

**Supplementary Materials**
**Table S1.** KRAS gene: values of the 56 texture parameters. No significant parameters were found.

Texture parameter	Median (interquartile range)		<i>p</i>
	Wild-type KRAS (group 0)	Mutated KRAS (group 1)	
<b>CONVENTIONAL HU ExcessKurtosis</b>	0.87 (0.33 to 1.39)	1.03 (0.51 to 1.56)	0.47
<b>CONVENTIONAL HU Kurtosis</b>	3.87 (3.33 to 4.39)	4.03 (3.51 to 4.56)	0.47
<b>CONVENTIONAL HU max</b>	159.74 (147.35 to 182.26)	167.4 (154.64 to 175.66)	0.68
<b>CONVENTIONAL HU mean</b>	74.78 (63.82 to 82.71)	73.43 (62.15 to 81.17)	0.76
<b>CONVENTIONAL HU min</b>	-60.28 (-85.99 to -41.77)	-87.4 (-107.56 to -39.83)	0.47
<b>CONVENTIONAL HU Q1</b>	59.56 (47.66 to 68.41)	59.9 (47.21 to 67.17)	0.95
<b>CONVENTIONAL HU Q2</b>	75.37 (65.37 to 85.14)	75.67 (64.6 to 83.95)	0.95
<b>CONVENTIONAL HU Q3</b>	89.73 (81.7 to 99.76)	89.44 (82.76 to 99.95)	0.84
<b>CONVENTIONAL HU Skewness</b>	-0.44 (-0.61 to -0.17)	-0.48 (-0.72 to -0.27)	0.42
<b>CONVENTIONAL HU std</b>	24.58 (22.6 to 27.09)	25 (23.05 to 28.36)	0.79
<b>DISCRETIZED AUC CSH</b>	1079.77 (1068.78 to 1087.67)	1078.45 (1067.17 to 1086.21)	0.74
<b>DISCRETIZED HISTO Energy [=Uniformity]</b>	0.12 (0.11 to 0.13)	0.12 (0.11 to 0.13)	0.84
<b>DISCRETIZED HISTO Entropy log2</b>	3.33 (3.19 to 3.47)	3.33 (3.22 to 3.48)	0.91
<b>DISCRETIZED HISTO Entropy log10</b>	1 (0.96 to 1.04)	1 (0.97 to 1.05)	0.91
<b>DISCRETIZED HU ExcessKurtosis</b>	0.85 (0.32 to 1.35)	1.02 (0.48 to 1.54)	0.44
<b>DISCRETIZED HU Kurtosis</b>	3.85 (3.32 to 4.35)	4.02 (3.48 to 4.54)	0.44
<b>DISCRETIZED HU max</b>	116 (115 to 119)	117 (116 to 118)	0.67
<b>DISCRETIZED HU mean</b>	107.98 (106.88 to 108.77)	107.84 (106.72 to 108.62)	0.74
<b>DISCRETIZED HU min</b>	94 (91.75 to 96.25)	91.5 (90 to 97)	0.47
<b>DISCRETIZED HU Q1</b>	106 (105 to 107)	106 (105 to 107)	0.95
<b>DISCRETIZED HU Q2</b>	108 (107 to 109)	108 (107 to 109)	0.92
<b>DISCRETIZED HU Q3</b>	109 (109 to 110)	109.5 (109 to 110)	0.83
<b>DISCRETIZED HU Skewness</b>	-0.44 (-0.6 to -0.16)	-0.47 (-0.7 to -0.26)	0.46
<b>DISCRETIZED HU std</b>	2.48 (2.28 to 2.72)	2.51 (2.32 to 2.85)	0.79
<b>GLCM Contrast [=Variance]</b>	6.57 (5.54 to 8)	6.64 (6.14 to 7.73)	0.74
<b>GLCM Correlation</b>	0.39 (0.34 to 0.44)	0.37 (0.34 to 0.47)	0.66
<b>GLCM Dissimilarity</b>	1.98 (1.79 to 2.17)	1.94 (1.91 to 2.13)	0.78
<b>GLCM Energy [=AngularSecondMoment]</b>	0.017 (0.014 to 0.021)	0.018 (0.015 to 0.021)	0.6
<b>GLCM Entropy log2 [=JointEntropy]</b>	6.4 (6.11 to 6.65)	6.34 (6.18 to 6.52)	0.95
<b>GLCM Entropy log10</b>	1.93 (1.84 to 2)	1.91 (1.86 to 1.96)	0.95
<b>GLCM Homogeneity [=InverseDifference]</b>	0.46 (0.44 to 0.48)	0.46 (0.44 to 0.47)	0.9
<b>GLRLM GLNU</b>	667.57 (474.06 to 1504.18)	1153.88 (327.3 to 1710.11)	0.73
<b>GLRLM HGRE</b>	1.16E+4 (1.14E+4 to 1.18E+4)	1.16E+4 (1.13E+4 to 1.17E+4)	0.74
<b>GLRLM LGRE</b>	8.6E-5 (8.5E-5 to 8.8E-5)	8.6E-5 (8.5E-5 to 8.8E-5)	0.68
<b>GLRLM LRE</b>	1.53 (1.48 to 1.59)	1.53 (1.46 to 1.55)	0.79
<b>GLRLM LRHGE</b>	1.76E+4 (1.72E+4 to 1.87E+4)	1.78E+4 (1.71E+4 to 1.81E+4)	0.78
<b>GLRLM LRLGE</b>	0.00013 (0.00013 to 0.00014)	0.00013 (0.00013 to 0.00014)	0.95
<b>GLRLM RLNU</b>	4661.98 (3227.46 to 11351.41)	6679.19 (2451.24 to 11364.2)	0.93
<b>GLRLM RP</b>	0.87 (0.85 to 0.88)	0.87 (0.86 to 0.88)	0.71

