

## Supplementary Data

Table e-1. CAS-to-CEA hazard ratios for the primary and secondary outcome

			BMI <sup>a</sup>				Test for trend
			<20	20-<25	25-<30	≥30	p-value
Stroke or death	Periprocedural period	CAS-to-CEA HR <sup>b</sup> 95% CI	1.55 0.12-20.23	1.25 0.71-2.21	1.26 0.81-1.95	1.37 0.61-3.06	0.15
	Postprocedural period	CAS-to-CEA HR <sup>b</sup> 95% CI	0.96 0.33-2.78	1.01 0.69-1.47	1.01 0.69-1.49	1.34 0.69-2.63	0.61
Ipsilateral stroke	Procedural period	CAS-to-CEA HR <sup>b</sup> 95% CI	1.61 0.12-21.15	1.35 0.69-2.68	1.33 0.81-2.18	2.08 0.72-6.00	0.06
	Postprocedural period	CAS-to-CEA HR <sup>c</sup> 95% CI	NA 0.06-1.32	0.28 1.12-14.47	4.02 0.17-2.37	0.63	0.75

CAS-to-CEA hazard ratios for the primary outcome (stroke or death) in the periprocedural and postprocedural ( $\leq 120$  days vs.  $>120$  days after randomization) period and for the secondary outcome (ipsilateral stroke) in the procedural and postprocedural ( $\leq 30$  days after procedure vs.  $>30$  days after procedure) period.

Abbreviations: BMI=body mass index; CAS=carotid artery stenting; CEA=carotid endarterectomy; HR=hazard ratio; CI=confidence interval; NA=not applicable.

<sup>a</sup> In kilograms per square meter ( $\text{kg}/\text{m}^2$ ).

<sup>b</sup> Adjusted for: source trial, age, sex, smoking (past or current).

<sup>c</sup> Adjusted for: source trial.

**Table e-2.** Stroke or death risk in periprocedural and postprocedural period with BMI classified into six groups

			BMI <sup>a</sup>						Test for trend p-value	
			<18.5	18.5-<20	20-<25	25-<30	30-<35	≥35		
Periprocedural period	CAS	Number	14	17	293	442	156	41	0.34	
		Events (cumulative risk)	1 (7%)	1 (6%)	25 (9%)	43 (10%)	12 (8%)	4 (10%)		
		BMI HR <sup>b</sup>	0.92	0.65	ref	1.19	1.12	1.68		
		95% CI	0.12-6.81	0.09-4.87		0.72-1.95	0.56-2.25	0.57-4.93		
	CEA	Number	7	24	332	486	130	27		0.73
		Events (cumulative risk)	1 (14%)	0 (0)	23 (7%)	39 (8%)	7 (5%)	3 (11%)		
		BMI HR <sup>b</sup>	1.94	NA	ref	1.14	0.75	1.59		
		95% CI	0.25-14.96			0.68-1.92	0.32-1.75	0.48-5.32		
	Total group	Number	21	41	625	928	286	68		0.44
		Events (cumulative risk)	2 (10%)	1 (2%)	48 (8%)	82 (9%)	19 (7%)	7 (10%)		
		BMI HR <sup>b</sup>	1.37	0.30	ref	1.19	0.92	1.49		
		95% CI	0.33-5.68	0.04-2.19		0.83-1.70	0.54-1.58	0.67-3.32		
Postprocedural period	CAS	Number	13	16	261	382	137	36	0.34	
		Events (rate/100 PYs)	5 (11.2)	2 (3.2)	49 (5.5)	48 (4.1)	15 (3.7)	4 (3.9)		
		BMI HR <sup>b</sup>	2.43	0.74	ref	0.76	1.01	1.39		
		95% CI	0.96-6.14	0.18-3.08		0.51-1.13	0.56-1.82	0.49-3.99		
	CEA	Number	6	22	300	436	119	23		0.06
		Events (rate/100 PYs)	1 (3.1)	7 (10.2)	62 (6.2)	56 (4.0)	18 (4.7)	3 (4.2)		
		BMI HR <sup>b</sup>	0.91	1.67	ref	0.68	0.82	0.72		
		95% CI	0.12-6.74	0.76-3.70		0.47-0.98	0.49-1.40	0.23-2.29		
	Total group	Number	19	38	561	818	256	59		0.04
		Events (rate/100 PYs)	6 (7.8)	9 (6.9)	111 (5.9)	104 (4.0)	33 (4.2)	7 (4.0)		
		BMI HR <sup>b</sup>	1.98	1.32	ref	0.72	0.88	0.97		
		95% CI	0.86-4.54	0.66-2.62		0.55-0.94	0.60-1.30	0.45-2.10		

Risk of primary outcome (stroke or death) in periprocedural (≤120 days after randomization) and postprocedural (>120 days after randomization) period in intention-to-treat analysis.

Abbreviations: BMI=body mass index; CAS=carotid artery stenting; CEA=carotid endarterectomy; HR=hazard ratio; CI=confidence interval; PYs=person-years; NA=not applicable; ref=reference category.

<sup>a</sup> In kilograms per square meter (kg/m<sup>2</sup>); normal BMI (20-<25 kg/m<sup>2</sup>) is used as reference category.

<sup>b</sup> Adjusted for: source trial, age, sex, smoking (past or current).

