NTCP model for acute esophageal toxicity in locally advanced NSCLC patients treated with intensity-modulated (chemo-)radiotherapy. *Radiotherapy and Oncology*, **2018**, 129, 249-256	5.3	5
63	Towards a Clinical Decision Support System for External Beam Radiation Oncology Prostate Cancer Patients: Proton vs. Photon Radiotherapy? A Radiobiological Study of Robustness and Stability. *Cancers*, **2018**, 10,	6.6	4
62	Medicine is a science of uncertainty and an art of probability (Sir W. Osler). *Radiotherapy and Oncology*, **2015**, 114, 132-4	5.3	4
61	PD-0496: Multi-centric learning with a federated IT infrastructure: application to 2-year lung-cancer survival prediction. *Radiotherapy and Oncology*, **2013**, 106, S193-S194	5.3	4
60	External validation of nodal failure prediction models including radiomics in head and neck cancer. *Oral Oncology*, **2021**, 112, 105083	4.4	4
59	The Evidence Driven Dosimetric Constraints From Outcome Analysis of H&N Patients Data from NRG Oncology RTOG 0522 Trial. *International Journal of Radiation Oncology Biology Physics*, **2017**, 99, S137	4	3
58	ASTRO Journals' Data Sharing Policy and Recommended Best Practices. *Advances in Radiation Oncology*, **2019**, 4, 551-558	3.3	3
57	Accurate functional volume definition in PET for radiotherapy treatment planning **2008**,		3

56	A Topic-centric Approach to Detecting New Evidences for Evidence-based Medical Guidelines **2016**,		3
55	Prognostic factors analysis for oral cavity cancer survival in the Netherlands and Taiwan using a privacy-preserving federated infrastructure. *Scientific Reports*, **2020**, 10, 20526	4.9	3
54	What is the degree of innovation routinely implemented in Dutch radiotherapy centres? A multicentre cross-sectional study. *British Journal of Radiology*, **2016**, 89, 20160601	3.4	3
53	Systematic review of radiomic biomarkers for predicting immune checkpoint inhibitor treatment outcomes. *Methods*, **2021**, 188, 61-72	4.6	3
52	EP-2132: Repeatability and reproducibility of radiomic features: results of a systematic review. *Radiotherapy and Oncology*, **2018**, 127, S1174-S1175	5.3	3
51	Implementation of the Australian Computer-Assisted Theragnostics (AusCAT) network for radiation oncology data´extraction, reporting and distributed learning. *Journal of Medical Imaging and Radiation Oncology*, **2021**, 65, 627-636	1.7	3
50	Generative models improve radiomics reproducibility in low dose CTs: a simulation study. *Physics in Medicine and Biology*, **2021**, 66,	3.8	3
49	How to measure innovation in radiotherapy: an application of the Delphi method. *Journal of Hospital Administration*, **2015**, 4, 14	0.3	2
48	Analysis of the Suitability of Existing Medical Ontologies for Building a Scalable Semantic Interoperability Solution Supporting Multi-site Collaboration in Oncology **2014**,		2
47	Une nouvelle m□hode de d□termination automatique des volumes fonctionnels pour les applications de l□magerie d□mission en oncologie. *Irbm*, **2009**, 30, 144-149	4.8	2
46	A systematic review on privacy-preserving distributed data mining. *Data Science*, **2021**, 4, 121-150	2.2	2
45	Exploring Associations of Preoperative Physical Performance With Postoperative Outcomes After Lumbar Spinal Fusion: A Machine Learning Approach. *Archives of Physical Medicine and Rehabilitation*, **2021**, 102, 1324-1330.e3	2.8	2
44	Prediction models for treatment-induced cardiac toxicity in patients with non-small-cell lung cancer: A systematic review and meta-analysis.. *Clinical and Translational Radiation Oncology*, **2022**, 33, 134-144	4.6	2
43	How to Share Data and Promote a Rapid Learning Health Medicine? **2018**, 623-634		1
42	Response to "Comment on 'Future radiotherapy practice will be based on evidence from retrospective interrogation of linked clinical data sources rather than prospective randomized controlled clinical trials'" [Med. Phys. 41(3) 030601 (3pp.) (2014)]. *Medical Physics*, **2014**, 41, 057102	4.4	1
41	The Combination of Clinical, Dose-Related and Imaging Features Helps Predict Radiation-Induced Normal-Tissue Toxicity in Lung-cancer Patients -- An in-silico Trial Using Machine Learning Techniques **2011**,		1
40	Privacy-Preserving Federated Data Analysis: Data Sharing, Protection, and Bioethics in Healthcare **2022**, 135-172		1
39	Case Study for Integration of an Oncology Clinical Site in a Semantic Interoperability Solution based on HL7 v3 and SNOMED-CT: Data Transformation Needs. *AMIA Summits on Translational Science Proceedings*, **2015**, 2015, 71	1.1	1