<b>GLRLM SRE</b>	0.9 (0.89 to 0.91)	0.9 (0.89 to 0.91)	0.63
<b>GLRLM SRHGE</b>	1.04E+4 (1.02E+4 to 1.06E+4)	1.05E+4 (1.02E+4 to 1.05E+4)	0.97
<b>GLRLM SRLGE</b>	7.7E-5 (7.6E-5 to 7.9E-5)	7.7E-5 (7.7E-5 to 8E-5)	0.69
<b>GLZLM GLNU</b>	104.25 (69.1 to 190.46)	132.52 (59.73 to 190.73)	0.81
<b>GLZLM HGZE</b>	1.14E+4 (1.12E+4 to 1.16E+4)	1.14E+4 (1.12E+4 to 1.16E+4)	0.42
<b>GLZLM LGZE</b>	8.8E-5 (8.6E-5 to 8.9E-5)	8.8E-5 (8.6E-5 to 9E-5)	0.42
<b>GLZLM LZE</b>	2573.42 (1176.92 to 6522.26)	3044.99 (1086.13 to 8368.48)	0.95
<b>GLZLM LZHGE</b>	3.07E+7 (1.42E+7 to 7.74E+7)	3.59E+07 (1.3E+07 to 9.72E+07)	0.98
<b>GLZLM LZLGE</b>	0.22 (0.098 to 0.55)	0.26 (0.09 to 0.72)	0.93
<b>GLZLM SZE</b>	0.63 (0.62 to 0.65)	0.65 (0.64 to 0.65)	0.17
<b>GLZLM SZHGE</b>	7232.64 (7009.95 to 7428.23)	7297.75 (7138.55 to 7441.65)	0.53
<b>GLZLM SZLGE</b>	5.6E-5 (5.4E-5 to 5.7E-5)	5.7E-5 (5.5E-5 to 5.9E-5)	0.12
<b>GLZLM ZLNU</b>	493.62 (328.08 to 950.03)	586.02 (316.99 to 897.54)	0.81
<b>GLZLM ZP</b>	0.16 (0.14 to 0.17)	0.16 (0.13 to 0.21)	0.41
<b>NGLDM Busyness</b>	0.34 (0.19 to 0.58)	0.42 (0.13 to 0.62)	1
<b>NGLDM Coarseness</b>	0.0012 (0.00048 to 0.0016)	0.00074 (0.00043 to 0.0022)	0.74
<b>NGLDM Contrast</b>	0.038 (0.025 to 0.047)	0.035 (0.028 to 0.043)	0.53

