**Supplementary table 1. Demographics and clinical characteristics of the entire outpatient cohort with available CT-scans**

|  |  |
| --- | --- |
| ***Variable*** | **All patients with available CT-scans** |
| N | 87 |
| Age, y (IQR) | 60 (51; 67) |
| Male gender, n (%) | 51 (58.6) |
| BMI (IQR) | 25.3 (22.4; 30.5) |
| Etiology | Alcohol, n (%)Viral hepatitis, n (%)NAFLD, n (%)Other/mixed, n (%) | 27 (31.0)15 (17.2)11 (12.6)34 (39.1) |
| Median MELD score (IQR) | 13 (9; 17) |
| Child-Pugh A/B/C, n (%) | 31/44/12 (36/50/14) |
| History of ascites or at study inclusion, n (%) | 59 (67.8) |
| History of OHE, n (%) | 18 (20.7) |
| Presence of CHE, n (%) | 37 (42.5) |
| Albumin, g/l (IQR) | 30 (25; 35) |
| Sodium | 138 (135; 140) |
| CFS | 3 (2; 3) |
| Deceased | 33 (37.9) |

Data are expressed as medians and interquartile ranges or as frequencies and percentages; NAFLD, non-alcoholic fatty liver disease; MELD, model for end-stage liver disease; OHE, overt hepatic encephalopathy; CHE, covert hepatic encephalopathy; CFS, clinical frailty scale.

**Supplementary table 2. Analyses of potential predictors for the composite of death or need for liver transplantation (mortality) in patients of cohort 1 with available CT-scans using univariable and multivariable Cox regression models**

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| --- | --- | --- |
|  | **Univariable Cox regression analysis** **HR p** | **Multivariable Cox regression analysis**  **HR p** |
| Age in years | 1.004 (0.978-1.032) | 0.743 |  |  |
| Gender | 0.957 (0.474-1.931) | 0.903 |  |  |
| Alcoholic liver disease | 2.699 (1.347-5.410) | **0.005** |  |  |
| BMI | 0.993 (0.939-1.051) | 0.821 |  |  |
| MELD score | 1.139 (1.077-1.205) | **<0.001** | **1.099 (1.030-1.173)** | **0.005** |
| History of OHE | 2.496 (1.208-5.156) | **0.013** |  |  |
| History of ascites or at study inclusion | 3.162 (1.218-8.206) | **0.018** |  |  |
| Albumin | 0.875 (0.827-0.927) | **<0.001** | **0.924 (0.867-0.986)** | **0.017** |
| Sodium | 0.847 (0.771-0.931) | **0.001** |  |  |
| CHE | 3.297 (1.616-6.728) | **0.001** | **2.162 (1.039-4.499)** | **0.039** |
| CFS | 1.674 (1.292-2.168) | **<0.001** | **1.553 (1.127-2.141)** | **0.007** |
| TPMA < median (low muscle mass) | 0.879 (0.438-1.765) | 0.717 |  |  |

HR, hazard ratio; 95% CI, 95% confidence interval; MELD, model for end-stage liver disease; OHE, overt hepatic encephalopathy; CHE, covert hepatic encephalopathy; CFS, clinical frailty scale; not significant on multivariable cox regression models were alcoholic liver disease, a history of OHE, ascites, sodium and TPMA < median (low muscle mass).

**Supplementary table 3. Analyses of potential predictors for the composite of death or need for liver transplantation (mortality) in patients of cohort 2 with available CT-scans using multiple logistic regression models**

|  |  |  |
| --- | --- | --- |
|  | **Model 1**a **OR p** | **Model 2**b **OR p** |
| ACLF  | 15.980 (3.004 – 85.018) | 0.001 | 8.052 (1.386 – 46.766) | 0.020 |
| Albumin | 0.892 (0.806 – 0.987) | 0.027 | 0.904 (0.819 – 0.997) | 0.043 |
| Infections during hospital stay | 7.885 (1.474 – 42.190) | 0.016 | 5.097 (0.870 – 29.845) | 0.071 |
| Frailty (CFS > 4) | 2.769 (0.535 – 14.331) | 0.225 | 2.120 (0.381 – 11.801) | 0.391 |
| TPMA below median | 0.656 (0.132 – 3.255) | 0.605 | 0.826 (0.152- 4.484) | 0.824 |
| MELD |  |  | 1.102 (0.982 – 1.236) | 0.099 |

aModel 1: logistic-regression model including the variables: ACLF, albumin, infections, frailty, TPMA below median.

bModel 2: logistic-regression model including the variables: ACLF, albumin, infections, frailty, TPMA below median, MELD.