38	A systematic review and quality of reporting checklist for repeatability and reproducibility of radiomic features. *Physics and Imaging in Radiation Oncology*, **2021**, 20, 69-75	3.1	1
37	Radiomics biopsy signature for predicting survival in patients with spinal bone metastases (SBMs).. *Clinical and Translational Radiation Oncology*, **2022**, 33, 57-65	4.6	1
36	Quantification of the´spatial distribution of primary tumors in the lung to develop new prognostic biomarkers for locally advanced NSCLC. *Scientific Reports*, **2021**, 11, 20890	4.9	1
35	Reporting Standards and Critical Appraisal of Prediction Models **2019**, 135-150		1
34	Personal Health Train on FHIR: A Privacy Preserving Federated Approach for Analyzing FAIR Data in Healthcare. *Communications in Computer and Information Science*, **2020**, 85-95	0.3	1
33	Robust Estimation of Breast Cancer Incidence Risk in Presence of Incomplete or Inaccurate Information. *Asian Pacific Journal of Cancer Prevention*, **2020**, 21, 2307-2313	1.7	1
32	Emerging role of artificial intelligence in nuclear medicine. *Nuclear Medicine Communications*, **2021**, 42, 592-601	1.6	1
31	Mind Your Data: Privacy and Legal Matters in eHealth. *JMIR Formative Research*, **2021**, 5, e17456	2.5	1
30	Overall survival nomogram for patients with spinal bone metastases (SBM). *Clinical and Translational Radiation Oncology*, **2021**, 28, 48-53	4.6	1
29	Deciphering the glioblastoma phenotype by computed tomography radiomics. *Radiotherapy and Oncology*, **2021**, 160, 132-139	5.3	1
28	Lung cancer diagnosis using deep attention based multiple instance learning and radiomics.. *Medical Physics*, **2022**,	4.4	1
27	Prediction Models for Radiation-Induced Neurocognitive Decline in Adult Patients With Primary or Secondary Brain Tumors: A Systematic Review.. *Frontiers in Psychology*, **2022**, 13, 853472	3.4	1
26	Methodological quality of machine learning-based quantitative imaging analysis studies in esophageal cancer: a systematic review of clinical outcome prediction after concurrent chemoradiotherapy.. *European Journal of Nuclear Medicine and Molecular Imaging*, **2021**, 1	8.8	1
25	Distributed learning: predictive models based on data from multiple hospitals without data leaving the hospital. *Radiotherapy and Oncology*, **2016**, 118, S53-S54	5.3	0
24	Practitioners' views on shared decision-making implementation: A qualitative study. *PLoS ONE*, **2021**, 16, e0259844	3.7	0
23	Radiomics integration into a picture archiving and communication system. *Physics and Imaging in Radiation Oncology*, **2021**, 20, 30-33	3.1	0
22	A knowledge graph representation of baseline characteristics for the Dutch proton therapy research registry. *Clinical and Translational Radiation Oncology*, **2021**, 31, 93-96	4.6	0
21	Shared decision-making for prophylactic cranial irradiation in extensive-stage small-cell lung cancer: an exploratory study. *Translational Lung Cancer Research*, **2021**, 10, 3120-3131	4.4	0

20	External validation of a Bayesian network for error detection in radiotherapy plans. *IEEE Transactions on Radiation and Plasma Medical Sciences*, **2021**, 1-1	4.2	0
19	Bayesian network structure for predicting local tumor recurrence in rectal cancer patients treated with neoadjuvant chemoradiation followed by surgery.. *Physics and Imaging in Radiation Oncology*, **2022**, 22, 1-7	3.1	0
18	Generative models improve radiomics performance in different tasks and different datasets: An experimental study.. *Physica Medica*, **2022**, 98, 11-17	2.7	0
17	Organizational development trajectory of a large academic radiotherapy department set up similarly to a prospective clinical trial: the MAASTRO experience. *British Journal of Radiology*, **2015**, 88, 20140559	3.4	
16	Authorization Framework for Medical Data. *International Journal of Database Management Systems*, **2019**, 11, 7-22	1.6	
15	Big data for better cancer care. *British Journal of Hospital Medicine (London, England: 2005)*, **2019**, 80, 304-305	0.8	
14	Statistics of Survival Prediction and Nomogram Development. *Medical Radiology*, **2013**, 7-28	0.2	
13	A Feature-Pooling and Signature-Pooling Method for Feature Selection for Quantitative Image Analysis: Application to a Radiomics Model for Survival in Glioma. *Lecture Notes in Computer Science* , **2020**, 70-80	0.9	
12	Auto Segmentation of Lung in Non-small Cell Lung Cancer Using Deep Convolution Neural Network. *Communications in Computer and Information Science*, **2020**, 340-351	0.3	
11	SU-FF-T-149: IMRT Pre-Treatment Verification with Ionization Chamber, Film and EPID: Quality Vs. Time Consumption. *Medical Physics*, **2005**, 32, 1984-1984	4.4	
10	Cancer registry and big data exchange **2019**, 153-180		
9	Informatics Solutions for Biomarker Discovery and Personalized Medicine in Clinical Care **2019**, 135-142		
8	Cancer informatics53-62		
7	Cancer Informatics53-62		
6	How Should Data Be Shared and Rapid Learning Health Care Promoted? **2012**, 355-364		
5	SU-E-J-66: Effects of Noise in 4D-CT On Deformable Image Registration and Derived Ventilation Data. *Medical Physics*, **2013**, 40, 165-165	4.4	
4	Artificial intelligence in oncology **2021**, 361-381		
3	. *IEEE Transactions on Radiation and Plasma Medical Sciences*, **2021**, 1-1	4.2	

2	Are all shortcuts in encoder-decoder networks beneficial for CT denoising?. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, 1-8	0.9
1	Data Storage, Cloud Usage and Artificial Intelligence Pipeline. *Contemporary Medical Imaging*, **2022**, 45-55.	0.1