**Supplementary Table 1. Comparison of clinical parameters according to presence of non-MAFLD-NAFLD, non-NAFLD-MAFLD, MAFLD with NAFLD, and non-NAFLD with non-MAFLD**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | Normal (n = 48 790) | non-MAFLD-NAFLD (n = 2 574) | non-NAFLD-MAFLD (n = 246) | MAFLD with NAFLD (n = 20 261) | non-NAFLD with non-MAFLD (n = 49 311) | *P*a for non-NAFLD-MAFLD vs. non-MAFLD-NAFLD | *P*a for non-NAFLD-MAFLD vs. Normal |
| Age, years | 43.04±15.54 | 46.70 ± 14.31 | 48.52 ± 11.88 | 48.84 ± 14.42 | 43.06 ± 15.52 | 0.242 | < 0.001\*\*\* |
| Male, % | 25 389 (52.04) | 1 383 (53.73) | 209 (84.96) | 14 592 (72.02) | 25 722 (52.16) | < 0.001\*\*\* | < 0.001\*\*\* |
| Severity of fatty liver |  |  |  |  |  | < 0.001\*\*\* | < 0.001\*\*\* |
| Mild, % | 0 (0) | 1 959 (76.11) | 149 (60.57) | 11 357 (56.05) | 13 (0.03) |  |  |
| Moderate, % | 0 (0) | 599 (23.27) | 96 (39.02) | 8 694 (42.91) | 4 (0.01) |  |  |
| Severe, % | 0 (0) | 16 (0.62) | 1 (0.41) | 210 (1.04) | 0 (0.00) |  |  |
| BMI, Kg/m2 | 22.49±10.73 | 21.75 ± 1.13 | 26.51 ± 2.85 | 26.38 ± 2.79 | 22.49 ± 10.67 | < 0.001\*\*\* | < 0.001\*\*\* |
| Excess Alcohol Use | 110 (0.23) | 0 (0.00) | 84 (34.15) | 0 (0.00) | 116 (0.24) | < 0.001\*\*\* | < 0.001\*\*\* |
| Diabetes, % | 1 953 (4.17) | 0 (0.00) | 37 (15.10) | 2 726 (13.65) | 1 975 (4.17) | < 0.001\*\*\* | < 0.001\*\*\* |
| Hypertension, % | 10 139 (20.78) | 350 (13.60) | 120 (48.78) | 9 821 (48.47) | 10 244 (20.77) | < 0.001\*\*\* | < 0.001\*\*\* |
| Platelets, 109/L | 222.39±54.91 | 231.52 ± 53.54 | 208.82 ± 56.42 | 225.74 ± 56.55 | 222.16 ± 54.92 | < 0.001\*\*\* | 0.002\*\* |
| BUN, mmoL | 4.87±1.79 | 4.90 ± 1.17 | 5.07 ± 1.15 | 5.11 ± 1.24 | 4.87 ± 1.79 | 0.249 | 0.081 |
| Creatinine, μmolL | 69.24±19.78 | 68.36 ± 14.65 | 74.00 ± 13.27 | 73.28 ± 16.92 | 69.25 ± 19.74 | < 0.001\*\*\* | < 0.001\*\*\* |
| TBIL, μmolL | 13.30±5.47 | 12.93 ± 5.48 | 14.06 ± 5.73 | 13.09 ± 5.18 | 13.32 ± 5.48 | 0.075 | 0.601 |
| ALT, U/L | 20.62±19.30 | 26.59 ± 19.63 | 43.65 ± 34.81 | 34.34 ± 25.12 | 20.78 ± 20.85 | < 0.001\*\*\* | < 0.001\*\*\* |
| AST, U/L | 22.15±11.43 | 24.05 ± 12.97 | 30.66 ± 15.73 | 26.55 ± 16.13 | 22.26 ± 12.52 | < 0.001\*\*\* | < 0.001\*\*\* |
| GGT, U/L | 26.44±34.74 | 33.69 ± 33.28 | 54.85 ± 51.43 | 44.38 ± 40.11 | 26.48 ± 34.91 | < 0.001\*\*\* | < 0.001\*\*\* |
