**Supplementary Table 6. Adjusted hazard ratios of incident severe liver disease and cardio-cerebrovascular disease in relation to different classification of fatty liver stratified by HBV infection**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcomes** | **No. of total** | **The median follow-up time years (95% CI)** | **PYs** | **No. of  events** | **Incidence rate  per 100 000 person years** | **HR (95% CI)** | ***P*** | **aHRa (95% CI)** | ***P*** | ***Pb*** |
| **Cirrhosis** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | 0.624 |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.25 (5.12 - 5.50) | 814.7 | 6 | 736.46 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 0.152 |
| 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 | 1.01 (0.67-1.52) | 0.741 | 0.82 (0.55-1.24) | 0.346 |  |
| MAFLD | 20 352 | 5.20 (5.19 - 5.21) | 108599.9 | 31 | 28.55 | 1.00 (0.65-1.53) | 0.726 | 0.81 (0.53-1.23) | 0.319 |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08 - 5.14) | 13545.3 | 5 | 36.91 | 1.33 (0.54-3.30) | 0.698 | 1.18 (0.48-2.93) | 0.714 |  |
| **HCC** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | - |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.22 (5.10 - 5.48) | 825.0 | 1 | 121.21 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 0.923 |
| 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) | 0.497 | 1.00 (0.52-1.94) | 0.996 |  |
| MAFLD | 20 352 | 5.20 (5.19 - 5.21) | 108629.2 | 11 | 10.13 | 1.11 (0.54-2.26) | 0.780 | 0.87 (0.42-1.77) | 0.693 |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08 - 5.14) | 13547.9 | 3 | 22.14 | 2.40 (0.72-7.97) | 0.153 | 2.28 (0.69-7.59) | 0.178 |  |
| **Liver failure** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | 0.258 |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.25 (5.12 - 5.54) | 809.9 | 10 | 1234.75 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 0.197 |
| 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 (1.39-1.85) | <0.001\*\*\* |  |
| MAFLD | 20 352 | 5.20 (5.19 - 5.21) | 108000.4 | 320 | 296.30 | 1.86 (1.61-2.15) | <0.001\*\*\* | 1.57 (1.36-1.82) | <0.001\*\*\* |  |
| Non-MAFLD-NAFLD | 2 574 | 5.11 (5.08 - 5.14) | 13446.8 | 45 | 334.65 | 2.12 (1.56-2.88) | <0.001\*\*\* | 1.93 (1.42-2.63) | <0.001\*\*\* |  |
| **Coronary heart disease** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | 0.998 |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.23 (5.10 - 5.50) | 824.0 | 2 | 242.72 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 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 | 20 352 | 5.20 (5.19 - 5.21) | 107621.4 | 430 | 399.55 | 2.12 (1.87-2.42) | <0.001\*\*\* | 1.69 (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) | 0.587 |  |
| **Stroke** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | 0.876 |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.22 (5.10 - 5.48) | 822.3 | 3 | 364.83 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 0.320 |
| 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 | 20 352 | 5.20 (5.19 - 5.21) | 107577.9 | 485 | 450.84 | 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) | 0.922 | 0.91 (0.66-1.27) | 0.593 |  |
| **Heart failure** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | - |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.23 (5.10 - 5.50) | 828.6 | 0 | 0.00 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 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 | 20 352 | 5.20 (5.19 - 5.21) | 108163.8 | 210 | 194.15 | 1.71 (1.43-2.04) | <0.001\*\*\* | 1.35 (1.13-1.62) | 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 |  |
| **Cardiomyopathy** |  |  |  |  |  |  |  |  |  |  |
| **HBV-positive populationc** |  |  |  |  |  |  |  |  |  | - |
| Normal | (-) |  | (-) | (-) | (-) | Ref | Ref | Ref | Ref |  |
| NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| MAFLD | 155 | 5.23 (5.10 - 5.50) | 828.6 | 0 | 0.00 | (-) | (-) | (-) | (-) |  |
| Non-MAFLD-NAFLD | (-) |  | (-) | (-) | (-) | (-) | (-) | (-) | (-) |  |
| **HBV-negative populationc** |  |  |  |  |  |  |  |  |  | 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 | 20 352 | 5.20 (5.19 - 5.21) | 108624.0 | 19 | 17.49 | 2.41 (1.28-4.55) | 0.007\*\* | 1.91 (1.01-3.61) | 0.047\* |  |
| 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 implemented by Cox proportional hazards models. \**p*< 0.05, \*\**p*< 0.01, \*\*\**p*< 0.001. aHR, adjusted hazard ratio; HBV, hepatitis B virus; HCC, hepatocellular carcinoma; HR, hazard ratio; MAFLD, metabolic associated fatty liver disease; NAFLD, non-alcoholic fatty liver disease; PYs, person-years.