

Supplementary Material: Texture Analysis of Fractional Water Content Images Acquired During PET/MRI: Initial Evidence for an Association with Total Lesion Glycolysis, Survival and Gene Mutation Profile in Primary Colorectal Cancer

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Table S1. Mean and range of all the imaging parameters employed in the study.

Tumor Characteristic	Mean	Range
Fractional water content	0.88	0.16–0.98
MRTA of FW (without-filtration, SSF = 0)		
SD	82.79	16.97–146.35
Entropy	5.12	3.51–5.79
MPP	0.88	0.16–0.98
Skewness	−1.57	−2.41–1.61
Kurtosis	3.66	−6.79–10.95
MRTA of FW (fine-scale, SSF = 2)		
Mean	144.18	−65.21–399.56
SD	257.96	108.75–359.73
Entropy	6.23	5.27–6.76
MPP	246.80	78.06–439.36
Skewness	0.96	0.12–2.22
Kurtosis	1.88	−0.17–11.41
MRTA of FW (medium-scale, SSF = 3)		
Mean	276.68	−89.23–705.07
SD	341.82	161.74–499.62
Entropy	6.42	5.55–6.85
MPP	379.83	123.35–773.96
Skewness	0.68	−0.06–2.27
Kurtosis	0.68	−0.83–8.99
MRTA of FW (medium-scale, SSF = 4)		
Mean	413.91	−98.89–952.59
SD	391.55	208.89–571.80
Entropy	6.53	5.73–7.02

MPP	505.52	172.55–1034.12
Skewness	0.43	−0.19–2.05
Kurtosis	0.08	−1.21–5.37
MRTA of FW (medium-scale, SSF = 5)		
Mean	544.79	−101.12–1132.39
SD	414.49	245.39–561.21
Entropy	6.58	5.87–7.16
MPP	620.92	212.76–1180.35
Skewness	0.23	−0.36–1.73
Kurtosis	−0.16	−1.24–2.98
MRTA of FW (coarse-scale, SSF = 6)		
Mean	665.06	−99.73–1257.67
SD	421.61	271.27–575.13
Entropy	6.61	5.93–7.21
MPP	730.95	248.84–1271.93
Skewness	0.07	−0.54–1.48
Kurtosis	−0.20	−1.34–1.64
FDG PET uptake		
SUV _{max}	16.46	8.42–52.11
SUV _{mean}	9.63	4.65–32.12
TLG	207.09	18.22–1020.61
ADC quantification		
ADC _{mean} from ADCmaps	981	122–1310
Skewness of ADC histogram	0.22	−0.80–0.89
Kurtosis of ADC histogram	0.16	−0.74–1.93

Table S2. Intra-class correlation (ICC) values characterizing the inter-observer agreement for each texture parameter.

Texture-scale, SSF	Mean	SD	Entropy	MPP	Skewness	Kurtosis
Without-filtration, SSF = 0	0.980	0.402	0.832	0.980	0.623	−0.152
Fine, SSF = 2	0.866	0.870	0.878	0.878	0.685	0.910
Medium, SSF = 3	0.899	0.901	0.879	0.929	0.814	0.889
Medium, SSF = 4	0.916	0.905	0.881	0.953	0.838	0.913
Medium, SSF = 5	0.927	0.871	0.871	0.956	0.875	0.901
Coarse, SSF = 6	0.931	0.805	0.879	0.951	0.873	0.779

Table S3. FW texture correlates for TLG (false discovery rate limited to 0.1).

Texture-Parameter	SSF (mm)	r_s	p -value
MPP	6	-0.547	0.002
Mean intensity	6	-0.541	0.002
Mean intensity	5	-0.530	0.003
Kurtosis	6	0.520	0.003
MPP	2	-0.503	0.005
Entropy	6	0.498	0.005
Mean intensity	4	-0.487	0.006
Mean intensity	3	-0.485	0.007
MPP	4	-0.479	0.007
Entropy	5	0.480	0.007
MPP	5	-0.478	0.008
MPP	3	-0.443	0.014
Mean intensity	2	-0.433	0.017
Entropy	4	0.394	0.031
Kurtosis	2	0.390	0.033
Entropy	3	0.385	0.036
Kurtosis	5	0.382	0.037
Kurtosis	3	0.375	0.041