Supplemental Material 8. Hazard ratio (95% CI) of cognitive decline\* by social activities <1/month and living arrangements†

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total |  | Male |  | Female |  | Interaction |
|  | HR (95% CI) | p-value | HR (95% CI) | p-value | HR (95% CI) | p-value | p-value |
| Social activity ≥ 1/month | 1 |  | 1 |  | 1 |  |  |
| Social activity <1/month | 1.37 (1.19-1.57) | <0.001 | 1.42 (1.16-1.73) | <0.001 | 1.29 (1.05-1.59) | 0.014 | 0.350 |
|  |  |  |  |  |  |  |  |
| Social activity ≥ 1/month, living with others | 1 |  | 1 |  | 1 |  |  |
| Social activity ≥ 1/month, living alone | 0.96 (0.70-1.32) | 0.819 | 1.36 (0.80-2.31) | 0.254 | 0.80 (0.54-1.20) | 0.279 | 0.112 |
| Social activity <1/month, living with others | 1.34 (1.15-1.55) | <0.001 | 1.46 (1.19-1.79) | <0.001 | 1.20 (0.97-1.50) | 0.098 | 0.152 |
| Social activity <1/month, living alone | 1.61 (1.13-2.32) | 0.01 | 1.28 (0.69-2.41) | 0.434 | 1.70 (1.08-2.67) | 0.022 | 0.740 |

\*Definition of cognitive decline: MMSE score decrease ≥4 over 2 years.

†Adjusted for sex, age group, education levels, annual household income, smoking, alcohol consumption, comorbidity, depression.