

Supplementary Table 1 RQS checkpoints, items and points for each item

RQS Checkpoint	RQS Item	RQS points
<i>Checkpoint 1</i>	Image protocol quality - well-documented image protocols (for example, contrast, slice thickness, energy, etc.) and/or usage of public image protocols allow reproducibility/replicability.	+1 (if protocols are well-documented) +1 (if public protocol is used)
<i>Checkpoint 2</i>	Multiple segmentations - possible actions are: segmentation by different physicians/algorithms/software, perturbing segmentations by (random) noise, segmentation at different breathing cycles. Analyse feature robustness to segmentation variabilities.	+1
	Phantom study on all scanners - detect inter-scanner differences and vendor-dependent features. Analyse feature robustness to these sources of variability.	+1
	Imaging at multiple time points - collect images of individuals at additional time points. Analyse feature robustness to temporal variabilities (for example, organ movement, organ expansion/ shrinkage).	+1
<i>Checkpoint 3</i>	Feature reduction or adjustment for multiple testing - decreases the risk of overfitting. Overfitting is inevitable if	-3 (if neither measure is implemented) +3 (if either measure is implemented)

	the number of features exceeds the number of samples. Consider feature robustness when selecting features.	
	Multivariable analysis with non radiomics features (for example, EGFR mutation) - is expected to provide a more holistic model. Permits correlating/inferencing between radiomics and non radiomics features.	+1
	Detect and discuss biological correlates - demonstration of phenotypic differences (possibly associated with underlying gene-protein expression patterns) deepens understanding of radiomics and biology.	+1
	Cut-off analyses - determine risk groups by either the median, a previously published cut-off or report a continuous risk variable. Reduces the risk of reporting overly optimistic results.	+1
	Discrimination statistics - report discrimination statistics (for example, C-statistic, ROC curve, AUC) and their statistical significance (for example, p-values, confidence intervals). One can also apply resampling method (for example, bootstrapping, cross-validation).	+1 (if a discrimination statistic and its statistical significance are reported) +1 (if a resampling method technique is also applied)
	Calibration statistics - report calibration statistics (for example, Calibration-in-the-large/slope, calibration plots)	+1 (if a calibration statistic and its statistical significance are reported)

	and their statistical significance (for example, P-values, confidence intervals). One can also apply resampling method (for example, bootstrapping, cross-validation).	+1 (if a resampling method technique is also applied)
	Prospective study registered in a trial database - provides the highest level of evidence supporting the clinical validity and usefulness of the radiomics biomarker.	+7 (for prospective validation of a radiomics signature in an appropriate trial)
	Validation - the validation is performed without retraining and without adaptation of the cut-off value, provides crucial information with regard to credible clinical performance.	<p>-5 (if validation is missing)</p> <p>+2 (if validation is based on a dataset from the same institute)</p> <p>+3 (if validation is based on a dataset from another institute)</p> <p>+4 (if validation is based on two datasets from two distinct institutes)</p> <p>+4 (if the study validates a previously published signature)</p> <p>+5 (if validation is based on three or more datasets from distinct institutes)</p> <p>*Datasets should be of comparable size and should have at least 10 events per model feature.</p>

	Comparison to 'gold standard' - assess the extent to which the model agrees with/is superior to the current 'gold standard' method (for example, TNM-staging for survival prediction). This comparison shows the added value of radiomics.	+2
	Potential clinical utility - report on the current and potential application of the model in a clinical setting (for example, decision curve analysis).	+2
	Cost-effectiveness analysis - report on the cost-effectiveness of the clinical application (for example, QALYs generated).	+1
	Open science and data - make code and data publicly available. Open science facilitates knowledge transfer and reproducibility of the study.	+1 (if scans are open source) +1 (if region of interest segmentations are open source) +1 (if code is open source) +1 (if radiomics features are calculated on a set of representative ROIs and the calculated features and representative ROIs are open source)

Journal Metrics

Supplementary Table 2 Journal metrics of the included studies

Authors, Year	Months from literature research	Journal	IF of the year of publication	5 Year IF	CiteScore	H-index	H-index first author	H-index first author no self citations
Liu J. Et al.	1	Quantitative imaging in medicine and surgery	3.9	2.956	4	21	23	0
Wang Y et al.	1	BMC Medical Imaging	2.79	2.11	2.6	37	0	0
Gong X. Et al.	1	Scientific Reports	4.997	4.409	7.1	213	6	6
Zhang L. et al.	1	Frontiers in Oncology	5.738	5.729	3.9	83	1	1
Zhang Y. et al.	1	World Journal of Gastroenterology	5.374	5.008	6.9	155	4	4

