

Supplementary

Table S1 Performance of segmentation and volumetry of Couinaud liver segments in the test data set [mean \pm standard deviation (95% CI)]

| Segment | DSC values in test data set | DSC values in test data set 1 | DSC values in test data set 2 | DSC values for healthy livers | DSC values for hepatic steatosis | DSC values for cirrhosis | Average volume (M) of liver segments (mL) | Average volume (A) of liver segments (mL) |
|--------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|---|---|
| Segment I | 0.93 \pm 0.01 (0.92, 0.94) | 0.93 \pm 0.07 (0.92, 0.94) | 0.92 \pm 0.03 (0.86, 0.98) | 0.95 \pm 0.10 (0.92, 0.98) | 0.96 \pm 0.02 (0.95, 0.97) | 0.90 \pm 0.09 (0.87, 0.92) | 36.51 \pm 18.02 (33.85, 39.18) | 33.44 \pm 13.74 (31.41, 35.47) |
| Segment II | 0.94 \pm 0.01 (0.93, 0.95) | 0.95 \pm 0.08 (0.93, 0.96) | 0.90 \pm 0.02 (0.87, 0.94) | 0.95 \pm 0.04 (0.94, 0.96) | 0.98 \pm 0.02 (0.97, 0.98) | 0.90 \pm 0.13 (0.86, 0.94) | 142.08 \pm 61.55 (132.97, 151.18) | 135.73 \pm 55.67 (127.50, 143.97) |
| Segment III | 0.93 \pm 0.01 (0.92, 0.95) | 0.95 \pm 0.07 (0.93, 0.96) | 0.89 \pm 0.03 (0.83, 0.95) | 0.92 \pm 0.07 (0.90, 0.94) | 0.96 \pm 0.04 (0.95, 0.97) | 0.91 \pm 0.10 (0.89, 0.94) | 107.85 \pm 72.32 (97.15, 118.55) | 102.41 \pm 67.97 (92.36, 112.47) |
| Segment IV | 0.93 \pm 0.01 (0.92, 0.95) | 0.95 \pm 0.06 (0.94, 0.96) | 0.86 \pm 0.03 (0.80, 0.92) | 0.90 \pm 0.08 (0.88, 0.92) | 0.96 \pm 0.04 (0.95, 0.97) | 0.93 \pm 0.09 (0.90, 0.95) | 198.38 \pm 87.03 (185.51, 211.25) | 199.84 \pm 79.23 (188.13, 211.56) |
| Segment V | 0.94 \pm 0.00 (0.93, 0.95) | 0.94 \pm 0.06 (0.93, 0.96) | 0.91 \pm 0.01 (0.88, 0.94) | 0.91 \pm 0.05 (0.89, 0.92) | 0.97 \pm 0.04 (0.96, 0.98) | 0.90 \pm 0.08 (0.88, 0.93) | 245.01 \pm 99.58 (230.28, 259.73) | 243.40 \pm 95.90 (229.21, 257.58) |
| Segment VI | 0.95 \pm 0.00 (0.94, 0.96) | 0.95 \pm 0.06 (0.94, 0.96) | 0.93 \pm 0.01 (0.91, 0.96) | 0.91 \pm 0.05 (0.90, 0.92) | 0.97 \pm 0.03 (0.96, 0.98) | 0.92 \pm 0.08 (0.90, 0.94) | 222.02 \pm 88.57 (208.92, 235.12) | 215.98 \pm 82.39 (203.80, 228.17) |
| Segment VII | 0.95 \pm 0.00 (0.94, 0.96) | 0.95 \pm 0.06 (0.94, 0.96) | 0.93 \pm 0.01 (0.91, 0.96) | 0.91 \pm 0.07 (0.89, 0.93) | 0.97 \pm 0.05 (0.95, 0.98) | 0.92 \pm 0.09 (0.90, 0.94) | 146.14 \pm 66.18 (136.35, 155.93) | 145.61 \pm 60.86 (136.60, 154.61) |
| Segment VIII | 0.95 \pm 0.00 (0.94, 0.96) | 0.96 \pm 0.05 (0.95, 0.96) | 0.92 \pm 0.02 (0.88, 0.96) | 0.91 \pm 0.05 (0.90, 0.93) | 0.97 \pm 0.04 (0.96, 0.98) | 0.93 \pm 0.06 (0.92, 0.95) | 257.45 \pm 115.76 (240.32, 274.57) | 260.95 \pm 105.98 (245.27, 276.63) |
| Mean | 0.94 \pm 0.00 (0.93, 0.94) | 0.93 \pm 0.07 (0.93, 0.94) | 0.91 \pm 0.13 (0.89, 0.92) | 0.92 \pm 0.07 (0.91, 0.93) | 0.97 \pm 0.04 (0.96, 0.97) | 0.91 \pm 0.09 (0.91, 0.92) | 169.43 \pm 107.26 (163.85, 175.01) | 167.17 \pm 103.98 (161.77, 172.58) |

Volume (M), volume obtained by manual segmentation; volume (A), volume obtained with automated segmentation.