*Legend:* **AUC:** area under the curve; **CSH:** cumulative SUV-volume histogram; **GLCM:** gray-level-co-occurrence-matrix; **GLNU,** gray-level nonuniformity; **GLRLM,** gray-level-run-length-matrix; **GLZLM:** gray-level zone-length-matrix; **HGRE:** high-gray-level-emphasis; **HGZE:** high-gray-level-zone-emphasis; **HU:** Hounsfield-Unit; **LGZE:** low-gray-level-zone-emphasis; **LRE:** long-run-emphasis; **LRHGE:** long-run-high-gray-level-emphasis; **LRLGE:** long-run-low-gray-level-emphasis; **LZE:** large-zone-emphasis; **LZHGE:** large-zone-high-gray-level-emphasis; **LZLGE:** large-zone-low-gray-level-emphasis; **NGLDM:** neighboring-gray-level-dependence-matrix; **Q1-2-3:** quartile 1-2-3; **RLNU:** run-length-non-uniformity; **RP:** Run-percentage; **SRHGE:** short-run-high-gray-level-emphasis; **SRLGE:** short-run-low-gray-level-emphasis; **SZHGE:** small-zone-high-gray-level-emphasis; **SZLGE:** small-zone-low-gray-level-emphasis; **SRE:** short-run-emphasis; **Std:** standard deviation; **SZE:** small-zone-emphasis; **SZHGE:** short-zone-high-gray-level-emphasis; **SZLGE:** short-zone-low-gray-level emphasis; **YI:** Youden Index; **ZLNU:** zone-length-non-uniformity; **ZP:** zone-percentage.

Table S2. BRAF gene: values of the 56 texture parameters. No significant parameters were found.

Texture parameter	Median (interquartile range)		p
	Wild-type BRAF (group 0)	Mutated BRAF (group 1)	
CONVENTIONAL HU ExcessKurtosis	0.93 (0.49 to 1.58)	1.01 (0.029 to 1.26)	0.63
CONVENTIONAL HU Kurtosis	3.93 (3.49 to 4.58)	4.01 (3.03 to 4.26)	0.63
CONVENTIONAL HU max	165.38 (151.49 to 178.04)	152.67 (143.15 to 176.87)	0.32
CONVENTIONAL HU mean	74.73 (63.71 to 81.83)	71.6 (64.25 to 80.79)	0.79
CONVENTIONAL HU min	-66.45 (-97.89 to -41.17)	-44.73 (-108.24 to -35.37)	0.70
CONVENTIONAL HU Q1	59.9 (47.51 to 68.43)	57.98 (48.08 to 62.71)	0.61
CONVENTIONAL HU Q2	75.98 (65.23 to 84.51)	73.45 (64.88 to 82.96)	0.77
CONVENTIONAL HU Q3	91.92 (82.42 to 99.82)	87.55 (81.09 to 100.46)	0.79
CONVENTIONAL HU Skewness	-0.44 (-0.66 to -0.2)	-0.52 (-0.62 to -0.28)	0.74
CONVENTIONAL HU std	24.73 (22.88 to 27.37)	24.53 (22.51 to 28.71)	0.90
DISCRETIZED AUC CSH	1079.78 (1068.69 to 1086.82)	1076.6 (1069.22 to 1085.76)	0.79
DISCRETIZED HISTO Energy [=Uniformity]	0.12 (0.11 to 0.13)	0.12 (0.099 to 0.13)	0.74
DISCRETIZED HISTO Entropy log2	3.34 (3.2 to 3.47)	3.33 (3.21 to 3.56)	0.88
DISCRETIZED HISTO Entropy log10	1 (0.96 to 1.05)	1 (0.97 to 1.07)	0.88
DISCRETIZED HU ExcessKurtosis	0.88 (0.46 to 1.52)	0.98 (0.027 to 1.25)	0.65
DISCRETIZED HU Kurtosis	3.88 (3.46 to 4.52)	3.98 (3.03 to 4.25)	0.65
DISCRETIZED HU max	117 (115.5 to 118.5)	116 (115 to 118.5)	0.60
DISCRETIZED HU mean	107.98 (106.87 to 108.68)	107.66 (106.92 to 108.58)	0.79
DISCRETIZED HU min	94 (91 to 96.5)	96 (89.25 to 96.75)	0.74
DISCRETIZED HU Q1	106 (105 to 107)	106 (105.25 to 107)	0.84
DISCRETIZED HU Q2	108 (107 to 109)	108 (107 to 108.75)	0.70
DISCRETIZED HU Q3	110 (109 to 110)	109 (109 to 110.5)	0.64
DISCRETIZED HU Skewness	-0.43 (-0.65 to -0.18)	-0.51 (-0.61 to -0.27)	0.72
DISCRETIZED HU std	2.49 (2.31 to 2.75)	2.47 (2.27 to 2.89)	0.93
GLCM Contrast [=Variance]	6.59 (5.79 to 8.02)	6.7 (5.72 to 7.37)	0.98
GLCM Correlation	0.38 (0.34 to 0.44)	0.41 (0.35 to 0.44)	0.44
GLCM Dissimilarity	1.94 (1.83 to 2.16)	1.99 (1.82 to 2.1)	0.98
GLCM Energy [=AngularSecondMoment]	0.017 (0.015 to 0.021)	0.017 (0.012 to 0.02)	0.55
GLCM Entropy log2 [=JointEntropy]	6.39 (6.14 to 6.57)	6.36 (6.18 to 6.79)	0.70
GLCM Entropy log10	1.92 (1.85 to 1.98)	1.91 (1.86 to 2.05)	0.70
GLCM Homogeneity [=InverseDifference]	0.46 (0.44 to 0.48)	0.45 (0.44 to 0.48)	0.81
GLRLM GLNU	804.89 (470.88 to 1567.22)	1400.92 (578.25 to 2265.58)	0.61
GLRLM HGRE	11650 (11418 to 11805)	11585 (11433 to 11789)	0.81
GLRLM LGRE	0.000086 (0.000085 to 0.000088)	0.000087 (0.000085 to 0.000088)	0.81
GLRLM LRE	1.53 (1.46 to 1.58)	1.54 (1.5 to 1.59)	0.88
GLRLM LRHGE	17842 (17175 to 18465)	17647 (17603 to 18492)	0.93
GLRLM LRLGE	1.3E-4 (1.3E-4 to 1.4E-4)	1.3E-4 (1.3E-4 to 1.4E-4)	0.57