**Table e-3.** All-cause mortality risk in postprocedural period

			BMI <sup>a</sup>				Test for trend
			<20	20-<25	25-<30	≥30	p-value
<b>Postprocedural period</b>	CAS	Number	29	261	382	173	0.11
		Events (rate/100 PYs)	7 (6.6)	44 (4.8)	35 (2.9)	14 (2.7)	
		BMI HR <sup>b</sup>	1.65	ref	0.66	0.92	
		95% CI	0.73-3.71		0.42-1.03	0.49-1.70	
	CEA	Number	28	300	436	142	0.02
		Events (rate/100 PYs)	6 (5.8)	55 (5.4)	44 (3.1)	15 (3.2)	
		BMI HR <sup>b</sup>	1.43	ref	0.63	0.66	
		95% CI	0.60-3.38		0.42-0.94	0.37-1.17	
	Total group	Number	57	561	818	315	<0.01
		Events (rate/100 PYs)	13 (6.2)	99 (5.1)	79 (3.0)	29 (2.9)	
		BMI HR <sup>b</sup>	1.51	ref	0.64	0.74	
		95% CI	0.84-2.72		0.47-0.86	0.49-1.12	

Risk of all-cause mortality in postprocedural (>120 days after randomization) period in intention-to-treat analysis.

Abbreviations: BMI=body mass index; CAS=carotid artery stenting; CEA=carotid endarterectomy; PYs=person-years; HR=hazard ratio; CI=confidence interval; ref=reference category.

<sup>a</sup> In kilograms per square meter (kg/m<sup>2</sup>); normal BMI (20-<25 kg/m<sup>2</sup>) is used as reference category.

<sup>b</sup> Adjusted for: source trial, age, sex, smoking (past or current).

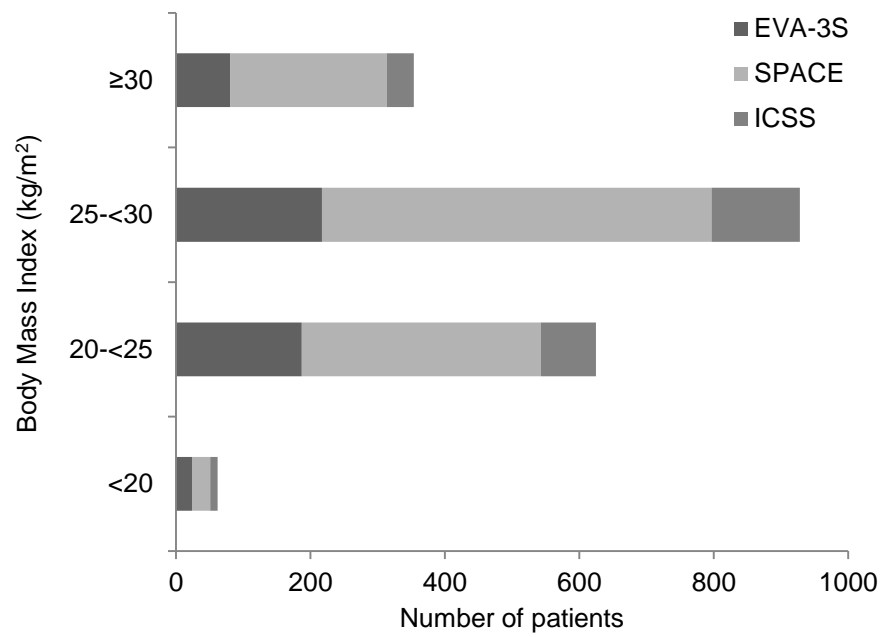
**Table e-4.** Baseline characteristics of ICSS patients with and without BMI data

	BMI available (n=264)	BMI unavailable (n=1,446)
Age at randomization in years (mean, SD)	68.7 ( $\pm$ 9.1)	70.4 ( $\pm$ 9.1)
Male sex (%)	180 (68%)	1,027 (71%)
History of (%):		
Hypertension	175 (67%)	1,008 (70%)
Hyperlipidemia <sup>a</sup>	169 (64%)	916 (63%)
Diabetes	60 (23%)	312 (22%)
Smoking (past or current)	207 (79%)	1,028 (72%)
Stroke or TIA >180 days before randomization	122 (46%)	440 (30%)
Coronary heart disease	85 (33%)	382 (27%)
Peripheral artery disease	48 (18%)	227 (16%)
Score on mRS at baseline (%):		
0	109 (42%)	566 (40%)
1	52 (20%)	381 (27%)
2	76 (29%)	316 (22%)
3	20 (8%)	120 (9%)
4	3 (1%)	33 (2%)
5	0	4 (<1%)
Blood pressure at baseline in mmHg (mean, SD):		
Systolic	161.1 ( $\pm$ 28.5)	143.9 ( $\pm$ 21.8)
Diastolic <sup>b</sup>	86.2 ( $\pm$ 14.2)	76.5 ( $\pm$ 11.5)
Degree of ipsilateral stenosis (%):		
Moderate (50-69%)	19 (7%)	149 (10%)
Severe ( $\geq$ 70%)	245 (93%)	1,297 (90%)
Contralateral severe stenosis ( $\geq$ 70%) or occlusion (%)	59 (22.3%)	242 (16.9%)
Type of most recent event before randomization (%):		
Retinal ischemia or amaurosis fugax	63 (24%)	276 (19%)
TIA	107 (41%)	469 (33%)
Hemispheric stroke	91 (35%)	678 (48%)

Abbreviations: BMI=body mass index; SD=standard deviation; TIA=transient ischemic attack; mRS=modified Rankin Scale.

<sup>a</sup> Defined as hyperlipidemia or taking lipid-lowering medication at randomization.

<sup>b</sup> Data not collected in carotid artery stenting patients.

**Figure e-1.** Distribution of BMI in each trial

Abbreviations: BMI=body mass index.