

## Supplemental Online Content

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**eTable 1.** UK Biobank Cohort Characteristics

**eTable 2.** Unadjusted Associations Between Body Mass Index Variability and Adverse Cardiovascular Events

**eTable 3.** Associations Between Body Mass Index Variability and Adverse Cardiovascular Events From the UK Biobank

**eTable 4.** Sex-Specific Associations Between Body Mass Index Variability and Adverse Cardiovascular Events From the UK Biobank

**eAppendix.** VA Million Veteran Program: Core Acknowledgment for Publications

This supplemental material has been provided by the authors to give readers additional information about their work.

**Supplemental eTable 1. UK Biobank Cohort Characteristics White (N= 65,047)**

<b>Variable</b>	<b>Participants No. (%)</b>
<b>N (%)</b>	65,047
<b>Age, mean (SD)</b>	57.30 (7.77)
<b>Male, N, %</b>	26,982 (41.5)
<b>BMI, mean (SD)</b>	26.83 (4.60)
<b>Diabetes, N, %</b>	3,919 (6.0)
<b>Smoking history, N, %</b>	28,621 (44.0)
<b>HDL, mean (SD)</b>	56.49 (14.72)
<b>SBP, mean (SD)</b>	141.38 (19.69)
<b>Hypertension meds, N, %</b>	15373 (23.6)
<b>Total Cholesterol, mean (SD)</b>	222.06 (43.85)
<b>Statins, N, %</b>	11517 (17.7)
<b>eGFR, mean (SD)</b>	94.20 (12.79)
<b>BMI, CV, SD</b>	0.06 (0.04)
<b>N of BMI measurements, median, IQR</b>	4 (3-6)
<b>Stroke, N, %</b>	1,767 (2.7)
<b>MI, N, %</b>	5,136 (7.9)
<b>CV Death, N, %</b>	1,405 (2.2)
<b>MACE, N, %</b>	6,934 (10.7)

Abbreviations: BMI, body mass index; CAD, coronary artery disease; IQR, interquartile range; MACE, major adverse cardiac events; SD, standard deviation; CV, coefficient of variation; SBP, systolic blood pressure; HDL, high density lipoprotein.

**Supplemental eTable 2. Unadjusted associations between body mass index (BMI) variability and adverse cardiovascular events.**

<b>Harmonized Ancestry and Race/Ethnicity</b>	<b>HR (95%CI) *</b>	<b>P</b>
<b>NHW</b>	0.99 (0.94-1.04)	0.69
<b>NHB</b>	1.08 (1.00-1.16)	0.04
<b>HIS</b>	1.12 (0.98-1.28)	0.10

Abbreviation: HIS, Hispanic; HR, hazard ratio; NHB, Non-Hispanic Black; NHW, non-Hispanic White; 95%CI, 95% confidence interval \*Per 1 standard deviation of BMI variability

**Supplemental eTable 3. Associations Between Body Mass index (BMI) Variability and Adverse Cardiovascular Events from the UK Biobank**

<b>Outcome</b>	<b>HR (95%CI) *</b>	<b>P</b>
<b>Model 1</b>		
<b>Incident CAD</b>	1.02 (0.99-1.04)	0.20
<b>Acute Ischemic Stroke</b>	1.01 (0.97-1.06)	0.53
<b>Cardiovascular Death</b>	1.08 (1.04-1.11)	<0.001
<b>MACE</b>	1.02 (0.995-1.04)	0.13
<b>Model 2</b>		
<b>Incident CAD</b>	1.02 (0.99-1.04)	0.20
<b>Acute Ischemic Stroke</b>	1.01 (0.97-1.06)	0.95
<b>Cardiovascular Death</b>	1.08 (1.04-1.11)	<0.001
<b>MACE</b>	1.02 (0.995-1.04)	0.12
<b>Model 3</b>		
<b>Incident CAD</b>	1.02 (0.99-1.05)	0.15
<b>Acute Ischemic Stroke</b>	1.00 (0.96-1.06)	0.87
<b>Cardiovascular Death</b>	1.08 (1.04-1.13)	<0.001
<b>MACE</b>	1.02 (0.99-1.04)	0.14

Abbreviation: HR, hazard ratio; 95%CI, 95% confidence interval; CAD, coronary artery disease; MACE, major adverse cardiac events.

\*Per 1 standard deviation of BMI variability

Model 1 adjusted for age, sex, mean BMI, diabetes, smoking history, high-density lipoprotein, hypertension, total cholesterol level and estimated glomerular filtration rate.

Model 2= model 1 adjusted for BMI PRS

Model 3= model 1 adjusted for physical activity

**Supplemental eTable 4. Sex-Specific Associations Between Body Mass index (BMI) Variability and Adverse Cardiovascular Events from the UK Biobank**

<b>Outcome</b>	<b>HR (95%CI) *</b>	<b>P</b>
<b>Male</b>		
<b>Incident CAD</b>	1.01 (0.99-1.04)	0.43
<b>Acute Ischemic Stroke</b>	1.04 (0.99-1.10)	0.12
<b>Cardiovascular Death</b>	1.07 (1.02-1.12)	0.002
<b>MACE</b>	1.02 (0.99-1.05)	0.14
<b>Female</b>		
<b>Incident CAD</b>	1.03 (0.99-1.07)	0.19
<b>Acute Ischemic Stroke</b>	0.99 (0.92-1.06)	0.69
<b>Cardiovascular Death</b>	1.10 (1.03-1.11)	0.002
<b>MACE</b>	1.02 (0.98-1.05)	0.41

Abbreviation: HR, hazard ratio; 95%CI, 95% confidence interval; CAD, coronary artery disease; MACE, major adverse cardiac events.

\*Per 1 standard deviation of BMI variability

Model adjusted for age, sex, mean BMI, diabetes, smoking history, high-density lipoprotein, hypertension, total cholesterol level and estimated glomerular filtration rate.

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