

Supplementary Appendix

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

Supplement to: Taylor AJ, Villines TC, Stanek EJ, et al. Extended-release niacin or ezetimibe and carotid intima-media thickness. *N Engl J Med* 2009;361:2113-22. DOI: 10.1056/NEJMoa0907569.

Supplemental Table 1. Baseline characteristics of 363 patients randomly assigned to either extended-release niacin or ezetimibe

	Ezetimibe N = 176	Niacin N = 187	P
Male gender (n, %)	144 (81.8)	147 (78.6)	0.44
Age, mean \pm SD	65 \pm 11	65 \pm 10	0.63
Diabetes mellitus (n, %)	72 (40.9)	73 (39.0)	0.71
Hypertension (n, %)	154 (87.5)	163 (87.2)	0.92
Tobacco use (n, %)	9 (5.1)	13 (7.0)	0.68
Family history of coronary heart disease (n, %)	65 (36.9)	88 (47.3)	0.05
History of coronary heart disease (n, %)			
Angina with documented ischemia	65 (36.9)	58 (31.2)	0.25
Angiographic coronary disease	109 (61.9)	116 (62.0)	0.98
Myocardial infarction	59 (33.5)	54 (28.9)	0.34
Percutaneous coronary revascularization	70 (39.8)	58 (31.0)	0.08
Coronary bypass surgery	44 (25.0)	48 (25.7)	0.88
Medications (n, %)			
Beta blocker	125 (71.0)	125 (67.6)	0.48
Aspirin (baseline and in-trial)	165 (93.8)	176 (94.1)	0.88
Clopidogrel	32 (24.8)	30 (27.0)	0.70

Angiotensin converting enzyme inhibitor	100 (56.8)	96 (51.9)	0.35
Statin therapy (n, %)			
Simvastatin	70 (39.8)	78 (41.7)	0.18
Atorvastatin	96 (54.5)	88 (47.1)	
Pravastatin	5 (2.8)	9 (4.8)	
Rosuvastatin	5 (2.8)	8 (4.3)	
Lovastatin	0 (0)	4 (2.1)	
Mean daily statin dose (mg)	42 ± 24	42 ± 24	0.95
Duration of statin use (years)	6.5 ± 5.6	6.1 ± 4.9	0.40
BMI kg/m ²	30.8 ± 5.6	31.3 ± 6.4	0.43
Waist circumference (cm)	40.9 ± 5.0	41.6 ± 5.9	0.27
Systolic blood pressure (mm Hg)	137 ± 18	134 ± 18	0.08
Diastolic blood pressure (mm Hg)	74 ± 10	75 ± 11	0.82
Total cholesterol (mg/dL)	147.1 ± 28.6	146.7 ± 24.0	0.90
LDL (mg/dL)	83.4 ± 24.6	80.8 ± 21.5	0.28
HDL (mg/dL)	43.0 ± 9.0	41.9 ± 8.1	0.22
Triglycerides (mg/dL)	130.4 ± 69.3	138.27 ± 67.6	0.28
Glucose (mg/dL)	104.2 ± 28.1	104.5 ± 32.4	0.92
High-sensitivity CRP (mg/L)	2.4 ± 2.3	2.0 ± 1.9	0.13

Data shown as mean ± standard deviation, or median (inter-quartile range) as appropriate.

	Baseline		2 Months		8 Months		14 Months	
	Ezetimibe	Niacin	Ezetimibe	Niacin	Ezetimibe	Niacin	Ezetimibe	Niacin
Total Cholesterol	146.6 ± 23.3	143.6 ± 24.0	120.2 ± 20.6	131.0 ± 22.9	122.4 ± 21.5	133.6 ± 25.5	127.8 ± 22.8	136.7 ± 29.3
P value	0.90		0.001		<0.001		0.025	
HDL-C	43.3 ± 8.5	42.5 ± 8.6	42.2 ± 8.5	48.9 ± 10.6	41.1 ± 9.0	50.7 ± 11.6	40.5 ± 7.9	49.9 ± 12.2
P value	0.59		<0.001		<0.001		<0.001	
LDL-C	83.7 ± 19.9	80.5 ± 17.2	60.1 ± 16.1	66.2 ± 18.1	61.6 ± 17.2	67.1 ± 19.5	66.1 ± 18.8	70.5 ± 23.9
P value	0.34		0.013		0.013		0.12	
Triglycerides	122 (87-162)	126 (94-163)	100 (78-140)	88 (69-125)	107 (78-153)	88 (66-123)	113 (84-150)	90 (69-138)
P value	0.56		0.033		0.019		0.018	
Glucose	104.0 ± 27.8	104.1 ± 18.9	109.6 ± 39.5	109.1 ± 23.9	108.2 ± 27.7	107.6 ± 28.1	110.4 ± 33.4	107.4 ± 24.9
P value	0.20		0.51		0.53		0.34	
C-reactive protein	1.9 (0.8-3.6)	1.3 (0.8-4.0)	1.2 (0.6-3.0)	1.1 (0.6-3.1)	1.3 (0.6-2.9)	1.1 (0.5-2.4)	0.6 (0.6-3.1)	1.0 (0.4-2.9)
P value	0.51		0.093		0.067		0.42	

