**Appendix E1. Performance of Segmentation and Volumetry of Couinaud’s Liver Segment in the Test dataset. (Mean ± standard deviation (95% confidence interval))**

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

volume (M): volume obtained by manual segmentation; volume (A): volume obtained by automated segmentation.