

**Supplementary Table 1. Baseline demographic and clinical characteristics by the psoas muscle density categories**

	<i>Z</i> ≤-1 (N=116)	-1< <i>Z</i> ≤1 (N=623)	<i>Z</i> >1 (N=100)	<i>p</i> -value ordinal*	<i>P</i> -value ≤-1 vs. >-1‡
Age, years	65.9 (8.5)	62.5 (8.7)	57.7 (8.6)	0.15	<0.001
Female	83 (71.6)	303 (48.6)	41 (41.0)	0.15	<0.001
Body mass index, mean (SD) [kg/m <sup>2</sup> ]	32.1 (6.3)	32.0 (6.1)	32.5 (5.4)	0.54	0.73
Smoking, current or former	68 (58.6)	373 (60.2)	58 (58.0)	0.63	0.83
Diabetes duration at enrollment, years	10.3 (6.6)	10.3 (7.2)	9.2 (7.0)	0.33	0.73
Angina	23 (19.8)	111 (17.8)	12 (12.0)	0.42	0.67
Heart attack	30 (26.1)	130 (21.0)	21 (21.2)	0.46	0.34
Coronary artery bypass surgery	18 (15.7)	101 (16.2)	10 (10.2)	0.20	0.69
Coronary angioplasty	21 (18.4)	106 (17.2)	17 (17.0)	0.86	0.98
Stroke	14 (12.3)	62 (10.1)	3 (3.0)	0.22	0.22
Carotid endarterectomy	6 (5.3)	15 (2.4)	0 (0.0)	0.97	0.12
Hypertension	101 (87.1)	555 (89.1)	83 (83.0)	0.12	0.61
Systolic blood pressure, mmHg	140.6 (17.9)	139.7 (18.3)	133.9 (16.2)	0.06	0.60
Diastolic blood pressure, mmHg	70.3 (10.5)	72.5 (10.0)	74.1 (9.5)	0.90	0.02
ACEi/ARB use	66 (56.9)	368 (59.1)	57 (57.0)	0.58	0.36
Insulin use	22 (20.6)	147 (24.9)	17 (18.7)	0.13	0.53
Oral antidiabetic medication	97 (83.6)	489 (78.5)	79 (79.0)	0.42	0.31
Aspirin use	67 (57.8)	375 (60.8)	63 (64.3)	0.89	0.59
Statin use	54 (46.6)	275 (44.3)	41 (41.0)	0.84	0.66

\* The outcome is the three levels of the psoas muscle density. The ordinal logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.

‡ The outcome is the psoas muscle density categories (*Z* ≤ -1 vs. *Z* > -1). The logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.

**Supplementary Table 2. Baseline biochemical characteristics by the psoas muscle density categories**

	<i>Z</i> ≤-1 (N=116)	-1< <i>Z</i> ≤1 (N=623)	<i>Z</i> >1 (N=100)	<i>p</i> -value ordinal*	<i>P</i> -value ≤-1 vs. >-1‡
Hemoglobin A1c, %	7.4 (1.7)	7.5 (1.6)	7.5 (1.6)	0.80	0.44
Fasting glucose, mg/dl	142.2 (52.8)	147.9 (55.9)	143.6 (55.6)	0.29	0.52
Serum creatinine, mg/dl	1.1 (0.5)	1.1 (0.3)	1.1 (0.2)	0.56	0.30
Blood urea nitrogen, mg/dl	20.0 (14.1)	18.4 (7.1)	17.3 (5.5)	0.87	0.04
CKD-EPI eGFR, ml/min/1.73m <sup>2</sup>	61.6 (19.7)	65.1 (16.5)	72.5 (17.6)	0.12	0.02
Urine albumin to creatinine ratio, mg/g	97.6 (272.4)	130.6 (631.8)	51.2 (137.2)	0.10	0.65
High density lipoprotein cholesterol, mg/dl	43.3 (13.2)	42.7 (12.2)	39.8 (8.7)	0.21	0.44
Low density lipoprotein cholesterol, mg/dl	103.6 (34.6)	102.3 (32.1)	104.0 (32.9)	0.59	0.58
Triglycerides, mg/dl	214.1 (122.4)	204.0 (131.8)	204.1 (110.6)	0.64	0.11
Coronary artery CP mass, mg Ca <sup>+</sup>	1598 (2878)	1933 (3525)	1556 (2997)	0.20	0.38
Coronary artery CP >10 mg Ca <sup>+</sup>	102 (90.3)	539 (87.5)	81 (81.0)	0.38	0.38
Carotid artery CP mass, mg Ca <sup>+</sup>	306.5 (557.0)	366.0 (733.8)	182.2 (373.0)	0.01	0.43
Carotid artery CP >10 mg Ca <sup>+</sup>	69 (63.3)	407 (66.3)	49 (49.5)	0.005	0.56
Aorta CP mass, mg Ca <sup>+</sup>	11882 (14564)	12591 (17126)	8889 (12277)	0.08	0.64
Aorta CP >10 mg Ca <sup>+</sup>	87 (96.7)	488 (94.9)	66 (89.2)	0.24	0.38
Vascular beds with CP, n	2.2 (0.9)	2.3 (0.8)	2.0 (1.0)	0.002	0.53

\* The outcome is the three levels of the psoas muscle density. The ordinal logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.

‡ The outcome is the psoas muscle density categories (*Z* ≤ -1 vs. *Z* > -1). The logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.