Dong X, et al	1	Journal Of Magnetic Resonance Imaging	5.119	4.475	7.8	160	6	6
Tabari A, et al	1	Cancers MDPI	6.575	6.275	4.4	76	14	13
Cao X, et al.	1	Journal Of Magnetic Resonance Imaging	5.119	4.475	7.8	160	3	3
Ince O. et al	1	Journal Of Vascular and Interventional Radiology	3.682	1.912	4.1	133	2	2
Chen M. et al.	1	Insights into Imaging	5.036	5.498	5.8	39	3	3
Jang T. et al.	1	Acta Radiologica	3.5	1.76	3.0	72	3	3

Hu X. Et al.	1	Comput Math Methods Med	2.809	2.671	3.5	48	1	1
Chong H. et al.	1	Academic Radiology	5.482	2.582	4.7	96	3	3
Hu X. Et al.	1	Diagnostics (Basel)	3.992	3.24	1.4	19	1	1
Tao Y. Et al.	1	Cancers (Basel)	6.575	6.275	4.4	76	6	6
Yang X. Et al.	1	Medicine (Baltimore)	1.817	0.063	0.1	5.0	4	4
Liu H. et al.	1	Translational Oncology	4.803	4.056	6	52	6	5
Zhang S. et al.	1	Frontiers In Oncology	5.738	5.729	3.9	83	2	2

Sim J. Et al.	1	World Journal of Clinical Oncology	2.8	3	2	45	4	4
Zhang X. Et al.	1	Frontiers In Oncology	5.738	5.729	3.9	83	1	1
Zhao Y. Et al.	1	Journal of Cancer Research and Clinical Oncology	4.322	4.104	6.5	94	1	1
Lu X. Et al.	1	BMC Medical Imaging	2.795	2.111	2.6	37	1	1
Yang W. Et al.	1	European Journal of Radiology	4.531	3.279	4.6	115	2	2
Ameli S. et al.	1	Diagnostics (Basel)	3.992	3.24	1.4	76	8	7

Li W. Et al.	1	Journal Of Oncology	4.501	3.925	3.1	54	3	3
Zeng F. et al.	1	Frontiers In Oncology	5.738	5.729	3.9	83	2	2
Aujay J. Et al.	1	Diagnostic And Interventional Imaging	7.242	2.571	4.1	36	2	2
Chen Y. et al.	1	World Journal of Gastroenterology	5.374	5.008	6.9	155	5	5
Wu Q, et al	1	JMRI	5.119	4.475	7.8	160	1	1
Li Y et al.	1	World Journal of Gastroenterology	5.374	5.008	6.9	155	9	9
Wang L. et al.	1	FRONTIERS IN ONCOLOGY	5.738	3.925	3.1	83	1	1

Zhang D, et al.	1	Journal of Clinical and Translational Hepatology	0	0	0	0	0	0
Brancato V .et al.	1	Diagnostics (Basel)	3.992	3.24	1.4	76	8	7
Fan T. et al.	1	FRONTIERS IN ONCOLOGY	5.738	3.925	3.1	83	2	2
Gao L. et al.	1	FRONTIERS IN ONCOLOGY	5.738	3.925	3.1	83	4	4
Hu F. et al.	1	FRONTIERS IN ONCOLOGY	5.738	3.925	3.1	83	1	1
He. Y. et al.	1	FRONTIERS IN ONCOLOGY	5.738	3.925	3.1	83	2	2

Ren Y. Et al	1	Medical Physics	4.506	4.232	6.1	180	3	3
Luo J et al	1	BMC Gastroenterology	2.849	2.843	3.2	75	2	2
Wang X. et al.	1	QUANTITATIVE IMAGING IN MEDICINE AND SURGERY	4.63	2.956	4.0	21	4	4
Mao Y. Et al.	1	Hepatobiliary Surgery and Nutrition	8.256	0	0	0	5	5
Anderson M. et al.	1	Acta Radiologica	1.99	1.76	3.0	72	23	23
Li H et al.	1	British Journal of Radiology	3.039	2.687	4.1	106	2	2

Li l. et al.	1	CLINICAL RADIOLOGY	2.35	2.247	3.9	90	1	1
Wang et al., 2021	1	COMPUTERS IN BIOLOGY AND MEDICINE	4.589	3.9	7.3	94.0	7	7
Yang Y. et al., 2021	2	FRONTIERS IN ONCOLOGY	6.244	6.264	3.9	83.0	0	0
Lv X. et al., 2021	3	EUROPEAN JOURNAL OF RADIOLOGY	3.528	3.539	4.6	115.0	6	6
Yu Y. et al., 2021	3	EUROPEAN RADIOLOGY	5.315	4.87	7.7	149	4	4
Fang S. et al., 2021	4	Frontiers in Molecular Biosciences	4.615	5.389	4.1	37.0	8	8
Yang F. et al., 2021	4	FRONTIERS IN ONCOLOGY	6.244	6.264	3.9	83.0	4	4
Chen Y. et al., 2021	5	Journal of Hepatocellular Carcinoma	5.828	6.783	0	0	2	2

