

**Table S1** Summary and brief description of all the 107 CT radiomic features extracted

Feature type	Method	Parameters
First order feature	Describe the distribution of voxel intensities within the image region defined by the mask through commonly used and basic metrics	Interquartile Range, Skewness, Uniformity, Median, Energy, Mean Absolute Deviation, Entropy, Range, Root Mean Squared, Robust Mean Absolute Deviation, Minimum, Total Energy, Variance, Kurtosis, 10Percentile, Mean, Maximum, 90Percentile
Shape feature(3D)	Describe the three-dimensional size and shape of the region of interest only on the non-derived image and mask	Voxel Volume, Flatness, Major Axis Length, Mesh Volume, Maximum 2D Diameter Slice, Sphericity, Surface Volume Ratio, Elongation, Minor Axis Length, Maximum 2D Diameter Row, Maximum 3D Diameter, Least Axis Length, Surface Area, Maximum2D Diameter Column
GLCM	Describe the second-order joint probability function of an image region constrained by the mask	Joint Average, Sum Average, Joint Entropy, Cluster Shade, Maximum Probability, Idmn, Joint Energy, Contrast, Difference Entropy, Inverse Variance, Idn, Difference Variance, Cluster Prominence, Idm, Correlation, Auto correlation, Sum Entropy, MCC, Sum Squares, Imc2, Imc1, Difference Average, Id, Cluster Tendency
GLDM	Quantify gray level dependencies, which are defined as the number of connected voxels within distance $\delta$ that are dependent on the center voxel	Gray Level Variance, High Gray Level Emphasis, Dependence Entropy, Dependence Non Uniformity, Gray Level Non Uniformity, Small Dependence Emphasis, Small Dependence High Gray Level Emphasis, Dependence Non Uniformity Normalized, Large Dependence Emphasis, Large Dependence Low Gray Level Emphasis, Dependence Variance, Large Dependence High Gray Level Emphasis, Small Dependence Low Gray Level Emphasis, Low Gray Level Emphasis
GLRLM	Quantify gray level runs, which are defined as the length in number of pixels, of consecutive pixels that have the same gray level value	Short Run Low Gray Level Emphasis, Gray Level Variance, Low Gray Level Run Emphasis, Gray Level Non Uniformity Normalized, Run Variance, Gray Level Non Uniformity, Long Run Emphasis, Short Run High Gray Level Emphasis, Run Length Non Uniformity, Short Run Emphasis, Long Run High Gray Level Emphasis, Run Percentage, Long Run Low Gray Level Emphasis, Run Entropy, High Gray Level Run Emphasis, Run Length Non Uniformity Normalized
GLSZM	Quantify gray level zones which were defined as the number of connected voxels that share the same gray level intensity	Gray Level Variance, Zone Variance, Gray Level Non Uniformity Normalized, Size Zone Non Uniformity Normalized, Size Zone Non Uniformity, Gray Level Non Uniformity, Large Area Emphasis, Small Area High Gray Level Emphasis, Zone Percentage, Large Area Low Gray Level Emphasis, Large Area High Gray Level Emphasis, High Gray Level Zone Emphasis, Small Area Emphasis, Low Gray Level Zone Emphasis, Zone Entropy, Small Area Low Gray Level Emphasis
NGTDM	Quantify the difference between a gray value and the average gray value of its neighbours within distance $\delta$	Coarseness, Complexity, Strength, Contrast, Busyness

GLCM, gray level co-occurrence matrix; GLDM, gray level dependence matrix; GLRLM, gray level run length matrix; GLSZM, gray level size zone matrix; NGTDM, neighbouring gray tone difference matrix.