**Supplementary Table 3. Baseline demographic and clinical characteristics by the psoas muscle index categories**

	<i>Z</i> ≤ -1 (N=116)	-1 < <i>Z</i> ≤ 1 (N=594)	<i>Z</i> > 1 (N=129)	<i>p</i> -value ordinal*	<i>P</i> -value ≤ -1 vs. > -1 <sup>‡</sup>
Age, years	64.9 (10.1)	62.6 (8.5)	59.2 (8.7)	0.11	0.004
Female	96 (82.8)	321 (54.0)	10 (7.8)	<0.001	<0.001
Body mass index, mean (SD) [kg/m <sup>2</sup> ]	29.4 (6.1)	32.2 (6.0)	34.1 (5.4)	0.72	<0.001
Smoking, current or former	57 (49.1)	354 (59.9)	88 (68.2)	0.74	0.02
Diabetes duration at enrollment, years	11.5 (8.1)	10.1 (6.8)	9.2 (7.0)	0.92	0.04
Angina	15 (12.9)	114 (19.2)	17 (13.2)	0.03	0.17
Heart attack	20 (17.2)	133 (22.6)	28 (21.7)	0.42	0.20
Coronary artery bypass surgery	16 (13.8)	93 (15.7)	20 (15.6)	0.77	0.61
Coronary angioplasty	19 (16.4)	105 (17.9)	20 (15.6)	0.50	0.80
Stroke	14 (12.2)	55 (9.4)	10 (7.8)	1.00	0.31
Carotid endarterectomy	3 (2.6)	17 (2.9)	1 (0.8)	0.26	0.99
Hypertension	101 (87.1)	529 (89.1)	109 (84.5)	0.12	0.74
Systolic blood pressure, mmHg	138.4 (16.9)	138.8 (17.7)	141.1 (20.5)	0.35	0.68
Diastolic blood pressure, mmHg	69.5 (9.9)	72.1 (9.7)	76.1 (10.8)	0.06	<0.001
ACEi/ARB use	63 (54.3)	350 (58.9)	78 (60.5)	0.84	0.34
Insulin use	25 (22.9)	130 (23.1)	31 (26.3)	0.58	0.93
Oral antidiabetic medication	91 (78.4)	474 (79.8)	100 (77.5)	0.52	0.80
Aspirin use	68 (59.1)	363 (61.6)	74 (58.3)	0.41	0.69
Statin use	50 (43.1)	263 (44.4)	57 (44.5)	0.92	0.82

\* The outcome is the three levels of the psoas muscle index. The ordinal logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.  
<sup>‡</sup> The outcome is the psoas muscle index categories (*Z* ≤ -1 vs. *Z* > -1). The logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.

**Supplementary Table 4. Baseline biochemical characteristics by the psoas muscle index categories**

	<b>Z<math>\leq</math>-1 (N=116)</b>	<b>-1&lt;Z<math>\leq</math>1 (N=594)</b>	<b>Z&gt;1 (N=129)</b>	<b>p-value ordinal*</b>	<b>P-value <math>\leq</math>-1 vs. &gt;-1<math>^{\ddagger}</math></b>
Hemoglobin A1c, %	7.4 (1.8)	7.5 (1.6)	7.6 (1.4)	0.73	0.43
Fasting glucose, mg/dl	145.9 (57.0)	147.4 (56.7)	143.5 (47.5)	0.45	0.88
Serum creatinine, mg/dl	1.0 (0.3)	1.1 (0.3)	1.2 (0.3)	0.33	0.04
Blood urea nitrogen, mg/dl	19.3 (9.8)	18.5 (8.3)	17.5 (6.4)	0.57	0.30
CKD-EPI eGFR, ml/min/1.73m <sup>2</sup>	63.9 (19.2)	64.9 (16.7)	69.8 (18.0)	0.06	0.31
Urine albumin to creatinine ratio, mg/g	109.5 (321.9)	118.6 (621.8)	113.3 (379.2)	0.84	0.79
High density lipoprotein cholesterol, mg/dl	45.9 (14.4)	43.1 (11.9)	36.5 (7.6)	0.002	0.001
Low density lipoprotein cholesterol, mg/dl	106.8 (34.0)	102.1 (31.8)	101.7 (34.2)	0.55	0.16
Triglycerides, mg/dl	209.5 (137.7)	199.3 (117.4)	228.9 (159.8)	0.03	0.74
Coronary artery CP mass, mg Ca <sup>+</sup>	1509 (2429)	1813 (3520)	2270 (3454)	0.48	0.22
Coronary artery CP >10 mg Ca <sup>+</sup>	97 (85.1)	510 (86.9)	115 (89.8)	0.63	0.52
Carotid artery CP mass, mg Ca <sup>+</sup>	337.9 (612.5)	332.7 (676.6)	349.0 (755.1)	0.82	0.95
Carotid artery CP >10 mg Ca <sup>+</sup>	74 (66.1)	371 (63.9)	80 (62.0)	0.92	0.56
Aorta CP mass, mg Ca <sup>+</sup>	12937 (17284)	12082 (15978)	11443 (17290)	0.93	0.57
Aorta CP >10 mg Ca <sup>+</sup>	88 (95.7)	446 (94.1)	107 (95.5)	0.46	0.59
Vascular beds with CP, n	2.2 (0.9)	2.2 (0.9)	2.3 (0.8)	0.28	0.83

\* The outcome is the three levels of the psoas muscle index. The ordinal logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.  
 $\ddagger$  The outcome is the psoas muscle index categories ( $Z \leq -1$  vs.  $Z > -1$ ). The logistic regression with generalized estimating equations is used to calculate the association between characteristics and the outcome measure.