

Supplementary Materials

Table S1. Radiomic quality score criteria

Criteria	Scoring criteria
1	Image protocol + 1 (if protocols are well-documented) + 1 (if public protocol is used)
2	Multiple segmentations + 1
3	Phantom study on all scanners + 1
4	Imaging at multiple time + 1
5	Feature reduction or adjustment for multiple testing - 3 (if neither measure is implemented) + 3 (if either measure is implemented)
6	Multivariable analysis with non-radiomics features + 1
7	Detect and discuss biological correlates + 1
8	Cut-off analyses + 1
9	Discrimination statistics + 1 (if a discrimination statistic and its statistical significance are reported) + 1 (if a resampling method technique is also applied)
10	Calibration statistics + 1 (if a calibration statistic and its statistical significance are reported) + 1 (if a resampling method technique is also applied)
11	Prospective study + 7 (for prospective validation of a radiomics signature in an appropriate trial)
12	Validation - 5 (if validation is missing) + 2 (if validation is based on a dataset from the same institute) + 3 (if validation is based on a dataset from another institute) + 4 (if validation is based on two datasets from two distinct institutes) + 4 (if the study validates a previously published signature) + 5 (if validation is based on three or more datasets from distinct institutes) *Datasets should be of comparable size and should have at least 10 events per model feature
13	Comparison to 'gold standard' + 2
14	Potential clinical utility + 2
15	Cost-effectiveness analysis + 1
16	Open science and data + 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

ROI, region of interest.