Horvart N. et al., 2021	5	Clinics	2.365	2.323	2.6	61.0	14	13
Alksas A. et al., 2021	6	Scientific Reports	4.38	5.134	7.1	213.0	1	0
Chong H. et al., 2021	6	Journal of Hepatocellular Carcinoma	5.828	6.783	0	0	2	2
Ding Z. et al., 2021	6	World Journal of Surgical Oncology	2.754	2.777	3.2	57.0	1	1
Fan Y. et al., 2021	6	BMC MEDICAL IMAGING	1.85	2.683	2.6	37.0	1	1
Gao F. et al., 2021	6	MAGNETIC RESONANCE IMAGING	2.546	2.608	3.8	111	3	3
Li X. et al., 2021	6	Journal of Clinical and Translational Hepatology	4.108	4.608	6.7	29	4	4

Shi Z. et al., 2021	6	Academic Radiology	3.173	2.751	4.7	96.0	3	3
Dai H. et al., 2021	7	QUANTITATIVE IMAGING IN MEDICINE AND SURGERY	3.837	3.507	4.0	21.0	2	2
Fan Y. et al., 2021	7	Journal of Hepatocellular Carcinoma	5.828	6.783	0	0	1	1
Yang X. et al., 2021	7	Medicine	1.889	2.351	2.4	148.0	2	2
Chen Y. et al., 2021	8	American Journal of Roentgenology	3.959	4.073	6.4	196.0	3	3
Kong C. et al., 2021	8	EUROPEAN RADIOLOGY	5.315	4.87	7.7	149	3	3
Zhao J. Et al.	8	European Journal of Radiology	3.528	3.279	4.6	115	1	1
Song D. et al., 2021	8	Journal of Cancer Research and Clinical Oncology	4.553	4.201	6.5	94.0	6	6

Zhong X. et al., 2021	8	BMC Gastroenterology	3.067	2.843	3.2	75.0	5	5
Zhao et al., 2021	8	European Journal of Radiology	3.528	3.539	4.6	115.0	1	1
Chen Y. et al., 2021	9	FRONTIERS IN ONCOLOGY	6.244	6.264	3.9	83.0	1	1
Liang H. et al., 2021	9	Journal of International Medical Research	1.671	1.805	1.4	57.0	1	1
Zhang L. et al., 2021	9	Abdominal Radiology	3.039	2.965	3.8	74.0	3	3
Zhang L. et al., 2021	9	Cancer Management and Research	3.989	3.947	3.3	40.0	3	3
Zhang Y. et al., 2021	9	FRONTIERS IN ONCOLOGY	6.244	6.264	3.9	83.0	2	2
Zhao Y. et al., 2021	9	FRONTIERS IN ONCOLOGY	6.244	6.264	3.9	83.0	3	3
Kuang Y. et al., 2021	9	Abdominal Radiology	3.039	2.965	3.8	74.0	1	1

Meng X. Et al.	10	Journal of Magnetic Resonance Imaging	4.813	4.475	7.8	160	5	5
Zhu Y. et al., 2021	10	Abdominal Radiology	3.039	2.965	3.8	74.0	2	1
Liu J. Et al	11	Abdominal Radiology	3.039	2.308	3.8	74	1	1
Chong H. et al., 2021	11	EUROPEAN RADIOLOGY	5.315	4.87	7.7	149.0	2	2
Gu D. et al., 2020	12	Journal of Magnetic Resonance Imaging	4.813	4.475	7.8	160.0	14	14
Zhao Y. et al., 2020	13	Journal of Magnetic Resonance Imaging	4.813	4.475	7.8	160.0	2	2
Ai et al., 2020	15	Annals of Translational Medicine	3.932	4.629	0	0	2	2

Shaghghi et al., 2020	15	European Radiology	5.315	4.87	7.7	149	11	11
Li J. et al., 2020	16	Experimental and Therapeutic Medicine	2.447	-	1.5	33	0	0
Geng et al., 2020	16	Magnetic Resonance in Medical Sciences	2.471	1.917	3.4	40.0	1	1
Zhang J. et al., 2020	17	Annals of Translational Medicine	3.932	4.629	0	0	1	1
Zhang Z. et al., 2020	17	Annals of Translational Medicine	3.932	4.629	0	0	4	4
Hectors et al., 2020	17	Radiology: Imaging Cancer	11.105	10.389	17.7	295.0	14	14
Shi et al., 2020	17	Cancer Management and Research	3.989	3.947	3.3	40.0	12	12
Feng. et al.	18	BMC Cancer	3.118	3.054	5.4	129	1	1

Nebbia G. et al., 2020	18	Journal of Digital Imaging	4.056	3.977	6.8	58.0	2	2
Schobert I.T. et al., 2020	19	European Radiology	5.315	4.87	7.7	149	5	5
Sun Y. et al., 2020	21	Journal of Magnetic Resonance Imaging	4.813	4.475	7.8	160.0	1	1
Wilson G.C. et al., 2020	21	HPB	3.647	4.482	4.8	74.0	20	20
Hectors S.J. et al., 2020	22	European Radiology	5.315	4.87	7.7	149	14	14
Wang W. et al., 2020	23	EUROPEAN RADIOLOGY	5.315	4.87	7.7	149	6	6
Wang X.H. et al., 2020	23	British Journal of Cancer	7.64	5.57	10.7	236.0	1	1