<b>GLRLM RLNU</b>	5005 (2926 to 10445)	7525 (3662 to 15047)	0.59
<b>GLRLM RP</b>	0.87 (0.86 to 0.88)	0.86 (0.85 to 0.87)	0.74
<b>GLRLM SRE</b>	0.9 (0.89 to 0.91)	0.9 (0.89 to 0.9)	0.65
<b>GLRLM SRHGE</b>	10491 (10255 to 10620)	10318 (10252 to 10515)	0.42
<b>GLRLM SRLGE</b>	7.7E-5 (7.6E-5 to 7.9E-5)	7.7E-5 (7.7E-5 to 7.8E-5)	0.90
<b>GLZLM GLNU</b>	111.09 (62.84 to 188.52)	140.38 (74.81 to 236.44)	0.63
<b>GLZLM HGZE</b>	11436 (11272 to 11657)	11367 (11243 to 11640)	0.74
<b>GLZLM LGZE</b>	8.8E-5 (8.6E-5 to 8.9E-5)	8.8E-5 (8.6E-5 to 8.9E-5)	0.74
<b>GLZLM LZE</b>	2496 (1056 to 6682)	3486 (2045 to 11522)	0.51
<b>GLZLM LZHGE</b>	2.99E+7 (1.25E+7 to 7.88E+7)	4.22E+7 (2.38E+7 to 1.36E+7)	0.53
<b>GLZLM LZLGE</b>	0.21 (0.090 to 0.57)	0.29 (0.18 to 0.97)	0.47
<b>GLZLM SZE</b>	0.64 (0.62 to 0.65)	0.62 (0.62 to 0.65)	0.49
<b>GLZLM SZHGE</b>	7297 (7101 to 7449)	7179 (6947 to 7318)	0.14
<b>GLZLM SZLGE</b>	5.6E-5 (5.5E-5 to 5.8E-5)	5.5E-5 (5.3E-5 to 5.9E-5)	0.51
<b>GLZLM ZLNU</b>	495.79 (313.37 to 845)	547.07 (344.8 to 1067.06)	0.51
<b>GLZLM ZP</b>	0.16 (0.14 to 0.2)	0.15 (0.12 to 0.16)	0.34
<b>NGLDM Busyness</b>	0.36 (0.19 to 0.58)	0.51 (0.26 to 0.78)	0.46
<b>NGLDM Coarseness</b>	0.00095 (0.00048 to 0.0017)	0.0006 (0.00036 to 0.0013)	0.63
<b>NGLDM Contrast</b>	0.036 (0.026 to 0.043)	0.04 (0.027 to 0.047)	0.44

