**Supplementary 1** **Logistic regression on categories of sleep duration in late life when sleep less than seven hours.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total | OR (95%CI) | P |
| Sleep categories |  |  | 0.009\*\* |
| 6 h ≤ sleep duration < 7 h (n, %) | 815 (16.4) | ref |  |
| 5 h ≤ sleep duration < 6 h (n, %) | 415 (17.8) | 1.81 (1.20-2.74) | 0.005\*\* |
| sleep duration < 5 h (n, %) | 176 (29.0) | 1.91 (1.22-3.00) | 0.005\*\* |

Logistic regression adjusted for age, gender, years of education, BMI, smoking history, alcohol consumption, tea consumption, physical activity, Hypertension, Heart disease, Diabetes.

Note: \* p<0.05, \*\* p<0.01

ref: reference group