Song W. et al., 2019	25	Journal of Magnetic Resonance Imaging	4.813	4.475	7.8	160.0	1	1
Zhang J. et al., 2019	25	Academic Radiology	2.488	2.751	4.7	96.0	1	1
Huang X. et al., 2019	26	Journal of Cancer Research and Clinical Oncology	3.656	4.201	6.5	94.0	2	2
Ye Z. et al., 2019	26	Chinese Journal of Cancer Research	4.135	4.451	0	34.0	5	5
Zhang R. et al., 2019	27	Quantitative Imaging in Medicine and Surgery	3.226	3.507	4.0	21.0	3	3
Chen et al., 2019	27	European Radiology	4.101	4.87	7.7	149	12	12
Xu et al., 2019	27	Abdominal Radiology	2.429	2.965	3.8	74.0	2	2

Li Y. et al., 2019	29	Clinical Radiology	2.118	2.597	3.9	90.0	6	6
Oyama A. et al., 2019	30	Scientific Reports	3.998	5.134	7.1	213.0	2	2
Wang H.Q et al., 2019	30	European Journal of Radiology	2.687	3.539	4.6	115.0	9	9
Zhu Y.J. et al., 2019	32	Oncology Letters	2.311	2.575	4.5	54.0	2	2
Zhang Z. et al., 2019	32	Cancer Imaging	2.193	3.849	3.5	48.0	2	2
Gordic et al., 2019	32	Cancer Imaging	2.193	3.849	3.5	48.0	18	18
Jansen et al., 2019	32	PLOS ONE	2.74	3.788	5.3	332.0	3	3
Ma et al., 2019	33	Chinese Journal of Cancer Research	4.135	4.451	0	34.0	8	7
Wu J. et al., 2019	34	BMC Medical Imaging	1.792	2.683	2.6	37.0	5	5

Kim S. et al., 2019	34	Clinical Cancer Research	10.107	12.836	18.2	324.0	7	7
Lewis S. et al., 2019	34	Abdominal Radiology	2.429	2.965	3.8	74.0	15	15
Chen S. et al., 2019	36	European Radiology	4.101	4.87	7.7	149	17	17
Feng S.T. et al., 2019	36	European Radiology	4.101	4.87	7.7	149	20	19
Wu M. et al., 2018	38	European Radiology	3.962	4.87	6.9	143.0	2	2
Yang L. et al., 2018	38	Liver Cancer	5.944	9.024	10.0	30.0	11	11
Stocker O. et al., 2018	38	Heliyon	1.648	2.845	1.2	18.0	5	5
Ahn S.J. et al., 2018	40	Abdominal Radiology	2.429	2.965	3.1	70.0	11	11
Hui T.C.H. et al., 2018	40	Clinical Radiology	2.082	2.597	3.5	87.0	3	3
Zou et al., 2018	40	Journal of Magnetic	3.732	4.475	6.6	152.0	2	2

		Resonance Imaging						
Li et al., 2018	43	European Journal of Radiology	2.948	3.539	4.8	109.0	1	1
Wu et al., 2018	43	European Radiology	3.962	4.87	6.9	143.0	2	2
Li Z. et al., 2017	54	BMC Medical Imaging	1.635	2.683	2.37	31.0	5	5
Moriya et al	54	Cancer Imaging	1.779	1.94	3.58	40	2	2

DD = differential diagnosis; cCC-HCC = combined hepatocellular cholangiocarcinoma; HCC = hepatocellular carcinoma; CC = cholangiocarcinoma; MVI = microvascular invasion; AIR = aggressive intrasegmental recurrence; RFA = radiofrequency ablation; VECT = vessels encapsulating tumor clusters; PFS = progression-free survival; TACE = transcatheter arterial chemoembolization; CK19= Cytokeratin19; RFS = recurrence-free survival; FNH = focal nodular hyperplasia; GOLM1 = Golgi membrane protein 1; SETD7 = SET domain containing 7; RND1 = Rho family GTPase 1; GPC3 = Glypican-3; MVD = microvessel density; MTM-HCC = macrotrabecular-massive HCC; ER = early recurrence; HH = hepatic hemangioma; HC = hepatic cysts; OS = overall survival; TFS = transplant-free survival; HMRC = hepatic metastasis of rectal cancer; CK7= Cytokeratin7; DEB-TACE = drug-eluting bead-TACE; DFS = disease-free survival; DPHCC = Dual-phenotype HCC; EpCAM = Epithelial Cell Adhesion Molecule; MT = metastatic tumor; CR = complete response; PR = partial response; SD = stable disease; LR = Logistic regression; LRec= Late Recurrence; ICC = intrahepatic cholangiocarcinoma; HA = hepatic adenoma; LNR = late regional recurrence; IMCC = mass-forming cholangiocarcinoma; TTP = time to progression; HM = hepatic metastases; DCE = dynamic contrast-enhanced; ART = arterial phase; PVP = portal venous phase; DP = delayed phase; T1WI = T1-weighted imaging; AP = arterial phase; HBP =