Values in mg/dL except for C-reactive protein (mg/L). Data shown as mean ± standard deviation or median (inter-quartile range).

Supplemental Table 3. Major cardiovascular events among subjects randomized to either ezetimibe or niacin in ARBITER 6-HALTS

	Ezetimibe N = 165	Niacin N = 160	P
Myocardial infarction	3	1	
Coronary revascularization procedure	3	0	
Cardiovascular death	5	1	
Subjects experiencing a composite clinical cardiovascular endpoint*	9	2	0.04

*Some subjects may have experienced more than one cardiovascular event. This analysis was performed among subjects who did not withdraw from the study or die from a non-cardiovascular cause.

Supplemental Figure Legends

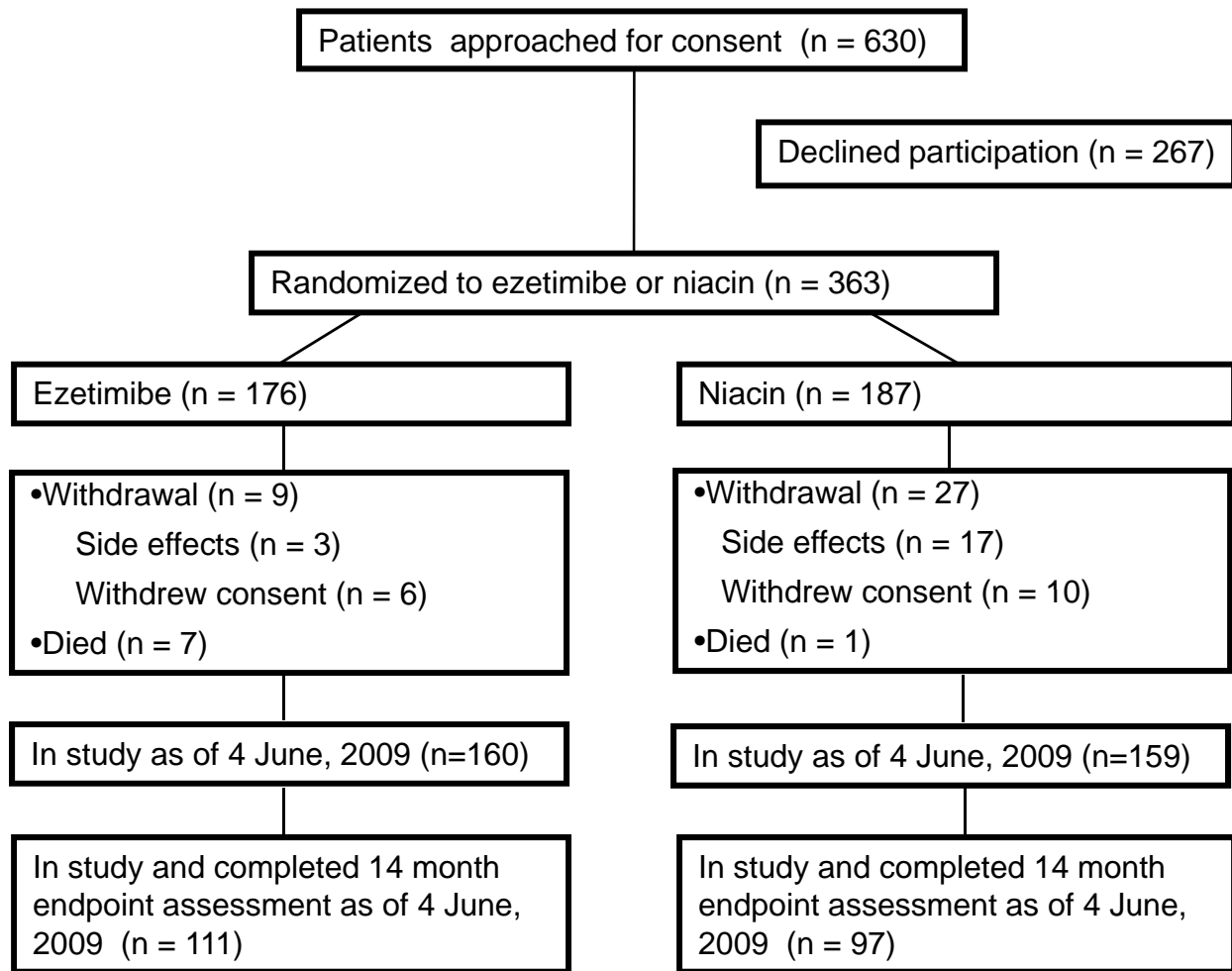
Figure 1. Flow of volunteer research subjects through ARBITER 6-HALTS

