**Supplementary Table 4. Adjusted hazard ratios of incident severe liver disease and cardio-cerebrovascular disease in relation to different level 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*** |
| **Cirrhosisc** |  |  |  |  |  |  |  |  |  | 0.261 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 261514.7  | 81 | 30.97  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.30) | 72662.3  | 22 | 30.28  | 0.99 (0.60-1.62) | 0.953 | 0.81 (0.49-1.33) | 0.400 |  |
| Moderate fatty liver | 9 389 | 5.10 (5.09 - 5.11) | 49113.9  | 18 | 36.65  | 1.27 (0.75-2.15) | 0.379 | 1.00 (0.59-1.70) | 0.990 |  |
| Severe fatty liver | 227 | 5.00 (4.92 - 5.08) | 1183.8  | 2 | 168.95  | 6.15 (1.51-25.05) | 0.011\* | 6.04 (1.48-24.60) | 0.012\* |  |
| **HCCc** |  |  |  |  |  |  |  |  |  | 0.556 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 261644.7  | 24 | 9.17  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.30) | 72679.0  | 11 | 15.14  | 1.65 (0.81-3.37) | 0.169 | 1.34 (0.66-2.74) | 0.419 |  |
| Moderate fatty liver | 9 389 | 5.10 (5.09 - 5.11) | 49138.5  | 4 | 8.14  | 0.89 (0.31-2.55) | 0.823 | 0.68 (0.24-1.96) | 0.475 |  |
| Severe fatty liver | 227 | 5.00 (4.92 - 5.08) | 1184.6  | 0 | 0.00  | (-) | (-) | (-) | (-) |  |
| **Liver failurec** |  |  |  |  |  |  |  |  |  | 0.519 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 260823.5  | 418 | 160.26  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.31) | 72300.1  | 189 | 261.41  | 1.62 (1.37-1.93) | <0.001\*\*\* | 1.40 (1.18-1.66) | <0.001\*\*\* |  |
| Moderate fatty liver | 9 389 | 5.11 (5.09 - 5.12) | 48788.5  | 181 | 370.99  | 2.36 (1.98-2.81) | <0.001\*\*\* | 1.99 (1.67-2.38) | <0.001\*\*\* |  |
| Severe fatty liver | 227 | 5.00 (4.92 - 5.08) | 1168.5  | 5 | 427.90  | 2.73 (1.13-6.59) | 0.026\* | 2.68 (1.11-6.47) | 0.029\* |  |
| **Coronary heart diseasec** |  |  |  |  |  |  |  |  | 0.505 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 260513.7  | 490 | 188.09  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.30) | 72043.3  | 277 | 384.49  | 2.04 (1.76-2.37) | <0.001\*\*\* | 1.69 (1.46-1.96) | <0.001\*\*\* |  |
| Moderate fatty liver | 9 389 | 5.10 (5.09 - 5.11) | 48718.3  | 180 | 369.47  | 1.97 (1.66-2.33) | <0.001\*\*\* | 1.54 (1.30-1.83) | <0.001\*\*\* |  |
| Severe fatty liver | 227 | 5.00 (4.93 - 5.08) | 1173.9  | 5 | 425.92  | 2.27 (0.94-5.47) | 0.069 | 2.42 (1.00-5.84) | 0.049\* |  |
| **Strokec** |  |  |  |  |  |  |  |  |  | 0.677 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 259944.7  | 748 | 287.75  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.30) | 72033.2  | 304 | 422.03  | 1.47 (1.28-1.68) | <0.001\*\*\* | 1.23 (1.07-1.40) | 0.003\*\* |  |
| Moderate fatty liver | 9 389 | 5.11 (5.09 - 5.12) | 48672.6  | 218 | 447.89  | 1.56 (1.34-1.82) | <0.001\*\*\* | 1.24 (1.07-1.44) | 0.005\*\* |  |
| Severe fatty liver | 227 | 5.00 (4.92 - 5.08) | 1174.8  | 4 | 340.48  | 1.19 (0.45-3.18) | 0.727 | 1.35 (0.50-3.60) | 0.552 |  |
| **Heart failurec** |  |  |  |  |  |  |  |  |  | 0.494 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 261016.5  | 297 | 113.79  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.30) | 72403.3  | 129 | 178.17  | 1.56 (1.27-1.92) | <0.001\*\*\* | 1.29 (1.05-1.58) | 0.016\* |  |
| Moderate fatty liver | 9 389 | 5.10 (5.09 - 5.11) | 48931.5  | 95 | 194.15  | 1.71 (1.36-2.15) | <0.001\*\*\* | 1.34 (1.06-1.68) | 0.014\* |  |
| Severe fatty liver | 227 | 5.00 (4.90 - 5.08) | 1181.3  | 1 | 84.65  | 0.74 (0.10-5.30) | 0.768 | 0.78 (0.11-5.54) | 0.802 |  |
| **Cardiomyopathyc** |  |  |  |  |  |  |  |  |  | 0.465 |
| Non-fatty liver | 48 790 | 5.23 (5.22 - 5.23) | 261659.8 | 19 | 7.26  | Ref | Ref | Ref | Ref |  |
| Mild fatty liver | 13 465 | 5.28 (5.27 - 5.31) | 72695.4  | 10 | 13.76  | 1.89 (0.88-4.07) | 0.103 | 1.54 (0.71-3.31) | 0.272 |  |
| Moderate fatty liver | 9 389 | 5.10 (5.09 - 5.11) | 49125.5  | 11 | 22.39  | 3.09 (1.47-6.50) | 0.003\*\* | 2.41 (1.14-5.06) | 0.021\* |  |
| Severe fatty liver | 227 | 5.00 (4.92 - 5.08) | 1184.6  | 0 | 0.00  | (-) | (-) | (-) | (-) |  |

**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 implemented by Cox proportional hazards models. \**p*< 0.05, \*\**p*< 0.01, \*\*\**p*< 0.001. aHR, adjusted hazard ratio; HCC, hepatocellular carcinoma; HR, hazard ratio; PYs, person-years.