hepatobiliary phase; HAP = hepatic arterial phase; SPP = substantial period phase; T2WI = T2-weighted imaging; DWI = diffusion-weighted imaging; EP = equilibrium phase; LAP = late arterial phase; TP = transitional phase; PP = portal phase; FS = fat saturation; ADC = apparent diffusion coefficient; DCE-MRI = DCE-Magnetic Resonance Imaging; IVIM = intravoxel incoherent motion; SWI = susceptibility weighted imaging; LVP = late venous phase; SPAIR T2WI = spectral attenuated inversion-recovery T2WI; M = manually; S = semi-automatic; A = automatic; GLCM = gray-level co-occurrence matrix; GLSZM = Grey Level Size Zone Matrix; GLRLM = gray-level run-length; GLDM = gray level dependence matrix; NGTDM = neighboring gray tone difference matrix; CNN = convolutional neural network; LBP = local binary patterns; FOS = first-order statistics; NGLDS = neighborhood gray-level difference statistics; RLM = run-length matrix; GWTF = Gabor wavelet transform; ISZM = intensity-size-zone matrix; MI = mutual information; LASSO = least absolute shrinkage and selection operator; mRMR = minimum redundancy maximum relevance; RF = random forests; SVM-RFE = support vector machine-recursive feature elimination; ICC = intra-class correlation coefficient; PCA = principal component analysis; RandomForestSRC = Random Forests for Survival, Regression, and Classification; LR = logistic regression; POE + ACC = classification error probability combined with average correlation coefficients; ROC = receiver operating characteristic; LDA (AUC) = linear discriminant analysis (area under the curve); AIC = Akaike information criteria; CCC = concordance correlation coefficient; DR = dynamic range; ANN = artificial neural network; GBDT = Gradient Boosting Tree; KNN = K-nearest Neighbours; XGBoost = extreme gradient boosting; DT = decision trees; DL = deep learning; FDA = Fisher discriminant analysis; AUROC = area under the receiver operating characteristic; BP-ANN = back propagation artificial neural network; TS = training sets; VS = validation sets; ICG = indocyanine green retention rate; NLR = Neutrophil-to-lymphocyte ratio; PLR = platelet-to-lymphocyte ratio; CAD = computer-aided diagnostic; TR = TACE response; SITET = single-input two-compartment extended Tofts; DITET = dual-input two-compartment extended Tofts; c-TACE = conventional-TACE; TA = texture analysis; RE = radioembolization.

Supplementary Table 3 Details of methodological quality assessment by Radiomic quality score (RQS) tool

Author	Image protocol quality	Multiple segmentation	Phantom study on all scanners	Imaging at multiple time points	Feature reduction or adjustment for multiple testing	Multiple analysis with non-radiomics features	Detect and discuss biological correlates	Cut-off analyses	Discrimination statistics	Calibration statistics	Prospective study registered in a trial database	Validation	Comparison to gold standard	Potential clinical utility	Cost-effectiveness analysis	Open science and data	Total
Liu J. Et al.	1	1	0	0	3	0	1	0	1	1	0	2	0	2	0	0	12 (33.33%)
Wang Y et al.	1	1	0	0	3	1	0	0	1	1	0	2	0	2	0	0	12 (33.33%)
Gong X. Et al.	1	1	0	0	3	1	1	0	1	0	0	2	0	0	0	0	10 (27.78%)

Zhang L. et al.	1	1	0	0	3	1	1	0	1	0	0	4	2	2	0	0	16 (44.44 %)
Zhang Y. et al.	1	1	0	0	3	1	0	1	1	0	0	2	0	0	0	0	10 (27.78 %)
Dong X, et al	1	1	0	0	3	1	1	1	1	1	0	2	0	0	0	1	13 (36.11 %)
Tabari A, et al	0	1	0	0	3	1	0	0	1	0	0	2	0	0	0	0	8 (22.22 %)
Cao X, et al.	1	1	0	0	3	1	0	0	1	1	0	4	0	0	0	0	12 (33.33 %)
Ince O. et al	0	1	0	0	3	1	0	1	1	1	0	-5	0	0	0	1	4 (11.11 %)
Chen M. et al.	1	1	0	0	3	1	0	0	1	1	0	4	2	2	0	0	16 (44.44 %)

