

## **SUPPLEMENTAL MATERIAL**

**Supplemental Table I** Baseline Demographic and Clinical Characteristics of Subjects by TG/HDL-C Ratio Quintile and TC/HDL-C Ratio Quintile, Respectively

	Quintile of TG/HDL-C Ratio					<i>P</i>	Quintile of TC/HDL-C Ratio					<i>P</i>
	1 (n=677)	2 (n=678)	3 (n=676)	4 (n=677)	5 (n=677)		1 (n=689)	2 (n=688)	3 (n=689)	4 (n=686)	5 (n=688)	
Age, year	68.4±11.1	67.0±10.7	<sup>a</sup> 66.5±10.3	65.2±10.7	<sup>b</sup> 64.2±10.6	<0.001	68.4±10.5	67.2±10.5	<sup>a</sup> 66.0±11.2	65.5±10.7	<sup>b</sup> 64.1±10.5	<0.001
Male sex	368 (54.4)	403 (59.4)	426 (63.0)	418 (61.7)	492 (72.7)	<0.001	333 (48.3)	400 (58.1)	430 (62.4)	477 (69.5)	500 (72.7)	<0.001
Non-white	180 (26.6)	158 (23.3)	127 (18.8)	124 (18.3)	104 (15.4)	<0.001	155 (22.5)	131 (19.0)	151 (21.9)	138 (20.1)	125 (18.2)	0.217
Body mass index, kg/m <sup>2</sup>	26.3±5.1	27.9±5.3	<sup>b</sup> 28.3±5.5	29.3±6.6	<sup>a</sup> 29.7±5.4	<0.001	26.8±5.4	<sup>b</sup> 27.9±5.3	28.8±6.3	28.7±5.4	<sup>a</sup> 29.4±5.7	<0.001
Hypertension	545 (80.5)	569 (83.9)	568 (84.0)	587 (86.7)	601 (88.8)	<0.001	572 (83.0)	583 (84.7)	574 (83.3)	594 (86.6)	588 (85.5)	0.320
Systolic BP, mm Hg	139.8±18.7	141.3±18.6	140.8±19.0	140.1±18.4	140.7±18.4	0.590	139.7±18.4	141.3±18.9	140.5±18.9	141.2±18.5	140.5±18.6	0.514
Diastolic BP, mm Hg	77.4±10.1	78.6±10.1	77.0±10.0	78.1±10.0	77.6±10.1	0.035	77.2±9.8	77.9±10.3	77.9±10.1	78.0±10.3	78.1±10.0	0.517
Diabetes mellitus	119 (17.6)	146 (21.5)	186 (27.5)	232 (34.3)	312 (46.1)	<0.001	155 (22.5)	174 (25.3)	202 (29.3)	219 (31.9)	261 (37.9)	<0.001
Lipid												
LDL-C, mg/dL	116.0±36.3	123.6±35.7	124.1±38.8	<sup>a</sup> 126.7±41.3	<sup>b</sup> 119.0±48.6	<0.001	95.3±29.6	113.9±31.6	122.3±33.5	<sup>b</sup> 131.5±37.4	<sup>a</sup> 146.8±48.7	<0.001
TG, mg/dL	81.8±29.0	117.0±26.5	148.2±35.2	<sup>b</sup> 194.8±44.4	<sup>a</sup> 331.0±277.9	<0.001	108.6±51.5	136.4±64.3	162.7±76.5	<sup>b</sup> 193.4±90.6	<sup>a</sup> 272.7±288.8	<0.001
HDL-C, mg/dL	61.7±20.0	49.1±11.0	43.5±10.0	<sup>a</sup> 39.4±8.2	<sup>b</sup> 33.5±7.5	<0.001	—	—	—	—	—	
Homocysteine, μmol/L	13.9±6.4	14.1±6.2	13.6±4.0	14.1±5.5	14.3±5.7	0.169	14.1±7.7	13.7±4.6	14.0±5.2	14.3±5.7	14.1±4.7	0.272
Days from stroke to randomization	35.7±35.0	36.9±36.1	38.1±33.1	34.4±33.4	36.9±33.9	0.355	37.8±34.5	37.6±33.5	37.2±35.2	34.7±33.5	34.9±34.6	0.259
NIHSS score*	1 (0–2)	1 (0–2)	1 (0–3)	1 (0–2)	1 (0–3)	0.288	<sup>b</sup> 1 (0–2)	1 (0–2)	1 (0–2)	1 (0–3)	<sup>a</sup> 1 (0–3)	0.018
History												
Current Smoking	111 (16.4)	106 (15.6)	96 (14.2)	112 (16.5)	143 (21.1)	0.011	105 (15.3)	112 (16.3)	99 (14.4)	108 (15.7)	155 (22.5)	<0.001
Prior stroke†	160 (23.6)	150 (22.1)	145 (21.5)	143 (21.1)	183 (27.0)	0.065	151 (21.9)	156 (22.7)	176 (25.5)	139 (20.3)	171 (24.9)	0.124