*Legend:* **AUC:** area under the curve; **CSH:** cumulative SUV-volume histogram; **GLCM:** gray-level-co-occurrence-matrix; **GLNU,** gray-level nonuniformity; **GLRLM,** gray-level-run-length-matrix; **GLZLM:** gray-level zone-length-matrix; **HGRE:** high-gray-level-emphasis; **HGZE:** high-gray-level-zone-emphasis; **HU:** Hounsfield-Unit; **LGZE:** low-gray-level-zone-emphasis; **LRE:** long-run-emphasis; **LRHGE:** long-run-high-gray-level-emphasis; **LRLGE:** long-run-low-gray-level-emphasis; **LZE:** large-zone-emphasis; **LZHGE:** large-zone-high-gray-level-emphasis; **LZLGE:** large-zone-low-gray-level-emphasis; **NGLDM:** neighboring-gray-level-dependence-matrix; **Q1-2-3:** quartile 1-2-3; **RLNU:** run-length-non-uniformity; **RP:** Run-percentage; **SRHGE:** short-run-high-gray-level-emphasis; **SRLGE:** short-run-low-gray-level-emphasis; **SZHGE:** small-zone-high-gray-level-emphasis; **SZLGE:** small-zone-low-gray-level-emphasis; **SRE:** short-run-emphasis; **Std:** standard deviation; **SZE:** small-zone-emphasis; **SZHGE:** short-zone-high-gray-level-emphasis; **SZLGE:** short-zone-low-gray-level emphasis; **YI:** Youden Index; **ZLNU:** zone-length-non-uniformity; **ZP:** zone-percentage.

**Table S3.** NRAS gene: values of the 56 texture parameters. One significant parameter was found. Note: the interquartile range could not be calculated for the mutated NRAS group, as it only comprised three patients.

Texture parameter	Median (interquartile range)		<i>p</i>
	Wild-type NRAS (group 0)	Mutated NRAS (group 1)	
CONVENTIONAL HU min	-69.15 (-103.6 to -41.17)	-42.93 (NC)	0.19
CONVENTIONAL HU mean	72.43 (63.62 to 81.40)	86.60 (NC)	0.09
CONVENTIONAL HU std	24.63 (22.88 to 27.75)	24.19 (NC)	0.49
CONVENTIONAL HU max	164.79 (150.71 to 178.04)	149.59 (NC)	0.73
CONVENTIONAL HU Q1	59.57 (47.19 to 66.15)	73.55 (NC)	0.08
CONVENTIONAL HU Q2	73.83 (64.77 to 83.32)	88.46 (NC)	0.07
CONVENTIONAL HU Q3	87.34 (81.95 to 98.78)	100.82 (NC)	0.08
CONVENTIONAL HU Skewness	-0.43 (-0.59 to -0.18)	-0.69 (NC)	0.07
CONVENTIONAL HU Kurtosis	3.90 (3.44 to 4.32)	4.60 (NC)	0.21
CONVENTIONAL HU ExcessKurtosis	0.90 (0.44 to 1.32)	1.60 (NC)	0.21
DISCRETIZED HU min	93.50 (90.50 to 96.50)	96 (NC)	0.21
DISCRETIZED HU mean	107.74 (106.86 to 108.64)	109.16 (NC)	0.09
DISCRETIZED HU std	2.48 (2.31 to 2.79)	2.43 (NC)	0.46
DISCRETIZED HU max	117 (115.50 to 118.50)	115 (NC)	0.68
DISCRETIZED HU Q1	106 (105 to 107)	108 (NC)	<b>0.049</b>
DISCRETIZED HU Q2	108 (107 to 109)	109 (NC)	0.13
DISCRETIZED HU Q3	109 (109 to 110)	111 (NC)	0.053
DISCRETIZED HU Skewness	-0.43 (-0.59 to -0.18)	-0.68 (NC)	0.08
DISCRETIZED HU Kurtosis	3.85 (3.43 to 4.28)	4.49 (NC)	0.22
DISCRETIZED HU ExcessKurtosis	0.85 (0.43 to 1.28)	1.49 (NC)	0.22
DISCRETIZED HISTO Entropy log10	1 (0.97 to 1.05)	0.98 (NC)	0.41
DISCRETIZED HISTO Entropy log2	3.34 (3.21 to 3.48)	3.27 (NC)	0.41
DISCRETIZED HISTO Energy [=Uniformity]	0.12 (0.11 to 0.13)	0.13 (NC)	0.26
DISCRETIZED AUC CSH	1077 (1068 to 1086)	1091 (NC)	0.09
GLCM Homogeneity [=InverseDifference]	0.46 (0.44 to 0.47)	0.48 (NC)	0.54
GLCM Energy [=AngularSecondMoment]	0.017 (0.015 to 0.021)	0.022 (NC)	0.18
GLCM Contrast [=Variance]	6.64 (5.87 to 7.88)	5.75 (NC)	0.6
GLCM Correlation	0.38 (0.34 to 0.45)	0.30 (NC)	0.18
GLCM Entropy log10	1.92 (1.85 to 1.99)	1.83 (NC)	0.19
GLCM Entropy log2 [=JointEntropy]	6.39 (6.16 to 6.61)	6.07 (NC)	0.19
GLCM Dissimilarity	1.97 (1.84 to 2.15)	1.82 (NC)	0.57
GLRLM SRE	0.90 (0.89 to 0.91)	0.90 (NC)	0.63
GLRLM LRE	1.53 (1.47 to 1.59)	1.53 (NC)	0.73
GLRLM LGRE	8.6E-5 (8.5E-5 to 8.8E-5)	8.4E-5 (NC)	0.09
GLRLM HGRE	11605 (11418 to 11794)	11908 (NC)	0.09
GLRLM SRLGE	7.7E-5 (7.6E-5 to 7.9E-5)	7.7E-5 (NC)	0.24
GLRLM SRHGE	10462 (10251 to 10602)	10702 (NC)	0.13
GLRLM LRLGE	1.3E-4 (1.3E-4 to 1.4E-4)	1.3E-4 (NC)	0.38
GLRLM LRHGE	17742 (17266 to 18648)	18235 (NC)	0.73
GLRLM GLNU	889.69 (498.56 to 1660.21)	469.51 (NC)	0.15
GLRLM RLNU	5609 (3221 to 11596)	3289 (NC)	0.09
GLRLM RP	0.87 (0.86 to 0.88)	0.87 (NC)	0.66
NGLDM Coarseness	0.86 (0.86 to 0.88)	0.0015 (NC)	0.14
NGLDM Contrast	0.04 (0.03 to 0.04)	0.04 (NC)	0.97
NGLDM Busyness	0.39 (0.21 to 0.63)	0.17 (NC)	0.11
GLZLM SZE	0.64 (0.62 to 0.65)	0.64 (NC)	0.83