Jang. T. Et al	1	1	0	0	3	1	1	0	1	1	0	2	2	2	0	0	15 (41.67%)
Hu X. Et al.	1	1	0	0	3	1	1	1	1	1	0	-5	0	0	0	0	5 (13.89%)
Chong H. et al.	1	1	0	0	3	1	1	1	1	1	0	2	0	2	0	0	14 (38.89%)
Hu X et al.	1	1	0	0	3	1	1	1	1	1	0	2	0	0	0	1	13 (36.11%)
Tao Y. Et al.	1	0	0	0	3	1	1	0	1	1	0	2	0	0	0	0	10 (27.78%)
Yang X. et al.	1	1	0	0	3	1	0	1	1	1	0	2	0	0	0	0	11 (30.56%)
Liu H. Et al.	1	1	0	0	3	1	1	0	1	1	0	2	0	2	0	0	13 (36.11%)

Zhang S. et al.	1	1	0	0	3	1	0	0	1	1	0	2	0	2	0	0	12 (33.33%)
Sim J. Et al.	1	1	0	0	3	0	0	0	2	0	0	-5	2	0	0	0	4 (11.11%)
Zhang X. Et al.	1	1	0	1	3	1	0	0	1	1	0	2	0	2	0	0	13 (36.11%)
Zhao Y. Et al.	1	0	0	0	3	1	0	1	1	1	0	2	2	2	0	0	14 (38.89%)
Lu X. Et al.	1	1	0	0	3	1	0	0	1	1	0	2	2	0	0	0	12 (33.33%)
Yang W. Et al	1	0	0	0	-3	0	1	1	1	0	0	-5	0	0	0	0	-4 (0%)
Ameli. S. et al.	1	0	0	0	3	0	1	0	2	1	0	-5	2	0	0	0	5 (13.89%)

Li W. Et al.	1	0	0	0	3	1	0	0	1	1	0	2	0	0	0	0	9 (25%)
Zeng F. et al.	1	1	0	0	3	1	1	0	1	1	0	2	0	2	0	0	13 (36.11%)
Aujay J. Et al.	0	0	0	0	-3	1	0	1	1	0	0	-5	2	0	0	0	-3 (0%)
Chen Y. et al.	1	1	0	0	3	1	0	1	2	1	0	5	2	2	0	0	19 (52.78%)
Wu Q, et al.	1	1	0	0	3	1	0	0	1	0	0	2	0	0	0	2	11 (30.56%)
Li Y et al.	1	1	0	0	3	1	1	0	1	0	0	-5	0	0	0	0	3 (8.33%)
Wang L. et al.	0	1	0	0	3	1	0	0	2	1	0	2	0	2	0	0	12 (33.33%)

Zhang D, et al.	0	1	0	0	3	1	0	0	1	0	7	4	0	0	0	0	17 (47.22%)
Brancato V .et al.	1	0	0	0	3	0	0	0	1	0	0	-5	0	0	0	4	4 (11.11%)
Fan T. et al.	1	1	0	0	3	1	1	0	2	1	0	2	0	2	0	0	14 (38.89%)
Gao L. et al.	1	1	0	0	3	1	0	1	1	1	0	2	0	2	0	0	13 (36.11%)
Hu F. et al.	0	1	0	0	3	1	0	0	1	0	0	2	0	0	0	0	8 (22.22%)
He. Y. et al.	1	1	0	0	3	1	0	1	1	1	0	2	0	0	0	0	11 (30.56%)
Ren Y. Et al	0	1	0	0	3	1	1	0	1	1	0	2	2	2	0	0	14 (38.89%)

Luo J et al	1	1	0	0	3	1	1	0	1	1	0	2	0	0	0	0	11 (30.56%)
Wang X. et al.	1	1	0	0	-3	0	0	1	1	0	0	-5	0	0	0	0	-4 (0%)
Mao Y. Et al.	1	1	0	0	3	0	1	0	1	0	0	2	2	2	0	0	13 (36.11%)
Anderson M. et al.	1	0	0	0	-3	1	1	0	0	0	7	-5	2	0	0	0	4 (11.11%)
Li H et al.	1	1	0	0	-3	0	0	1	1	0	0	-5	0	0	0	0	-4 (0%)
Wang et al. 2021	0	1	0	0	3	0	0	0	1	0	0	-5	0	0	0	0	0 (0%)
Yang Y. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	2	2	2	0	0	15 (41.67%)
Lv X. et al. 2021	1	1	0	0	3	1	0	0	1	1	0	2	0	2	0	0	12 (33.33%)

Yu Y. et al. 2021	1	1	0	0	3	0	1	0	1	0	0	2	2	0	0	0	11 (30.56%)
Fang S. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	2	0	2	0	0	13 (36.11%)
Yang F. et al. 2021	1	1	0	0	3	1	1	1	1	0	0	4	0	0	0	0	13 (36.11%)
Chen Y. et al. 2021	1	1	0	0	3	1	1	1	2	0	0	3	0	2	0	0	15 (41.67%)
Horvart N. et al. 2021	1	0	0	0	-3	0	0	0	1	0	0	-5	0	0	0	0	-6 (0%)
Alksas A. et al. 2021	1	1	0	0	3	0	0	0	2	0	0	-5	2	2	0	0	6 (16.67%)
Chong H. et al. 2021	1	1	0	0	3	1	0	0	2	1	0	2	2	2	0	0	15 (41.67%)