Angina‡	47 (6.9)	44 (6.5)	54 (8.0)	52 (7.7)	51 (7.6)	0.831	47 (6.8)	54 (7.8)	48 (7.0)	47 (6.9)	59 (8.6)	0.657
Any cardiac disease§	143 (21.1)	145 (21.4)	168 (24.9)	162 (23.9)	201 (29.7)	0.001	162 (23.5)	166 (24.1)	159 (23.1)	167 (24.3)	176 (25.6)	0.849
Carotid endarterectomy	41 (6.1)	44 (6.5)	52 (7.7)	47 (6.9)	45 (6.6)	0.811	44 (6.4)	46 (6.7)	47 (6.8)	48 (7.0)	48 (7.0)	0.992
Medication												
Antihypertensive use¶	515 (76.1)	548 (80.8)	553 (81.8)	564 (83.3)	568 (83.9)	0.002	547 (79.4)	560 (81.4)	558 (81.0)	571 (83.2)	560 (81.4)	0.494
Lipid modifier use	288 (42.5)	342 (50.4)	388 (57.4)	402 (59.4)	444 (65.6)	<0.001	322 (46.7)	351 (51.0)	363 (52.7)	405 (59.0)	448 (65.1)	<0.001
Antithrombotic use	626 (92.5)	636 (93.8)	636 (94.1)	634 (93.6)	635 (93.8)	0.775	646 (93.8)	639 (92.9)	657 (95.4)	631 (92.0)	646 (93.9)	0.124
High-dose B vitamin	330 (48.7)	346 (51.0)	332 (49.1)	320 (47.3)	348 (51.4)	0.531	344 (49.9)	331 (48.1)	367 (53.3)	348 (50.7)	343 (49.9)	0.423

Values are numbers (percentages) of patients. \* Median (interquartile range).  $a > b P < 0.05$  by Dunnett *post hoc* tests. Ranges for TG/HDL-C ratio quintile were 1<sup>st</sup>;  $\leq 1.93$ , 2<sup>nd</sup>; 1.94–2.86, 3<sup>rd</sup>; 2.87–4.05, 4<sup>th</sup>; 4.06–6.21, and 5<sup>th</sup>;  $\geq 6.22$ . Ranges for TC/HDL-C ratio quintile were 1<sup>st</sup>;  $\leq 3.50$ , 2<sup>nd</sup>; 3.51–4.20, 3<sup>rd</sup>; 4.21–4.98, 4<sup>th</sup>; 4.99–5.97, and 5<sup>th</sup>;  $\geq 5.98$ . † Before VISIP qualifying stroke. ‡ Determined by the Rose questionnaire.<sup>1</sup> § Defined as history of myocardial infarction, congestive heart failure, coronary angioplasty, or coronary artery bypass graft surgery. ¶ Includes angiotensin-converting enzyme inhibitors, angiotensin II receptor blocker, peripheral sympatholytic, central sympatholytic,  $\beta$ -blockers,  $\alpha$ -blockers,  $\alpha$ - and  $\beta$ -blockers, diltiazem or verapamil, other calcium channel blocker, loop active diuretic, thiazide diuretic, and potassium-sparing diuretic. BP indicates blood pressure; NIHSS, qualifying stroke National Institutes of Health Stroke Scale; TG, triglycerides; HDL-C, high-density lipoprotein cholesterol; TC, total cholesterol; LDL-C, low-density lipoprotein cholesterol.