<b>GLZLM LZE</b>	3204 (1110 to 8153)	1226 (NC)	0.19
<b>GLZLM LGZE</b>	8.8E-5 (8.6E-5 to 8.9E-5)	8.6E-5 (NC)	0.32
<b>GLZLM HGZE</b>	11412 (11265 to 11640)	11684 (NC)	0.32
<b>GLZLM SZLGE</b>	5.6E-5 (5.4E-5 to 5.8E-5)	5.6E-5 (NC)	0.93
<b>GLZLM SZHGE</b>	7250 (7054 to 7406)	7434 (NC)	0.41
<b>GLZLM LZLGE</b>	0.27 (0.09 to 0.71)	0.10 (NC)	0.19
<b>GLZLM LZHGE</b>	3.79E+7 (1.30E+7 to 9.41E+7)	1.48E+7 (NC)	0.19
<b>GLZLM GLNU</b>	113.51 (67.20 to 191.10)	71.75 (NC)	0.13
<b>GLZLM ZLNU</b>	508.48 (320.11 to 928.6)	357.87 (NC)	0.16
<b>GLZLM ZP</b>	0.16 (0.13 to 0.19)	0.17 (NC)	0.22

*Legend:* **AUC:** area under the curve; **CSH:** cumulative SUV-volume histogram; **GLCM:** gray-level-co-occurrence-matrix; **GLNU,** gray-level nonuniformity; **GLRLM,** gray-level-run-length-matrix; **GLZLM:** gray-level zone-length-matrix; **HGRE:** high-gray-level-emphasis; **HGZE:** high-gray-level-zone-emphasis; **HU:** Hounsfield-Unit; **LGZE:** low-gray-level-zone-emphasis; **LRE:** long-run-emphasis; **LRHGE:** long-run-high-gray-level-emphasis; **LRLGE:** long-run-low-gray-level-emphasis; **LZE:** large-zone-emphasis; **LZHGE:** large-zone-high-gray-level-emphasis; **LZLGE:** large-zone-low-gray-level-emphasis; **NGLDM:** neighboring-gray-level-dependence-matrix; **Q1-2-3:** quartile 1-2-3; **RLNU:** run-length-non-uniformity; **RP:** Run-percentage; **SRHGE:** short-run-high-gray-level-emphasis; **SRLGE:** short-run-low-gray-level-emphasis; **SZHGE:** small-zone-high-gray-level-emphasis; **SZLGE:** small-zone-low-gray-level-emphasis; **SRE:** short-run-emphasis; **Std:** standard deviation; **SZE:** small-zone-emphasis; **SZHGE:** short-zone-high-gray-level-emphasis; **SZLGE:** short-zone-low-gray-level emphasis; **YI:** Youden Index; **ZLNU:** zone-length-non-uniformity; **ZP:** zone-percentage.