Ding Z. et al. 2021	1	1	0	0	3	1	0	0	1	0	0	2	2	0	0	0	11 (30.56%)
Fan Y. et al. 2021	1	1	0	0	3	1	1	1	1	1	0	2	0	2	0	0	14 (38.89%)
Gao F. et al. 2021	1	1	0	0	3	1	0	0	1	0	0	2	0	0	0	0	9 (25%)
Li X. et al. 2021	1	1	0	0	3	0	1	0	2	0	0	2	0	2	0	0	12 (33.33%)
Shi Z. et al. 2021	1	0	0	0	3	0	0	1	2	0	0	-5	0	0	0	0	2 (5.56%)
Dai H. et al. 2021	1	1	0	0	3	0	0	0	2	0	0	-5	0	0	0	0	2 (5.56%)
Fan Y. et al. 2021	1	1	0	0	3	1	1	1	1	0	0	-5	0	0	0	0	4 (11.11%)

Yang X. et al. 2021	1	1	0	0	3	1	0	0	1	0	0	2	0	2	0	0	11 (30.56 %)
Chen Y. et al. 2021	1	1	0	0	3	0	0	0	1	0	0	2	0	0	0	0	8 (22.22 %)
Kong C. et al. 2021	1	1	0	0	3	1	0	0	1	1	0	2	2	2	0	0	14 (38.89 %)
Zhao J. Et al.	1	1	0	0	-3	0	0	1	2	1	0	-5	0	2	0	0	0 (0%)
Song D. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	2	0	0	0	0	11 (30.56 %)
Zhong X. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	-5	2	0	0	0	6 (16.67 %)
Zhao et al. 2021	1	1	0	0	3	1	1	1	1	1	0	-5	0	2	0	0	7 (19.44 %)

Chen Y. et al. 2021	1	1	0	0	3	1	0	0	2	0	0	3	2	0	0	0	13 (36.11%)
Liang H. et al. 2021	1	0	0	0	3	0	0	0	2	0	0	-5	0	0	0	0	1 (2.78%)
Zhang L. et al. 2021	1	1	0	0	3	1	0	0	1	1	0	2	0	2	0	0	12 (33.33%)
Zhang L. et al. 2021	1	0	0	0	3	1	0	1	1	0	0	2	2	2	0	0	13 (36.11%)
Zhang Y. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	2	0	2	0	0	13 (36.11%)
Zhao Y. et al. 2021	1	1	0	0	3	1	0	0	1	1	0	2	2	2	0	0	14 (38.89%)
Kuang Y. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	3	2	2	0	0	16 (44.44%)

Meng X. Et al.	0	1	0	0	3	1	0	0	1	1	0	2	2	0	0	0	11 (30.56 %)
Zhu Y. et al. 2021	1	1	0	0	3	1	0	0	1	1	0	-5	0	0	0	0	3 (8.33 %)
Liu J. Et al	1	1	0	0	3	1	0	1	1	0	0	-5	0	0	0	0	3 (8.33 %)
Chong H. et al. 2021	1	1	0	0	3	1	0	1	1	1	0	2	2	2	0	0	15 (41.67 %)
Gu D. et al. 2020	1	1	0	0	3	1	1	1	2	1	0	2	2	2	0	0	17 (47.22 %)
Zhao Y. et al. 2020	1	1	0	0	3	1	0	1	1	1	0	2	2	2	0	0	15 (41.67 %)
Ai et al. 2020	1	1	0	0	3	0	0	1	1	0	0	-5	0	0	0	0	2 (5.56 %)

Shaghaghi et al. 2020	1	0	0	0	-3	0	0	1	1	0	0	-5	0	0	0	0	-5 (0%)
Li J. et al. 2020	1	1	0	0	3	0	0	0	2	1	0	-5	0	0	0	0	3 (8.33%)
Geng et al. 2020	1	1	0	0	3	0	1	1	1	0	0	-5	0	0	0	0	3 (8.33%)
Zhang J. et al. 2020	1	0	0	0	3	1	0	0	1	0	0	-5	0	2	0	0	3 (8.33%)
Zhang Z. et al. 2020	1	1	0	0	3	0	0	1	1	0	7	2	2	0	0	0	18 (50%)
Hectors et al. 2020	1	1	0	0	3	1	0	0	1	0	7	-5	0	0	0	0	9 (25%)
Shi et al. 2020	1	1	0	0	3	0	0	0	1	0	7	-5	0	0	0	0	8 (22.22%)