## REFERENCE

1. Rose GA. The diagnosis of ischaemic heart pain and intermittent claudication in field surveys. *Bull World Health Organ.* 1962;27:645–658.

**Supplemental Table II** Baseline Demographic and Clinical Characteristics of Subjects by LDL-C/HDL-C Ratio Quintile and non-HDL-C Quintile, Respectively

	Quintile of LDL-C/HDL-C Ratio					<i>P</i>	Quintile of non-HDL-C					<i>P</i>
	1 (n=686)	2 (n=668)	3 (n=677)	4 (n=677)	5 (n=675)		1 (n=709)	2 (n=682)	3 (n=695)	4 (n=675)	5 (n=679)	
Age, year	67.7±10.6	67.5±10.3	<sup>a</sup> 66.0±11.3	65.5±11.0	<sup>b</sup> 64.6±10.4	<0.001	67.7±10.6	66.7±10.8	66.9±10.7	<sup>a</sup> 65.9±10.7	<sup>b</sup> 64.0±10.8	<0.001
Male sex	336 (49.0)	391 (58.5)	423 (62.5)	484 (71.5)	471 (69.8)	<0.001	460 (64.9)	447 (65.5)	441 (63.5)	410 (60.7)	382 (56.3)	0.002
Non-white	154 (22.4)	125 (18.7)	144 (21.3)	127 (18.8)	142 (21.0)	0.338	167 (23.6)	125 (18.3)	133 (19.1)	131 (19.4)	144 (21.2)	0.111
Body mass index, kg/m <sup>2</sup>	27.2±5.7	<sup>b</sup> 27.9±5.3	29.0±6.4	28.6±5.0	<sup>a</sup> 28.8±5.8	<0.001	<sup>b</sup> 27.5±5.3	<sup>a</sup> 28.3±5.8	28.3±5.7	28.5±5.8	<sup>a</sup> 29.0±5.6	<0.001
Hypertension	577 (84.1)	564 (84.4)	580 (85.7)	582 (86.0)	566 (83.9)	0.752	606 (85.4)	594 (87.1)	587 (84.5)	555 (82.2)	569 (83.8)	0.138
Systolic BP, mm Hg	139.0±18.0	141.1±19.0	141.0±18.7	140.5±18.5	141.1±18.9	0.175	<sup>b</sup> 138.7±18.4	140.8±18.8	140.6±19.5	141.2±17.8	<sup>a</sup> 141.9±18.6	0.021
Diastolic BP, mm Hg	76.7±9.9	77.6±10.0	<sup>a</sup> 78.0±10.3	77.9±10.1	<sup>b</sup> 78.5±10.0	0.013	<sup>b</sup> 76.8±9.9	77.7±10.1	78.1±10.4	78.0±10.1	<sup>a</sup> 78.6±9.9	0.012
Diabetes mellitus	189 (27.6)	194 (29.0)	189 (27.9)	211 (31.2)	210 (31.1)	0.425	222 (31.3)	202 (29.6)	185 (26.6)	186 (27.6)	216 (31.8)	0.143
Lipid												
TG, mg/dL	151.2±128.9	155.2±101.8	169.2±91.2	<sup>b</sup> 186.5±107.7	<sup>a</sup> 201.5±101.9	<0.001	—	—	—	—	—	
HDL-C, mg/dL	—	—	—	—	—		<sup>a</sup> 48.8±21.5	45.0±14.1	45.0±13.2	44.3±13.3	<sup>b</sup> 44.0±12.8	<0.001
Homocysteine, μmol/L	14.1±7.5	13.9±6.6	14.0±4.5	14.1±4.4	14.0±4.4	0.932	14.1±5.1	14.2±5.7	14.0±5.6	14.1±7.1	13.8±4.8	0.796
Days from stroke to randomization	38.9±33.8	37.1±34.0	36.8±35.0	35.6±33.5	33.8±35.2	0.088	36.1±34.2	38.4±34.1	37.1±36.0	34.3±32.9	36.1±34.1	0.263
NIHSS score*	1 (0–2)	1 (0–2)	<sup>b</sup> 1 (0–2)	1 (0–3)	<sup>a</sup> 1 (0–3)	0.005	1 (0–2)	1 (0–2)	1 (0–3)	1 (0–2)	1 (0–3)	0.239
History												
Current Smoking	118 (17.2)	92 (13.8)	104 (15.4)	105 (15.5)	147 (21.8)	0.001	116 (16.4)	109 (16.0)	101 (14.5)	106 (15.7)	147 (21.6)	0.005
Prior stroke†	160 (23.3)	167 (25.0)	162 (23.9)	151 (22.3)	140 (20.7)	0.399	167 (23.6)	162 (23.8)	164 (23.6)	165 (24.4)	135 (19.9)	0.287