Table S4. Microsatellite status: values of the 56 texture parameters. Four significant parameters were found.

Texture parameter	Median (interquartile range)		p
	MSS (group 0)	MSI (group 1)	
CONVENTIONAL HU min	-61.30 (-93.12 to -39.83)	-76.30 (-212.44 to -43.22)	0.21
CONVENTIONAL HU mean	74.97 (65 to 82.01)	65.11 (58.35 to 81.48)	0.2
CONVENTIONAL HU std	24.56 (22.19 to 26.54)	27.89 (23.37 to 30.25)	0.099
CONVENTIONAL HU max	159.52 (148.75 to 174.51)	169.04 (159.19 to 184.83)	0.27
CONVENTIONAL HU Q1	60.22 (48.68 to 68.48)	47.82 (38.92 to 63.58)	0.11
CONVENTIONAL HU Q2	76.19 (66.79 to 85.07)	66.23 (57.26 to 83.37)	0.17
CONVENTIONAL HU Q3	91.92 (82.76 to 99.95)	84 (76.46 to 100.78)	0.32
CONVENTIONAL HU Skewness	-0.45 (-0.63 to -0.22)	-0.44 (-0.72 to -0.21)	0.94
CONVENTIONAL HU Kurtosis	3.93 (3.44 to 4.56)	4.01 (3.57 to 4.73)	0.71
CONVENTIONAL HU ExcessKurtosis	0.93 (0.44 to 1.56)	1.01 (0.57 to 1.73)	0.71
DISCRETIZED HU min	94 (91 to 97)	93 (79 to 96)	0.18
DISCRETIZED HU mean	108 (107 to 108.7)	107.01 (106.33 to 108.65)	0.2
DISCRETIZED HU std	2.48 (2.23 to 2.67)	2.8 (2.36 to 3.04)	0.094
DISCRETIZED HU max	116 (115 to 118)	117 (116.5 to 119)	0.2
DISCRETIZED HU Q1	106.5 (105 to 107)	105 (104.75 to 107)	0.14
DISCRETIZED HU Q2	108 (107 to 109)	107 (106 to 109)	0.24
DISCRETIZED HU Q3	110 (109 to 110)	109 (108 to 110.25)	0.17
DISCRETIZED HU Skewness	-0.44 (-0.62 to -0.21)	-0.44 (-0.7 to -0.21)	0.91
DISCRETIZED HU Kurtosis	3.88 (3.44 to 4.49)	3.98 (3.56 to 4.72)	0.71
DISCRETIZED HU ExcessKurtosis	0.88 (0.44 to 1.49)	0.98 (0.56 to 1.72)	0.71
DISCRETIZED HISTO Entropy log10	1 (0.96 to 1.03)	1.06 (0.97 to 1.09)	0.079
DISCRETIZED HISTO Entropy log2	3.33 (3.2 to 3.41)	3.51 (3.23 to 3.63)	0.079
DISCRETIZED HISTO Energy [=Uniformity]	0.12 (0.11 to 0.13)	0.1 (0.093 to 0.13)	0.074
DISCRETIZED AUC CSH	1079 (1070 to 1087)	1070 (1063 to 1086)	0.2
GLCM Homogeneity [=InverseDifference]	0.46 (0.44 to 0.48)	0.45 (0.43 to 0.48)	0.73
GLCM Energy [=AngularSecondMoment]	0.018 (0.015 to 0.021)	0.013 (0.012 to 0.02)	0.084
GLCM Contrast [=Variance]	6.59 (5.75 to 7.73)	7.59 (5.74 to 8.9)	0.52
GLCM Correlation	0.37 (0.34 to 0.44)	0.43 (0.38 to 0.52)	0.089
GLCM Entropy log10	1.91 (1.85 to 1.96)	2.04 (1.85 to 2.06)	0.099
GLCM Entropy log2 [=JointEntropy]	6.35 (6.16 to 6.5)	6.76 (6.15 to 6.86)	0.099
GLCM Dissimilarity	1.95 (1.82 to 2.13)	2.13 (1.82 to 2.23)	0.67
GLRLM SRE	0.9 (0.89 to 0.91)	0.89 (0.88 to 0.91)	0.53
GLRLM LRE	1.53 (1.46 to 1.56)	1.55 (1.44 to 1.67)	0.55
GLRLM LGRE	8.6E-5 (8.5E-5 to 8.8E-5)	8.8E-5 (8.5E-5 to 8.9E-5)	0.21
GLRLM HGRE	11661 (11448 to 11815)	11452 (11309 to 11804)	0.21
GLRLM SRLGE	7.7E-5 (7.6E-5 to 7.9E-5)	7.7E-5 (7.7E-5 to 7.9E-5)	0.77
GLRLM SRHGE	10475 (10263 to 10604)	10318 (10115 to 10655)	0.37
GLRLM LRLGE	1.3E-4 (1.3E-4 to 1.4E-4)	1.4E-4 (1.2E-4 to 1.4E-4)	0.47
GLRLM LRHGE	17739 (17197 to 18235)	17830 (16943 to 19052)	0.61
GLRLM GLNU	655 (469 to 1468)	1448 (772 to 3213)	0.084
GLRLM RLNU	4419 (2811 to 9267)	11829 (5918 to 21721)	<b>0.037</b>
GLRLM RP	0.87 (0.86 to 0.88)	0.86 (0.84 to 0.88)	0.57
NGLDM Coarseness	1.2E-3 (5.4E-4 to 1.7E-3)	4.9E-4 (2.8E-4 to 9.3E-4)	0.055
NGLDM Contrast	0.036 (0.028 to 0.043)	0.03 (0.021 to 0.047)	0.52
NGLDM Busyness	0.34 (0.19 to 0.49)	0.63 (0.36 to 0.88)	0.066
GLZLM SZE	0.64 (0.63 to 0.65)	0.62 (0.62 to 0.63)	0.062
GLZLM LZE	2407 (1086 to 6361)	4790 (1953 to 18584)	0.27
GLZLM LGZE	8.8E-5 (8.6E-5 to 8.9E-5)	8.9E-5 (8.6E-5 to 8.9E-5)	0.42