Figure 2. Sample image of a quantified, carotid intima media thickness scan using automated border detection in the far wall of the distal common carotid artery.

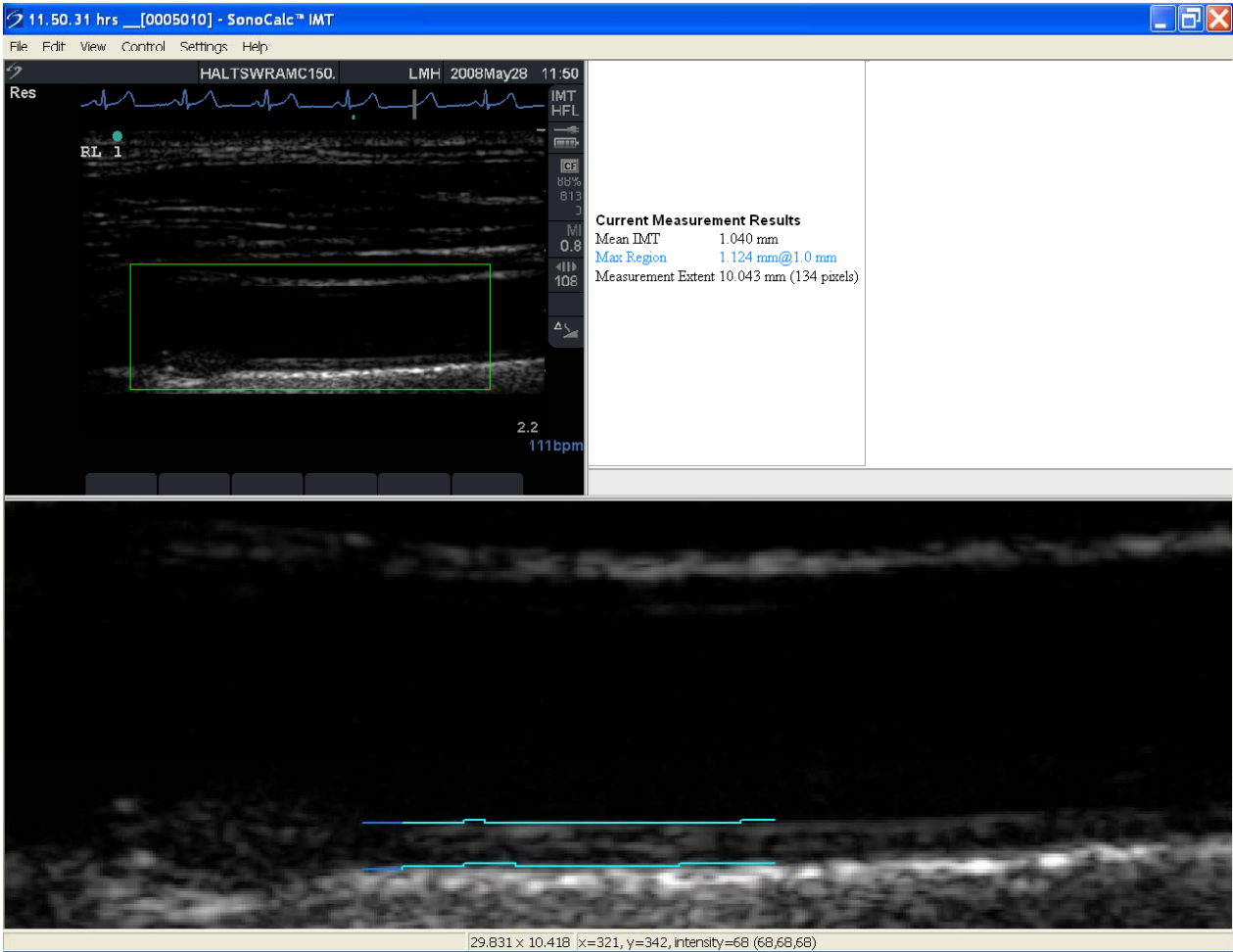
Figure 3. Changes in maximum carotid intima-media thickness over the 14-month study period, according to treatment group. The carotid intima-media thickness is the thickness of the far wall of the bilateral distal common carotid arteries, measured in millimeters. The P value is given for the comparison of repeated measures of the carotid intima-media thickness over the 14-month period. The vertical bars indicate standard errors.

