

**Supplementary Table 5. Subgroup Analysis (for 18 Tumors among Randomly Chosen 30 Tumors), Excluding Tumors with Ill-Defined Margins: Interobserver and Intraobserver Reproducibility of Texture Analysis Results of Eighteen Intrahepatic Mass-Forming Cholangiocarcinomas**

Segmentation Method	Interobserver (Semi-Automatic)	Interobserver (Fully Automatic)	Intraobserver 1	Intraobserver 2
Volume	0.999 (0.995–1.000)	0.987 (0.964–0.995)	0.990 (0.974–0.996)	0.993 (0.982–0.998)
Diameter	0.967 (0.914–0.988)	0.923 (0.797–0.971)	0.953 (0.874–0.982)	0.957 (0.887–0.984)
First-order				
Mean	0.986 (0.960–0.995)	0.965 (0.906–0.987)	0.971 (0.923–0.989)	0.975 (0.823–0.993)
Variance	0.978 (0.943–0.992)	0.899 (0.727–0.962)	0.888 (0.701–0.958)	0.894 (0.710–0.961)
Energy	0.999 (0.997–1.000)	0.961 (0.894–0.986)	0.961 (0.898–0.985)	0.990 (0.974–0.996)
Entropy	0.958 (0.890–0.984)	0.924 (0.796–0.972)	0.947 (0.852–0.981)	0.919 (0.742–0.971)
Skewness	0.981 (0.950–0.993)	0.556 (-0.178–0.833)	0.408 (-0.679–0.783)	0.667 (0.122–0.875)
Kurtosis	0.969 (0.917–0.988)	0.091 (-1.461–0.661)	0.182 (-1.357–0.702)	0.614 (-0.039–0.856)
Uniformity	0.937 (0.832–0.976)	0.911 (0.763–0.967)	0.943 (0.831–0.979)	0.884 (0.625–0.959)
Second-order				
GLCM IDM	0.997 (0.993–0.999)	0.987 (0.965–0.995)	0.988 (0.966–0.995)	0.986 (0.964–0.995)
GLCM contrast	0.996 (0.990–0.999)	0.976 (0.936–0.991)	0.974 (0.928–0.990)	0.993 (0.980–0.997)
GLCM correlation	0.903 (0.746–0.963)	0.805 (0.479–0.927)	0.818 (0.372–0.938)	0.671 (0.107–0.878)
GLCM sum average	0.875 (0.669–0.953)	0.501 (-0.329–0.813)	0.257 (-1.120–0.729)	0.780 (0.432–0.917)
GLCM diff average	0.997 (0.992–0.999)	0.985 (0.961–0.994)	0.986 (0.960–0.995)	0.995 (0.986–0.998)
GLCM sum entropy	0.952 (0.872–0.982)	0.919 (0.784–0.970)	0.937 (0.812–0.978)	0.902 (0.666–0.967)
GLCM diff entropy	0.997 (0.992–0.999)	0.976 (0.938–0.991)	0.975 (0.929–0.991)	0.993 (0.980–0.997)
Shape				
Compactness1	0.223 (-0.413–0.647)	0.677 (0.110–0.881)	0.493 (-0.336–0.809)	0.147 (-0.489–0.602)
Compactness2	0.240 (-0.393–0.657)	0.668 (0.085–0.877)	0.421 (-0.545–0.783)	0.199 (-0.441–0.634)
Elongation	0.462 (-0.462–0.800)	0.905 (0.752–0.964)	0.563 (-0.219–0.839)	0.590 (-0.142–0.849)
Flatness	0.916 (0.779–0.968)	0.945 (0.855–0.980)	0.690 (0.184–0.884)	0.675 (0.164–0.877)
Sphericity	0.215 (-0.424–0.643)	0.681 (0.121–0.882)	0.517 (-0.265–0.818)	0.130 (-0.509–0.592)

Data are intraclass correlation coefficient values with 95% confidence interval in parentheses. Interobserver agreement of semi-automatic segmentation or fully-automatic segmentation was calculated between radiologist 1 and radiologist 2. Intraobserver 1 was calculated between semi-automatic and fully-automatic segmentation by radiologist 1. Intraobserver 2 was calculated between semi-automatic and fully-automatic segmentation by radiologist 2. diff = difference, GLCM = Gray-Level Co-occurrence Matrix, IDM = inverse difference moment