Feng. et al.	1	1	0	0	3	0	0	0	1	0	0	-5	0	0	0	0	1 (2.78%)
Nebbia G. et al. 2020	1	1	0	0	3	0	0	0	2	0	0	-5	0	0	0	0	2 (5.56%)
Schobert I.T. et al. 2020	1	1	0	0	3	1	1	0	1	0	0	-5	2	0	0	0	5 (13.89%)
Sun Y. et al. 2020	1	1	0	0	3	0	0	0	2	0	0	2	0	0	0	0	9 (25%)
Wilson G.C. et al. 2020	1	0	0	0	-3	0	0	0	1	0	0	-5	0	0	0	0	-6 (0%)
Hectors S.J. et al. 2020	1	1	0	0	-3	0	1	0	1	0	0	-5	2	0	0	0	-2 (0%)
Wang W. et al. 2020	1	1	0	0	3	1	1	1	2	0	0	2	2	0	0	0	14 (38.89%)

Wang X.H. et al. 2020	1	1	0	0	3	1	0	0	2	1	0	2	0	2	0	0	13 (36.11%)
Song W. et al. 2019	1	1	0	0	3	1	0	1	1	1	0	2	2	0	0	0	13 (36.11%)
Zhang J. et al. 2019	1	1	0	0	-3	1	0	0	1	0	0	-5	0	0	0	0	-4 (0%)
Huang X. et al. 2019	1	1	0	0	3	0	1	0	2	0	0	-5	0	0	0	0	3 (8.33%)
Ye Z. et al. 2019	1	1	0	0	3	1	1	1	1	1	7	-5	0	2	0	0	14 (38.89%)
Zhang R. et al. 2019	1	1	0	0	3	1	0	0	1	1	0	2	0	2	0	0	12 (33.33%)
Chen et al. 2019	1	1	0	0	3	1	0	1	1	0	0	-5	0	0	0	0	3 (8.33%)

Xu et al. 2019	1	1	0	0	-3	0	0	1	1	0	0	-5	0	0	0	0	-4 (0%)
Li Y. et al. 2019	1	0	0	0	3	0	1	1	1	0	0	-5	0	0	0	0	2 (5.56 %)
Oyama A. et al. 2019	1	0	0	0	3	1	0	0	2	0	0	-5	0	0	0	0	2 (5.56 %)
Wang H.Q et al. 2019	1	1	0	0	3	1	1	1	2	0	0	-5	2	0	0	0	7 (19.44 %)
Zhu Y.J. et al. 2019	1	1	0	0	3	1	0	0	1	0	0	2	0	0	0	0	9 (25%)
Zhang Z. et al. 2019	1	1	0	0	3	1	0	0	1	1	7	2	2	2	0	0	21 (58.33 %)
Gordic et al. 2019	1	1	1	0	3	1	0	1	1	0	0	-5	0	0	0	0	4 (11.11 %)

Jansen et al. 2019	1	1	0	0	3	1	0	0	2	0	0	-5	0	0	0	0	3 (8.33%)
Ma et al. 2019	1	0	0	0	-3	0	1	1	1	0	0	-5	0	0	0	0	-4 (0%)
Wu J. et al. 2019	1	1	0	0	3	0	0	0	1	1	0	2	2	2	0	0	13 (36.11%)
Kim S. et al. 2019	1	1	0	0	3	1	0	1	0	0	0	2	2	0	0	0	11 (30.56%)
Lewis S. et al. 2019	1	1	0	0	3	1	0	1	1	0	0	-5	2	0	0	0	5 (13.89%)
Chen S. et al. 2019	1	1	0	0	3	0	1	1	1	1	0	2	0	2	0	0	13 (36.11%)
Feng S.T. et al. 2019	1	1	0	0	3	0	0	0	1	0	0	2	2	2	0	0	12 (33.33%)

Wu M. et al. 2018	1	0	0	0	3	1	0	0	2	0	0	2	2	0	0	0	11 (30.56 %)
Yang L. et al. 2018	1	1	0	0	3	1	1	0	1	1	0	2	2	2	0	0	15 (41.67 %)
Stocker O. et al. 2018	1	1	0	0	3	0	0	0	1	1	0	-5	2	0	0	0	4 (11.11 %)
Ahn S.J. et al. 2018	1	1	0	0	3	1	0	0	0	0	0	-5	2	0	0	0	3 (8.33 %)
Hui T.C.H. et al. 2018	1	1	0	0	3	0	0	0	2	1	0	-5	0	0	0	0	3 (8.33 %)
Zou et al. 2018	1	1	0	0	-3	0	1	0	1	0	0	0	0	0	0	0	1 (2.78 %)
Li et al. 2018	1	1	0	0	3	0	1	0	1	0	7	0	0	0	0	0	14 (38.89 %)

Wu et al. 2018	1	0	0	0	-3	1	0	0	1	0	7	0	0	0	0	0	7 (19.44 %)
Li Z. et al. 2017	1	1	0	0	3	0	0	0	2	0	0	2	0	0	0	0	9 (25%)
Moriya et al	1	1	0	0	-3	1	0	0	1	0	0	-5	0	0	0	0	-4 (- 11.11 %)