**Supplementary Table 3. Adjusted hazard ratios of incident severe liver disease and cardio-cerebrovascular disease in relation to different classifications of fatty liver**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcomes** | **No. of total** | **The median follow-up time****[Years (95%CI)]** | **PYs** | **No. of events** | **Incidence rate per 100 000 PYs** | **HR (95% CI)** | ***P*** | **aHRa (95% CI)** | ***P*** | ***Pb*** |
| **Cirrhosis** |  |  |  |  |  |  |  |  |  | 0.170 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 261514.7  | 81 | 30.97  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 121657.0  | 35 | 28.77  | 0.94 (0.63-1.39) | 0.741 | 0.76 (0.51-1.13) | 0.170 |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 109414.7  | 37 | 33.82  | 1.10 (0.75-1.62) | 0.631 | 0.88 (0.60-1.30) | 0.525 |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13545.3  | 5 | 36.91  | 1.20 (0.48-2.95) | 0.699 | 1.07 (0.43-2.64) | 0.884 |  |
| **HCCc** |  |  |  |  |  |  |  |  |  | 0.919 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 261644.7  | 24 | 9.17  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 121689.0  | 14 | 11.50  | 1.26 (0.65-2.43) | 0.498 | 1.00 (0.52-1.94) | 0.997 |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 109454.2  | 12 | 10.96  | 1.20 (0.60-2.40) | 0.609 | 0.94 (0.47-1.87) | 0.853 |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13547.9  | 3 | 22.14  | 2.40 (0.72-7.97) | 0.153 | 2.29 (0.69-7.60) | 0.177 |  |
| **Liver failurec** |  |  |  |  |  |  |  |  |  | 0.173 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 260823.5  | 418 | 160.26  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 120964.8  | 363 | 300.09  | 1.88 (1.64-2.17) | <0.001\*\*\* | 1.61 (1.40-1.85) | <0.001\*\*\* |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 108810.3  | 330 | 303.28  | 1.90 (1.65-2.20) | <0.001\*\*\* | 1.61 (1.39-1.86) | <0.001\*\*\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13446.8  | 45 | 334.65  | 2.11 (1.56-2.88) | <0.001\*\*\* | 1.93 (1.42-2.63) | <0.001\*\*\* |  |
| **Coronary heart diseasec** |  |  |  |  |  |  |  |  |  | 0.197 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 260513.7  | 490 | 188.09  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 120632.8  | 457 | 378.84  | 2.01 (1.77-2.29) | <0.001\*\*\* | 1.63 (1.43-1.85) | <0.001\*\*\* |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 108445.4  | 432 | 398.36  | 2.12 (1.86-2.41) | <0.001\*\*\* | 1.68 (1.48-1.92) | <0.001\*\*\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13490.1  | 30 | 222.39  | 1.18 (0.82-1.71) | 0.370 | 1.11 (0.77-1.60) | 0.590 |  |
| **Strokec** |  |  |  |  |  |  |  |  |  | 0.313 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 259944.7  | 748 | 287.75  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 120571.4  | 522 | 432.94  | 1.51 (1.35-1.69) | <0.001\*\*\* | 1.23 (1.10-1.38) | <0.001\*\*\* |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 108400.2  | 488 | 450.18  | 1.57 (1.40-1.76) | <0.001\*\*\* | 1.27 (1.13-1.42) | <0.001\*\*\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13480.5  | 38 | 281.89  | 0.98 (0.71-1.36) | 0.921 | 0.91 (0.66-1.27) | 0.589 |  |
| **Heart failurec** |  |  |  |  |  |  |  |  |  | 0.310 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 261016.5  | 297 | 113.79  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 121203.9  | 223 | 183.99  | 1.62 (1.36-1.92) | <0.001\*\*\* | 1.30 (1.09-1.55) | 0.003\*\* |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 108992.4  | 210 | 192.67  | 1.69 (1.42-2.02) | <0.001\*\*\* | 1.34 (1.13-1.60) | 0.001\*\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13523.8  | 15 | 110.92  | 0.98 (0.58-1.64) | 0.929 | 0.91 (0.54-1.52) | 0.707 |  |
| **Cardiomyopathyc** |  |  |  |  |  |  |  |  |  | 0.740 |
| Normal | 48 790 | 5.23 (5.22-5.23) | 261659.8  | 19 | 7.26  | Ref | Ref | Ref | Ref |  |
| NAFLD | 22 835 | 5.19 (5.19-5.20) | 121688.7  | 21 | 17.26  | 2.38 (1.28-4.42) | 0.006\*\* | 1.91 (1.03-3.56) | 0.041\* |  |
| MAFLD | 20 507 | 5.20 (5.19-5.21) | 109452.6  | 19 | 17.36  | 2.39 (1.27-4.52) | 0.007\*\* | 1.89 (1.00-3.59) | 0.050\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08-5.14) | 13552.9  | 2 | 14.76  | 2.04 (0.47-8.74) | 0.339 | 1.87 (0.43-8.01) | 0.402 | 　 |

a Models were adjusted for age at baseline (continuous) and sex (female or male). b Tests of proportional hazards assumption for adjusted models. c Survival analysis was started by Cox proportional hazards models. \**p*< 0.05, \*\**p*<  0.01, \*\*\**p*< 0.001. aHR, adjusted hazard ratio; HCC, hepatocellular carcinoma; HR, hazard ratio; MAFLD, metabolic associated fatty liver disease; NAFLD, non-alcoholic fatty liver disease; PYs, person-years.