Figure 4. Bivariate regression plot showing the relationship between change in LDL-C and mean carotid intima-media thickness from baseline to 14 months. Data are shown separately for ezetimibe (in blue) and niacin (in green) for the 208 subjects who completed the 14 month carotid intima-media thickness endpoint. The vertical bars indicate the 95% confidence interval.

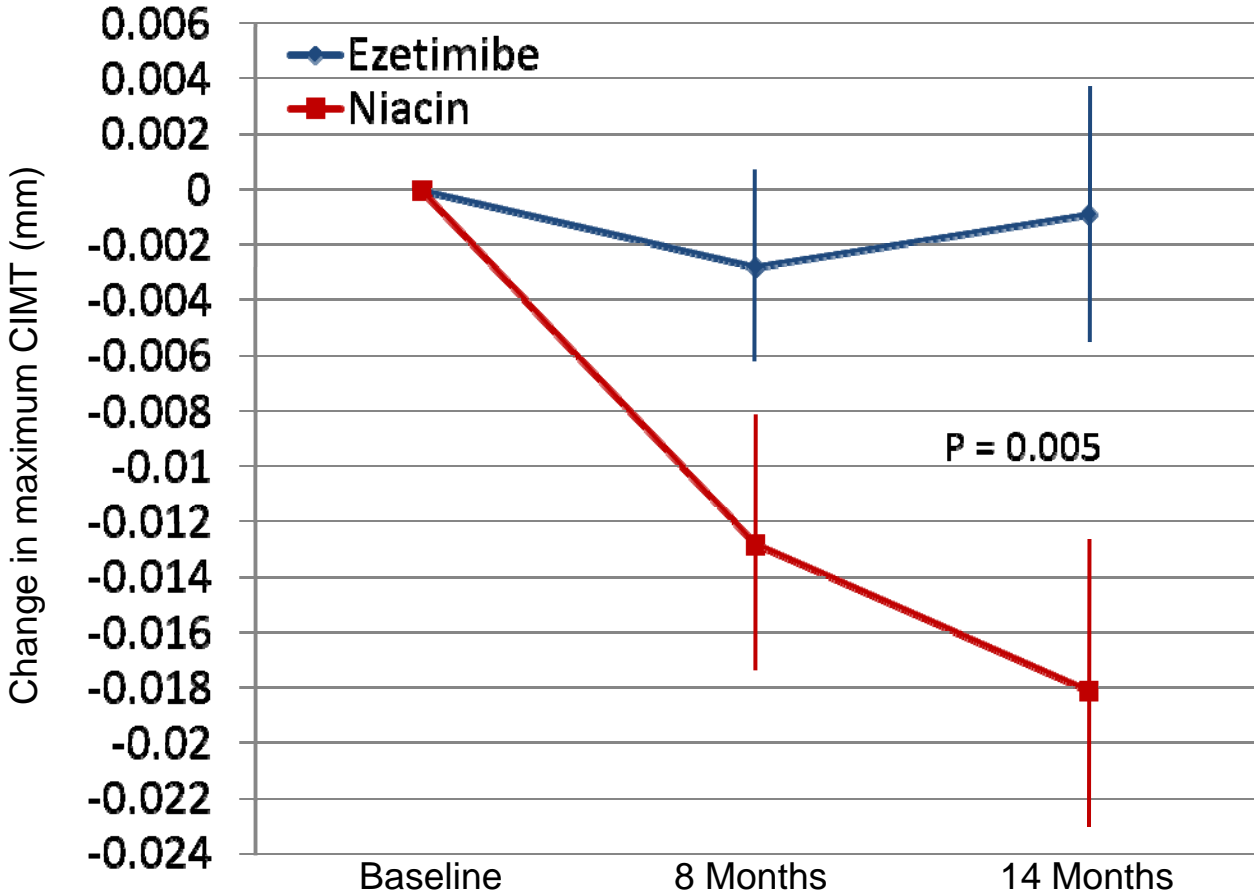
Supplemental Figure 1



Supplemental Figure 2



Supplemental Figure 3



Supplemental Figure 4