| ALP, U/L | 74.58±22.36 | 78.56 ± 21.80 | 77.92 ± 19.91 | 81.91 ± 22.08 | 74.62 ± 22.55 | 1.000 | 0.182 |
| LDH, U/L | 181.79±34.03 | 185.86 ± 32.88 | 190.39 ± 31.39 | 191.44 ± 36.80 | 181.87 ± 34.01 | 0.543 | 0.001\*\* |
| Albumin, g/L | 45.51±2.85 | 45.50 ± 2.79 | 46.21 ± 2.58 | 45.71 ± 2.75 | 45.51 ± 2.85 | 0.003\*\* | 0.001\*\* |
| HbA1c, % | 5.53±0.62 | 5.47 ± 0.36 | 5.67 ± 0.63 | 5.87 ± 0.90 | 5.53 ± 0.62 | 0.087 | 0.530 |
| FPG, mmol/L | 5.18±0.90 | 5.16 ± 0.50 | 5.66 ± 1.17 | 5.72 ± 1.43 | 5.18 ± 0.90 | < 0.001\*\*\* | < 0.001\*\*\* |
| TC, mmol/L | 5.00±0.95 | 5.29 ± 1.00 | 5.20 ± 0.97 | 5.35 ± 1.02 | 5.00 ± 0.95 | 1.000 | 0.013\* |
| TG, mmol/L | 1.23±0.84 | 1.56 ± 1.18 | 2.04 ± 1.64 | 2.20 ± 1.75 | 1.23 ± 0.84 | < 0.001\*\*\* | < 0.001\*\*\* |
| LDL-C, mmol/L | 3.15±0.75 | 3.42 ± 0.78 | 3.41 ± 0.74 | 3.49 ± 0.77 | 3.15 ± 0.75 | 1.000 | < 0.001\*\*\* |
| HDL-C, mmol/L | 1.41±0.32 | 1.34 ± 0.29 | 1.19 ± 0.24 | 1.20 ± 0.26 | 1.41 ± 0.32 | < 0.001\*\*\* | < 0.001\*\*\* |
| APRI score, mean ± SD | 0.27±0.23 | 0.28 ± 0.18 | 0.40 ± 0.26 | 0.32 ± 0.24 | 0.27 ± 0.26 | < 0.001\*\*\* | < 0.001\*\*\* |
| APRI score > 1.5, n (%) | 81 (0.20) | 4 (0.17) | 2 (0.87) | 54 (0.30) | 89 (0.21) | 0.962 | 0.788 |
| FIB-4 score, mean ± SD | 1.13±1.09 | 1.11 ± 0.70 | 1.24 ± 0.67 | 1.15 ± 0.68 | 1.13 ± 1.09 | 0.049\* | 0.127 |
| FIB-4 score > 1.3, n (%) | 11 531 (28.05) | 643 (27.75) | 85 (36.80) | 5 692 (31.60) | 11 715 (28.18) | 0.037\* | 0.032\* |
| AFP | 3.10±6.19 | 3.12 ± 1.82 | 3.16 ± 1.98 | 3.13 ± 2.27 | 3.12 ± 7.21 | 1.000 | 1.000 |
| CEA | 2.05±5.51 | 2.05 ± 5.43 | 2.30 ± 1.31 | 2.23 ± 2.96 | 2.05 ± 5.48 | 0.706 | 0.056 |

a *p*-value was the Bonferroni-corrected with ten multiple comparisons. \**p* < 0.05, \*\**p* < 0.01, and \*\*\**p*<0.001. AFP, alpha fetoprotein; ALP, alkaline phosphatase; ALT, alanine aminotransferase; APRI, alanine aminotransferase -to-platelet ratio index; AST, aspartate aminotransferase; BMI, body mass index; BUN, blood urea nitrogen; CEA, carcinoembryonic antigen; FIB-4, Fibrosis-4 index; FPG, fasting plasma glucose; GGT, γ-glutamyl transferase; HbA1c, glycated haemoglobin; HDL-C, high-density lipoprotein-cholesterol; LDH, lactic dehydrogenase; LDL-C, low-density lipoprotein-cholesterol; MAFLD, metabolic associated fatty liver disease; NAFLD, non-alcoholic fatty liver disease; TBIL, total bilirubin; TC, total cholesterol; TG, triglyceride.