**Table S1 Association between baseline sex-specific ASM/BMI tertiles and incidence of metabolic syndrome (Cox model) (N = 14,830)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ASM/BMI (m2)MenWomen | Lowest tertile(*n* = 4,943)0.768 (0.133)0.870 (0.068)0.631 (0.051) | Middle tertile (*n* = 4,944)0.856 (0.132)0.960 (0.062)0.717 (0.042) | Highest tertile(*n* = 4,943)0.952 (0.145)1.059 (0.083)0.810 (0.067) |  |
|  | Referent  | HR | 95% CI | *P* value | HR | 95% CI | *P* value | *P* for trend |
| Model 1 | 1 | 0.72 | 0.66, 0.78 | <0.001 | 0.48 | 0.43, 0.52 | <0.001 | <0.001 |
| Model 2 | 1 | 0.76 | 0.70, 0.83 | <0.001 | 0.53 | 0.48, 0.58 | <0.001 | <0.001 |
| Model 3 | 1 | 0.88 | 0.81, 0.96 | 0.003 | 0.70 | 0.64, 0.77 | <0.001 | <0.001 |
| Model 4 | 1 | 0.89 | 0.81, 0.96 | 0.005 | 0.71 | 0.64, 0.78 | <0.001 | <0.001 |

Model 1: crude.

Model 2: Model 1+ further adjusted for age.

Model 3: Model 2 + further adjusted for waist circumference.

Model 4: Model 3 + further adjusted for family history of diabetes, smoking status, regular exercise, eGFR, and CRP.

*ASM* appendicular skeletal muscle mass, *BMI* body mass index*, CI* confidence interval, *CRP* C-reactive protein, *eGFR* estimated glomerular filtration rate, *HR* hazard ratio.