|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Cirrhotics of the study population A with low serum AST | Cirrhotics of the study population A with high serum AST | P value |  | Cirrhotics of the study population B with low serum AST | Cirrhotics of the study population B with high serum AST | P value |
| Age, median (IQR) | 55.0 (48.0-61.0) | 50.5 (47.3-57.8) | 0.519 | 60.0 (55.6-63.8) | 54.9 (50.1-60.2) | 0.054 |
| Sex, male, n (%) | 11 (84.6) | 11 (78.6) | 1 | 13 (86.7) | 14 (87.5) | 1 |
| BMI (Kg/m2), median (IQR) | 23.1 (22.6-29.6) | 24.8 (23.3-27.4) | 0.488 | 25.9 (24.4-29.8) | 25.5 (23.5-27.6) | 0.572 |
| Cirrhosis aetiology, n (%):  MAFLD  Alcohol  Viral | 7 (53.8)  6 (46.2)  8 (61.5) | 9 (64.3)  4 (28.6)  11 (78.6) | 0.704  0.440  0.420 | 9 (60)  6 (40)  4 (26.7) | 8 (50)  10 (62.5)  8 (50.0) | 0.576  0.210  0.273 |
| HCC, n (%) | 9 (69.2) | 5 (35.7) | 0.128 | 11 (73.3) | 6 (37.5) | 0.073 |
| Diuretic treatment, n (%):  No  K sparing diuretics only  Loop diuretics plus K sparing diuretics | 5 (38.5)  7 (53.8)  1 (7.7) | 3 (21.4)  9 (64.3)  2 (14.3) | 0.637 | 4 (26.7)  4 (26.7)  7 (46.7) | 7 (43.8)  0 (0)  9 (56.3) | 0.102 |
| MELDNa, median (IQR) | 14.0 (11.2-22.0) | 19.0 (17.8-22.3) | 0.054 | 14.0 (10.0-18.0) | 24.0 (14.8-27.8) | **0.006** |
| Serum AST (IU/L), median (IQR) | 40.0 (30.0-44.0) | 98.0 (76.8-115.3) | **<0.001** | 33.0 (28.0-46.0) | 97.0 (72.8-139.8) | **<0.001** |
| Serum ALT (IU/L), median, (IQR) | 30.0 (24.0-37.5) | 59.5 (50.0-100.0) | **<0.001** | 25.0 (20.0-37.0) | 61.0 (44.3-84.8) | **<0.001** |
| Serum Mg, mg/dL, median (IQR) | NAV | NAV | - | 1.90 (1.70-2.11) | 1.90 (1.61-1.94) | 0.358 |
| Tissue Mg, (µg/g), median, (IQR) \* | 118.7 (114.3-140.6) | 114.1 (106.9-125.8) | 0.220 | NAV | NAV | - |
| Percentage of weak positive hepatocytes to TRPM7 stain, median (IQR) | NAV | NAV | - | 43.2 (24.6-52.4) | 50.6 (36.3-57.8) | 0.118 |
| Percentage of intense positive hepatocytes to TRPM7 stain, median, (IQR) | NAV | NAV | - | 0.8 (0.2-4.0) | 7.0 (1.5-12.5) | **0.041** |
| Percentage of total positive hepatocytes to TRPM7 stain, median (IQR) | NAV | NAV | - | 47.2 (24.8-56.2) | 55.0 (50.9-74.7) | 0.060 |
| \* Measured by atomic absorption. All data refer to the time of liver transplant, unless otherwise specified  Abbreviation: AST aspartate amino transferase; ALT alanine amino transferase; BMI: body mass index; HCC, hepatocellular carcinoma; IQR, interquartile range; MAFLD, metabolic associated fatty liver disease; MELDNa, Model for End stage Liver disease with added serum sodium concentration parameter; Mg, magnesium. NAV, not available | | | | | | | | |

**Supplementary table 1**. Demographic and clinical characteristics of the cirrhotic patients of the study populations A and B, subgrouped according to the respective median value of serum AST activity.