Type of feature	Feature name	Description
Image-based parameters	minvalue	Describe its minimum
	meanvalue	Describe its mean
	stdvalue	Describe its standard deviation
	maxvalue	Describe its maximum
Co-occurrence matrix (GLCM): takes into	Homogeneity	Homogeneity of grey-level voxel pairs
account the arrangements of pairs of voxels	Energy	Uniformity of grey-level voxel pairs.
to extract textural indices	Correlation	Linear dependency of grey-levels in GLCM
	Contrast	Local variations in the GLCM
	Entropy	Randomness of grey-level voxel pairs
	Dissimilarity	Variation of grey-level voxel pairs
Grey-Level Run Length Matrix (GLRLM):	SRE (short-run emphasis)	Distribution of the short homogeneous runs in
gives the size of homogenous runs for each		an image
grey-level	LRE (long-run emphasis)	Distribution of the long homogeneous runs in
		an image
	LGRE (low grey-level run	Distribution of the low grey-level runs
	emphasis)	
	HGRE (high grey-level run	Distribution of the high grey-level runs
	emphasis)	
	SRLGE (short-run low	Distribution of the short homogenous runs
	grey-level emphasis)	with low grey-levels
	SRHGE (short-run high	Distribution of the short homogenous runs
	grey-level emphasis)	with high grey-levels
	LRLGE (long-run low	Distribution of the long homogeneous runs
	grey-level Emphasis)	with low grey-levels
	LRHGE (long-run high	Distribution of the long homogeneous runs
	grey-level emphasis)	with high grey-levels
	GLNU (grey-level	Non-uniformity of the grey-levels of the
	non-uniformity)	homogeneous runs
	RLNU (run length	Length of the homogeneous runs
	non-uniformity)	
	RP (run percentage)	Homogeneity of the homogeneous runs
Neighbourhood Grey-Level Different Matrix (NGLDM): corresponds to the	Coarseness	Level of spatial rate of change in intensity

Supplementary table 1

Matrix (NGLDM): corresponds to the difference of grey-level between one voxel and its 26 neighbourhoods in three

dimensions	Contrast	Intensity diference between neighbouring regions
	Busyness	Spatial frequency of changes in intensity
Grey-Level Zone Length Matrix (GLZLM): provides information on the size of	SZE (short-zone emphasis)	Distribution of the short homogeneous zones in an image
homogenous zones for each grey-level in	LZE (long-zone emphasis)	Distribution of the long homogeneous zones in
three dimensions	LGZE (low grey-level zone emphasis)	Distribution of the low grey-level zones
	HGZE (high grey-level zone emphasis)	Distribution of the high grey-level zones
	SZLGE (short-zone low	Distribution of the short homogenous zones
	grey-level emphasis)	with low grey-levels
	SZHGE (short-zone high	Distribution of the short homogenous zones
	grey-level emphasis)	with high grey-levels
	LZLGE (long-zone low	Distribution of the long homogeneous zones
	grey-level emphasis)	with low grey-levels
	LZHGE (long-zone high	Distribution of the long homogeneous zones
	grey-level emphasis)	with high grey-levels
	GLNU (grey-level	Non-uniformity of the grey-levels of the
	non-uniformity)	homogeneous zones
	ZLNU (zone length	Length of the homogeneous runs
	non-uniformity)	
	ZP (zone percentage)	Homogeneity of the homogeneous zones
Indices from SHAPE:	Sphericity	Measures how spherical a volume of interest is
provides information from shape analysis	Compacity	Measures the degree to which the volume of
		interest is compact
	SHAPE_Volume (mL)	Measures the Volume of Interest in mL
	SHAPE_Volume (# vx)	Measures the Volume of Interest in voxels.
Indices from Histogram(HISTO): provides	Skewness	Asymmetry of the grey-level distribution in the
information derived from global histogram	W. A. T	histogram.
anaiysis	Kurtosis	Reflects the shape of the grey-level
		assurbution (peaked or flat) relative to a
	E. to an	
	Енгору	Measures the randomness of the distribution
	Energy	measures the uniformity of the distribution