Angina‡	47 (6.9)	51 (7.6)	48 (7.1)	49 (7.3)	53 (7.9)	0.957	59 (8.3)	47 (6.9)	50 (7.2)	43 (6.4)	56 (8.3)	0.568
Any cardiac disease§	176 (25.7)	164 (24.6)	148 (21.9)	162 (23.9)	170 (25.2)	0.519	237 (33.4)	166 (24.3)	156 (22.4)	133 (19.7)	138 (20.3)	<0.001
Carotid endarterectomy	45 (6.6)	44 (6.6)	44 (6.5)	42 (6.2)	54 (8.0)	0.714	51 (7.2)	44 (6.5)	48 (6.9)	43 (6.4)	47 (6.9)	0.971
Medication												
Antihypertensive use¶	552 (80.5)	539 (80.7)	557 (82.3)	564 (83.3)	535 (79.3)	0.342	590 (83.2)	572 (83.9)	560 (80.6)	535 (79.3)	539 (79.4)	0.078
Lipid modifier use	345 (50.3)	343 (51.3)	346 (51.1)	385 (56.9)	441 (65.3)	<0.001	356 (50.2)	338 (49.6)	351 (50.5)	397 (58.8)	447 (65.8)	<0.001
Antithrombotic use	641 (93.4)	620 (92.8)	637 (94.1)	632 (93.4)	634 (93.9)	0.888	663 (93.5)	638 (93.5)	658 (94.7)	633 (93.8)	627 (92.3)	0.530
High-dose B vitamin	346 (50.4)	338 (50.6)	331 (48.9)	325 (48.0)	336 (49.8)	0.864	360 (50.8)	353 (51.8)	337 (48.5)	329 (48.7)	328 (48.3)	0.616

Values are numbers (percentages) of patients. \* Median (interquartile range).  $a > b$   $P < 0.05$  by Dunnett *post hoc* tests. Ranges for LDL-C/HDL-C ratio quintile were 1<sup>st</sup>;  $\leq 1.92$ , 2<sup>nd</sup>; 1.93–2.48, 3<sup>rd</sup>; 2.49–3.04, 4<sup>th</sup>; 3.05–3.80, and 5<sup>th</sup>;  $\geq 3.81$ . Ranges for non-HDL-C quintile were 1<sup>st</sup>;  $\leq 120$ , 2<sup>nd</sup>; 121–143, 3<sup>rd</sup>; 144–164, 4<sup>th</sup>; 165–190, and 5<sup>th</sup>;  $\geq 191$ . † Before VISP qualifying stroke. ‡ Determined by the Rose questionnaire.<sup>1</sup> § Defined as history of myocardial infarction, congestive heart failure, coronary angioplasty, or coronary artery bypass graft surgery. ¶ Includes angiotensin-converting enzyme inhibitors, angiotensin II receptor blocker, peripheral sympatholytic, central sympatholytic,  $\beta$ -blockers,  $\alpha$ -blockers,  $\alpha$ - and  $\beta$ -blockers, diltiazem or verapamil, other calcium channel blocker, loop active diuretic, thiazide diuretic, and potassium-sparing diuretic. BP indicates blood pressure; NIHSS, qualifying stroke National Institutes of Health Stroke Scale; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; TG, triglycerides.

