

CLEAR Checklist v1.0

Section	No.	Item	Yes	No	n/a	Page
Title						
	1	Relevant title, specifying the radiomic methodology	☒	☐	☐	
Abstract						
	2	Structured summary with relevant information	☒	☐	☐	
Keywords						
	3	Relevant keywords for radiomics	☒	☐	☐	
Introduction						
	4	Scientific or clinical background	☒	☐	☐	
	5	Rationale for using a radiomic approach	☐	☐	☐	
	6	Study objective(s)	☒	☐	☐	
Method						
Study design	7	Adherence to guidelines or checklists (e.g., CLEAR checklist)	☒	☐	☐	
	8	Ethical details (e.g., approval, consent, data protection)	☒	☐	☐	
	9	Sample size calculation	☐	☒	☐	
	10	Study nature (e.g., retrospective, prospective)	☒	☐	☐	
	11	Eligibility criteria	☒	☐	☐	
	12	Flowchart for technical pipeline	☒	☐	☐	
Data	13	Data source (e.g., private, public)	☒	☐	☐	
	14	Data overlap	☐	☒	☐	
	15	Data split methodology	☒	☐	☐	
	16	Imaging protocol (i.e., image acquisition and processing)	☒	☐	☐	
	17	Definition of non-radiomic predictor variables	☒	☐	☐	
	18	Definition of the reference standard (i.e., outcome variable)	☒	☐	☐	
Segmentation	19	Segmentation strategy	☒	☐	☐	
	20	Details of operators performing segmentation	☒	☐	☐	

Section	No.	Item	Yes	No	n/a	Page
Pre-processing	21	Image pre-processing details	☒	☐	☐	
	22	Resampling method and its parameters	☒	☐	☐	
	23	Discretization method and its parameters	☒	☐	☐	
	24	Image types (e.g., original, filtered, transformed)	☒	☐	☐	
Feature extraction	25	Feature extraction method	☒	☐	☐	
	26	Feature classes	☒	☐	☐	
	27	Number of features	☒	☐	☐	
	28	Default configuration statement for remaining parameters	☒	☐	☐	
Data preparation	29	Handling of missing data	☐	☐	☒	
	30	Details of class imbalance	☒	☐	☐	
	31	Details of segmentation reliability analysis	☒	☐	☐	
	32	Feature scaling details (e.g., normalization, standardization)	☒	☐	☐	
	33	Dimension reduction details	☒	☐	☐	
Modeling	34	Algorithm details	☒	☐	☐	
	35	Training and tuning details	☒	☐	☐	
	36	Handling of confounders	☐	☒	☐	
	37	Model selection strategy	☒	☐	☐	
Evaluation	38	Testing technique (e.g., internal, external)	☒	☐	☐	
	39	Performance metrics and rationale for choosing	☒	☐	☐	
	40	Uncertainty evaluation and measures (e.g., confidence intervals)	☒	☐	☐	
	41	Statistical performance comparison (e.g., DeLong's test)	☒	☐	☐	
	42	Comparison with non-radiomic and combined methods	☒	☐	☐	
	43	Interpretability and explainability methods	☒	☐	☐	
Results						
	44	Baseline demographic and clinical characteristics	☒	☐	☐	
	45	Flowchart for eligibility criteria	☒	☐	☐	
	46	Feature statistics (e.g., reproducibility, feature selection)	☒	☐	☐	
	47	Model performance evaluation	☒	☐	☐	
	48	Comparison with non-radiomic and combined approaches	☒	☐	☐	

Section	No.	Item	Yes	No	n/a	Page
Discussion						
	49	Overview of important findings	☒	☐	☐	
	50	Previous works with differences from the current study	☒	☐	☐	
	51	Practical implications	☒	☐	☐	
	52	Strengths and limitations (e.g., bias and generalizability issues)	☒	☐	☐	
Data availability	53	Sharing images along with segmentation data [n/e]	☐	☒	☐	
	54	Sharing radiomic feature data	☒	☐	☐	
Code availability	55	Sharing pre-processing scripts or settings	☒	☐	☐	
	56	Sharing source code for modeling	☐	☒	☐	
Model availability	57	Sharing final model files	☐	☒	☐	
	58	Sharing a ready-to-use system [n/e]	☐	☒	☐	