Supplement material 2: The meaning of texture parameters

Matrixes	Defination	TA feature name	Description
Histogram	the information derived from global histogram analysis	Skewness	Measures the asymmetry of the grey-level distribution in the histogram.
		Kurtosis	Measures whether the grey-level distribution is peaked or flat relative to a normal distribution
		Entropy	Measures the randomness of the distribution
		Energy	Measures the uniformity of the distribution
Shape		Volume	Volume of Interest in mL and in voxels.
Co-occurrence matrix (GLCM)	the arrangements of pairs of voxels to extract textural indices	Homogeneity	Homogeneity of grey-level voxel pairs
		Energy	Uniformity of grey-level voxel pairs.
		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)	the size of homogenous grey-level runs for each grey level	SRE	Distribution of the short homogeneous runs in an image
		LRE	Distribution of the long homogeneous runs in an image
		LGRE	Distribution of the low grey-level runs
		HGRE	Distribution of the high grey-level runs
		SRLGE	Distribution of the short homogenous runs with low grey-levels
		SRHGE	Distribution of the short homogenous runs with high grey-levels
		LRLGE	Distribution of the long homogeneous runs with low grey-levels
		LRHGE	Distribution of the long homogeneous runs with high grey-levels
		GLNUr	Non-uniformity of the grey-levels of the homogeneous runs
		RLNU	Length of the homogeneous runs
		RP	Homogeneity of the homogeneous runs
Neighbourhood Grey-Level Different Matrix (NGLDM)	the difference of grey-level between one voxel and its 26 neighbourhoods in three dimensions	Coarseness	Level of spatial rate of change in intensity
		Contrast	Intensity difference between neighbouring regions
		Busyness	Spatial frequency of changes in intensity
Grey-Level Zone Length Matrix (GLZLM)	the information on the size of homogenous zones for each grey-level in three dimensions	SZE	Distribution of the short homogeneous zones in an image
		LZE	Distribution of the long homogeneous zones in an image
		LGZE	Distribution of the low grey-level zones
		HGZE	Distribution of the high grey-level zones
		SZLGE	Distribution of the short homogenous zones with low grey-levels
		SZHGE	Distribution of the short homogenous zones with high grey-levels
		LZLGE	Distribution of the long homogenous zones with low grey-levels
		LZHGE	Distribution of the long homogenous zones with high grey-levels
		GLNUz	Non-uniformity of the grey-levels of the homogeneous zones
		RLNU	Length of the homogeneous runs
		ZP	Homogeneity of the homogeneous zones
		Sphericity	Measures how spherical a volume of interest is
		Compacity	Measures the degree to which the volume of interest is compact