

Supplementary Materials

Table 1. Radiomics features.

Histogram
Skewness
Kurtosis
Excess kurtosis
Entropy-log10
Entropy-log2
Energy (uniformity)
GLCM (gray-level co-occurrence matrix)
Homogeneity (inverse difference)
Energy (angular second moment)
Contrast (variance)
Correlation
Entropy-log10
Entropy-log2 (joint entropy)
Dissimilarity
GLRLM (gray-level run-length matrix)
SRE (short-run emphasis)
LRE (long-run emphasis)
LGRE (low gray-level run emphasis)
HGRE (high gray-level run emphasis)
SRLGE (short-run low gray-level emphasis)
SRHGE (short-run high gray-level emphasis)
LRLGE (long-run low gray-level emphasis)
LRHGE (long-run high gray-level emphasis)
GLNU (gray-level non-uniformity)
RLNU (run length non-uniformity)

RP (run percentage)
NGLDM (neighborhood gray-level difference matrix)
Coarseness
Contrast
Busyness
GLZLM (gray-level zone length matrix)
SZE (short-zone emphasis)
LZE (long-zone emphasis)
LGZE (low gray-level zone emphasis)
HGZE (high gray-level zone emphasis)
SZLGE (short-zone low gray-level emphasis)
SZHGE (short-zone high gray-level emphasis)
LZLGE (long-zone low gray-level emphasis)
LZHGE (long-zone high gray-level emphasis)
GLNU (gray-level non-uniformity)
ZLNU (zone length non-uniformity)
ZP (zone percentage)
Conventional indices
Q1 (the first quartile)
Q2 (the second quartile)
Q3 (the third quartile)
Min (minimum)
Mean
Std (standard deviation)
Max (maximum)
Shape features
Volume (mL)
Volume (voxels)

Detailed information about the features can be found on the website of the software (www.lifexsoft.org).

Table 2. Interobserver reproducibility.

Texture features	ICC	95% CI	P value
Histogram			
Skewness	0.812	0.788 – 0.941	< 0.001
Kurtosis	0.917	0.854 – 0.955	< 0.001
Excess kurtosis	0.622	0.743 – 0.989	< 0.001
Entropy-log10	0.765	0.811 – 0.976	< 0.001
Entropy-log2	0.689	0.675 – 0.936	< 0.001
Energy	0.923	0.889 – 0.957	< 0.001
GLCM			
Homogeneity	0.701	0.721 – 0.989	< 0.001
Energy	0.824	0.855 – 0.976	< 0.001
Contrast	0.766	0.711 – 0.923	< 0.001
Correlation	0.814	0.845 – 0.954	< 0.001
Entropy-log10	0.699	0.769 – 0.918	< 0.001
Entropy-log2	0.896	0.866 – 0.953	< 0.001
Dissimilarity	0.901	0.871 – 0.946	< 0.001
GLRLM			
SRE	0.834	0.785 – 0.911	< 0.001
LRE	0.866	0.805 – 0.942	< 0.001
LGRE	0.902	0.853 – 0.957	< 0.001
HGRE	0.833	0.763 – 0.952	< 0.001
SRLGE	0.741	0.707 – 0.854	< 0.001
SRHGE	0.852	0.874 – 0.942	< 0.001
LRLGE	0.882	0.824 – 0.957	< 0.001

LRHGE	0.865	0.813 – 0.968	< 0.001
GLNU	0.678	0.746 – 0.895	< 0.001
RLNU	0.815	0.723 – 0.914	< 0.001
RP	0.932	0.875 – 0.953	< 0.001
NGLDM			
Coarseness	0.746	0.772 – 0.882	< 0.001
Contrast	0.814	0.782 – 0.965	< 0.001
Busyness	0.894	0.861 – 0.972	< 0.001
GLZLM			
SZE	0.843	0.723 – 0.889	< 0.001
LZE	0.914	0.853 – 0.956	< 0.001
LGZE	0.744	0.769 – 0.934	< 0.001
HGZE	0.839	0.684 – 0.920	< 0.001
SZLGE	0.782	0.630 – 0.874	< 0.001
SZHGE	0.834	0.696 – 0.912	< 0.001
LZLGE	0.851	0.783 – 0.856	< 0.001
LZHGE	0.928	0.884 – 0.947	< 0.001
GLNU	0.863	0.671 – 0.836	< 0.001
ZLNU	0.910	0.830 – 0.904	< 0.001
ZP	0.913	0.793 – 0.901	< 0.001
Conventional indices			
Q1	0.765	0.657 – 0.847	< 0.001
Q2	0.815	0.790 – 0.939	< 0.001
Q3	0.839	0.795 – 0.965	< 0.001
Min	0.943	0.876 – 0.953	< 0.001
Mean	0.890	0.759 – 0.945	< 0.001
Std	0.781	0.665 – 0.890	< 0.001
Max	0.905	0.856 – 0.936	< 0.001

Shape features			
Volume (mL)	0.824	0.813 – 0.965	< 0.001
Volume (voxels)	0.902	0.811 – 0.925	< 0.001

ICC = intraclass correlation coefficient, CI = confidence interval, GLCM = gray-level co-occurrence matrix, GLRLM = gray-level run-length matrix, SRE = short-run emphasis, LRE = long-run emphasis, LGRE = low gray-level run emphasis, HGRE = high gray-level run emphasis, SRLGE = short-run low gray-level emphasis, SRHGE = short-run high gray-level emphasis, LRLGE = long-run low gray-level emphasis, LRHGE = long-run high gray-level emphasis, GLNU = gray-level non-uniformity, RLNU = run length non-uniformity, RP = run percentage, NGLDM = neighborhood gray-level difference matrix, GLZLM = gray-level zone length matrix, SZE = short-zone emphasis, LZE = long-zone emphasis, LGZE = low gray-level zone emphasis, HGZE = high gray-level zone emphasis, SZLGE = short-zone low gray-level emphasis, SZHGE = short-zone high gray-level emphasis, LZLGE = long-zone low gray-level emphasis, LZHGE = long-zone high gray-level emphasis, ZLNU = zone length non-uniformity, ZP = zone percentage, Q1 = the first quartile, Q2 = the second quartile, Q3 = the third quartile, Min = minimum, Std = standard deviation, Max = maximum.