

**Supplementary Table 3.** Sensitivity Analysis for CVD and All-cause Mortality Associated with B2M, excluding participants with history of disease. (Cancer, congestive heart failure, coronary heart disease, angina pectoris, heart attack, or stroke. n=1815)

|                            |                 | HR (95% CI), P-value |                  |                  |
|----------------------------|-----------------|----------------------|------------------|------------------|
|                            | Deaths, No. (%) | Model 1              | Model 2          | Model 3          |
| <b>All-cause mortality</b> |                 |                      |                  |                  |
| Q1                         | 135(5.27)       | ref                  | ref              | ref              |
| Q2                         | 245(10.4)       | 1.74(1.27, 2.37)     | 1.39(1.01, 1.91) | 1.23(0.88, 1.71) |
| Q3                         | 416(20.3)       | 3.11(2.36, 4.10)     | 1.80(1.36, 2.37) | 1.48(1.09, 2.01) |
| Q4                         | 850(53.2)       | 12.16(9.39, 15.73)   | 4.10(3.12, 5.39) | 2.54(1.87, 3.44) |
| <b>CVD mortality</b>       |                 |                      |                  |                  |
| Q1                         | 30 (1.17)       | ref                  | ref              | ref              |
| Q2                         | 69 (2.92)       | 2.34(1.43, 3.84)     | 1.81(1.08, 3.04) | 1.50(0.89, 2.52) |
| Q3                         | 100(4.87)       | 2.54(1.53, 4.20)     | 1.36(0.80, 2.32) | 1.01(0.58, 1.74) |
| Q4                         | 284(17.8)       | 17.39(11.24, 26.91)  | 5.28(3.30, 8.46) | 2.55(1.46, 4.46) |

Model 1: no adjustment.

Model 2: Model 1+ Age, Gender, Race, Income.

Model 3: Model 2+ BMI, Alcohol intake, Smoke, CRP, Serum globulin, Physical activity, Total-to-HDL cholesterol ratio, eGFR, ACR, Healthy eating index, History of Cancer, History of Diabetes, History of Hypertension.

CVD = Cardiovascular disease, CRP = C-reactive protein, eGFR = estimate Glomerular Filtration Rate, ACR = albumin: creatinine ratio, HDL = high-density lipoprotein, BMI = body mass index, B2M = beta-2-microglobulin.