<b>GLZLM HGZE</b>	11458 (11275 to 11668)	11355 (11219 to 11639)	0.45
<b>GLZLM SZLGE</b>	5.6E-5 (5.5E-5 to 5.8E-5)	5.5E-5 (5.4E-5 to 5.6E-5)	0.23
<b>GLZLM SZHGE</b>	7334 (7114 to 7457)	7070 (6937 to 7192)	<b>0.0081</b>
<b>GLZLM LZLGE</b>	0.2 (0.09 to 0.54)	0.42 (0.16 to 1.64)	0.27
<b>GLZLM LZHGE</b>	2.86E+7 (1.30E+7 to 7.59E+7)	5.41E+7 (2.32E+7 to 2.11E+7)	0.28
<b>GLZLM GLNU</b>	97.39 (62.29 to 177.79)	186.42 (133.31 to 290.23)	<b>0.025</b>
<b>GLZLM ZLNU</b>	378 (304 to 763)	920 (546 to 1378)	<b>0.011</b>
<b>GLZLM ZP</b>	0.16 (0.14 to 0.19)	0.15 (0.12 to 0.2)	0.3

*Legend:* **AUC:** area under the curve; **CSH:** cumulative SUV-volume histogram; **GLCM:** gray-level-co-occurrence-matrix; **GLNU,** gray-level nonuniformity; **GLRLM,** gray-level-run-length-matrix; **GLZLM:** gray-level zone-length-matrix; **HGRE:** high-gray-level-emphasis; **HGZE:** high-gray-level-zone-emphasis; **HU:** Hounsfield-Unit; **LGZE:** low-gray-level-zone-emphasis; **LRE:** long-run-emphasis; **LRHGE:** long-run-high-gray-level-emphasis; **LRLGE:** long-run-low-gray-level-emphasis; **LZE:** large-zone-emphasis; **LZHGE:** large-zone-high-gray-level-emphasis; **LZLGE:** large-zone-low-gray-level-emphasis; **NGLDM:** neighboring-gray-level-dependence-matrix; **Q1-2-3:** quartile 1-2-3; **RLNU:** run-length-non-uniformity; **RP:** Run-percentage; **SRHGE:** short-run-high-gray-level-emphasis; **SRLGE:** short-run-low-gray-level-emphasis; **SZHGE:** small-zone-high-gray-level-emphasis; **SZLGE:** small-zone-low-gray-level-emphasis; **SRE:** short-run-emphasis; **Std:** standard deviation; **SZE:** small-zone-emphasis; **SZHGE:** short-zone-high-gray-level-emphasis; **SZLGE:** short-zone-low-gray-level emphasis; **YI:** Youden Index; **ZLNU:** zone-length-non-uniformity; **ZP:** zone-percentage.