**Supplementary Figure 1.** Boxplot Analysis of Additional Deepcatch-Derived Metrics Across MASLD Subtypes

(A) Liver HU

(B) Liver PDFF

(C) Subcutaneous Fat Area

(D) Visceral Fat Area

텍스트, 스크린샷, 도표, 직사각형이(가) 표시된 사진

AI가 생성한 콘텐츠는 부정확할 수 있습니다.텍스트, 도표, 스크린샷, 직사각형이(가) 표시된 사진

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**Supplementary Figure 2.** ROC Curves of DeepCatch-Derived Metrics for Assessing Steatosis Severity, and Significant Fibrosis

(A) Liver/Spleen HU for Detecting Hepatic Steatosis (Score ≥ 1)

(B) Liver/Spleen HU for Detecting Severe Steatosis (Score ≥ 3)

(C) Adjusted Visceral Fat Index (VFI − 0.44 × VFV) for Significant Fibrosis Prediction (Stage ≥ 2)

텍스트, 스크린샷, 도표, 라인이(가) 표시된 사진

AI가 생성한 콘텐츠는 부정확할 수 있습니다.텍스트, 도표, 스크린샷, 라인이(가) 표시된 사진

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텍스트, 스크린샷, 라인, 도표이(가) 표시된 사진

AI가 생성한 콘텐츠는 부정확할 수 있습니다.

**For Detecting Hepatic Steatosis:** Liver (HU) (0.683), Liver (PDFF) (0.695), CAP (0.720), BMI (0.744), BMI (Categorical) (0.733)

**For Discriminating Severe Steatosis:** Liver (HU) (0.591), Liver (PDFF) (0.598), CAP (0.650), BMI (0.519), BMI (Categorical) (0.541)

**For Predicting Significant Fibrosis:** LSM (0.847), LSM (Categorical) (0.829), FIB-4 (0.718), FIB-4 (Categorical) (0.714), PLT (0.681)

**Supplementary Table 1.** Crude and Adjusted Hazard Ratios for the Association Between Predictors and the Risk of Liver-Related Events

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Exposure group** | **Events** | **Person**  **-years** | **Incidence rate a** | **Crude model** | | **Adjusted model** | |
| **HR (95% CI)** | ***P*-value** | **HR (95% CI)** | ***P*-value** |
| **Sex** |  |  |  |  | 0.0196 |  | 0.8087 |
| Male | 6 | 725.37 | 82.7162 | 0.33 (0.13-0.84) |  | 1.24 (0.21-7.23) |  |
| Female | 19 | 719.43 | 264.0968 | 1.00 (reference) |  | 1.00 (reference) |  |
| **Cerebrovascular Disease Status** |  |  |  |  | 0.047 |  | 0.0201 |
| Yes | 3 | 48.89 | 613.6249 | 3.41 (1.02-11.45) |  | 5.47 (1.31-22.94) |  |
| No | 22 | 1395.92 | 157.6027 | 1.00 (reference) |  | 1.00 (reference) |  |
| **Skeletal Muscle Area** |  |  |  |  | 0.0046 |  | 0.2126 |
| High SMA (Above Median) | 5 | 751.15 | 66.5645 | 0.24 (0.09-0.65) |  | 0.39 (0.09-1.72) |  |
| Low SMA (Below Median) | 20 | 693.65 | 288.3283 | 1.00 (reference) |  | 1.00 (reference) |  |
| **Skeletal Muscle Attenuation** |  |  |  |  | 0.0247 |  | 0.1534 |
| High SMA (Above Median) | 7 | 758.25 | 92.3144 | 0.37 (0.15-0.88) |  | 0.47 (0.17-1.32) |  |
| Low SMA (Below Median) | 18 | 686.53 | 262.1892 | 1.00 (reference) |  | 1.00 (reference) |  |
| **LSM** |  |  |  |  |  |  | 0.0276 |
| High LSM  (Above Median) | 17 | 447.54 | 379.8543 | 4.12 (1.76-9.63) |  | 2.83 (1.12-7.13) |  |
| Low LSM (Below Median) | 8 | 997.26 | 80.2194 | 1.00 (reference) |  | 1.00 (reference) |  |
| **AST** |  |  |  |  | 0.0320 |  | 0.2007 |
| High AST (Above Median) | 17 | 620.09 | 274.1536 | 2.52 (1.08-5.86) |  | 1.90 (0.71-5.06) |  |
| Low AST (Below Median) | 8 | 824.71 | 97.0033 | 1.00 (reference) |  | 1.00 (reference) |  |
| **PLT** |  |  |  |  | 0.0349 |  | 0.1940 |
| High PLT (Above Median) | 7 | 729.09 | 96.0105 | 0.39 (0.16-0.94) |  | 0.47 (0.15-1.47) |  |
| Low PLT (Below Median) | 18 | 715.72 | 251.4957 | 1.00 (reference) |  | 1.00 (reference) |  |
| **LDL** |  |  |  |  | 0.0364 |  | 0.1323 |
| High LDL (Above Median) | 1 | 404.73 | 24.7079 | 0.12 (0.02-0.87) |  | 0.20 (0.02-1.63) |  |
| Low LDL (Below Median) | 24 | 1040.08 | 230.7522 | 1.00 (reference) |  | 1.00 (reference) |  |
| **FIB-4** |  |  |  |  | 0.0221 |  | 0.4807 |
| High FIB-4 (Above Median) | 18 | 667.37 | 269.7164 | 2.78 (1.16-6.66) |  | 0.63 (0.18-2.27) |  |
| Low FIB-4 (Below Median) | 7 | 777.44 | 90.0394 | 1.00 (reference) |  | 1.00 (reference) |  |
| **Height** |  |  |  |  | 0.0068 |  | 0.5125 |
| High Height (Above Median) | 5 | 709.88 | 70.4341 | 0.26 (0.10-0.69) |  | 0.60 (0.13-2.79) |  |
| Low Height (Below Median) | 20 | 734.92 | 272.138 | 1.00 (reference) |  | 1.00 (reference) |  |

a Per 10,000 person-years