## REFERENCE

1. Rose GA. The diagnosis of ischaemic heart pain and intermittent claudication in field surveys. *Bull World Health Organ.* 1962;27:645–658.

**Supplemental Table III.** Adjusted Hazard Ratios (AHRs) of Covariates Included in the Adjusted Risk Models of Vascular Outcomes by TG/HDL-C Ratio Quintile and TC/HDL-C Ratio Quintile

	Outcome	AHR (95% CI)	<i>P</i>	AHR (95% CI)	<i>P</i>
		<b>TG/HDL-C Ratio</b>		<b>TC/HDL-C Ratio</b>	
Age (1-yr difference)	Stroke	1.01 (1.00–1.03)	0.030		
	Stroke/CHD/vascular death	1.02 (1.01–1.03)	<0.001	1.03 (1.02–1.04)	<0.001
Male	Stroke	—	0.538		
	Stroke/CHD/vascular death	1.21 (1.01–1.45)	0.042	1.21 (1.00–1.45)	0.047
Hypertension	Stroke	—	0.074		
	Stroke/CHD/vascular death	2.15 (1.43–3.22)	<0.001		
Diabetes mellitus	Stroke	1.31 (1.00–1.70)	0.049		
	Stroke/CHD/vascular death	1.49 (1.24–1.80)	<0.001	1.67 (1.39–2.00)	<0.001
Smoking	Stroke	—	0.189		
	Stroke/CHD/vascular death	1.32 (1.05–1.66)	0.020	1.31 (1.04–1.64)	0.023
Prior stroke history*	Stroke	1.92 (1.50–2.47)	<0.001		
	Stroke/CHD/vascular death	1.61 (1.35–1.93)	<0.001		
Any cardiac disease†	Stroke	—	0.876		
	Stroke/CHD/vascular death	1.44 (1.20–1.73)	<0.001		
Antihypertensive use‡	Stroke	—	0.448		
	Stroke/CHD/vascular death	0.68 (0.49–0.94)	0.020		
Lipid modifier use	Stroke	0.74 (0.58–0.94)	0.015		
	Stroke/CHD/vascular death	0.83 (0.70–0.99)	0.035	—	0.103
NIHSS score	Stroke/CHD/vascular death			1.06 (1.02–1.10)	0.002
TG	Stroke/CHD/vascular death			—	0.664
LDL	Stroke	—	0.877		
	Stroke/CHD/vascular death	—	0.146	—	0.651
Non-white	Stroke	—	0.121		
	Stroke/CHD/vascular death	—	0.471		
Body mass index	Stroke	—	0.579		
	Stroke/CHD/vascular death	—	0.816	—	0.838
Days from stroke to randomization	Stroke/CHD/vascular death			—	0.201

\* Before VISP qualifying stroke. † Defined as history of myocardial infarction, congestive heart failure, coronary angioplasty, or coronary artery bypass graft surgery. ‡ Includes angiotensin-converting enzyme inhibitors, angiotensin II receptor blocker, peripheral sympatholytic, central sympatholytic,  $\beta$ -blockers,  $\alpha$ -blockers,  $\alpha$ - and  $\beta$ -blockers, diltiazem or verapamil, other calcium channel blocker, loop active diuretic, thiazide diuretic, and potassium-sparing diuretic. CHD, coronary heart disease; NIHSS, National Institutes of Health Stroke Scale; TG indicates triglycerides; HDL-C, high-density lipoprotein cholesterol; TC, total cholesterol; LDL-C, low-density lipoprotein cholesterol.