Online Table 1. CTA acquisition parameters

	CTA
Scanner	Siemens, SOMATOM Definition AS+ and Edge
Detector collimation (mm)	128 x 0.6
Reconstruction slice thickness (mm)	1.0
Reconstruction interval (mm)	0.5
Scan phase	Intravenous contrast agent, 3-sec delay
Table speed (mm/s)	5
Pitch	1
Rotation time (s)	0.5
Tube voltage (kV/mAs)	120/300
Contrast agent	Iopamidol-based nonionic contrast (Pamiray370®)
Iodine concentration (mg/mL)	370
Flow rate (mL/s)	4.5
Contrast agent volume (mL)	60
Staring location	Aortic root
Ending location	3cm above the skull
CTDI dosimetry phantom diameter (cm)	32
Mean CTDI volume (mGy)	69.6 ± 26.5 L
1st quartile	47 L
Median	74 L
3rd quartile	84 L
Mean DLP (mGy $\times$ cm)	2170 ± 827.6
1st quartile	1500
Median	2177
3rd quartile	2652
Soft tissue Kernel	B40

CTDI, computed tomography dose index; DLP, dose-length product

Online Table 2. Cox proportional hazards model for the association of the plaque HU values with the occurrence of the MACE composite outcome and the individual MACE components among subjects with moderate CAS (*n*=101)

	MACE (-)	MACE (+)	HR (95% CI)	*P* value
MACE[a] (*n*=18)	39.6 ± 15.7	27.6 ± 8.6	0.95 (0.92–0.98)	.002
Any stroke (*n*=8)	38.5 ± 15.3	25.0 ± 11.6	0.95 (0.90–0.99)	.01
Ipsilateral stroke (*n*=6)	38.2 ± 15.4	25.3 ± 11.0	0.95 (0.90–0.99)	.04
ACS (*n*=7)	38.1 ± 15.7	29.6 ± 6.1	0.96 (0.92–1.01)	.14
Cardiovascular mortality (*n*=8)	38.3 ± 15.7	27.5 ± 6.6	0.95 (0.91–0.99)	.04
All-cause mortality (*n*=23)	38.3 ± 15.7	34.8 ± 14.3	0.99 (0.96–1.01)	.31

Data are presented as means ± standard deviations of plaque HU values.

ACS, acute coronary syndrome; CAS, carotid artery stenosis; HR, hazard ratio; HU, Hounsfield unit;

MACE, major adverse cardiovascular event

[a]Any stroke, ACS, or cardiovascular mortality

Online Table 3. Cox proportional hazards model for the association of the presence of spotty calcium on CTA with the occurrence of the MACE composite outcome and the individual MACE components among subjects with moderate CAS (*n*=101)

	MACE (-)	MACE (+)	HR (95% CI)	*P* value
MACE[a] (*n*=18)	11 (13.3)	8 (44.4)	5.20 (1.94–13.92)	.001
Any stroke (*n*=8)	16 (17.2)	3 (37.5)	4.07 (0.91–18.31)	.07
Ipsilateral stroke (*n*=6)	16 (16.8)	3 (50.0)	5.48 (1.10–27.37)	.04
ACS (*n*=7)	15 (16.0)	4 (57.1)	6.93 (1.52–31.58)	.01
Cardiovascular mortality (*n*=8)	15 (16.1)	4 (50.0)	4.34 (1.08–17.40)	.04
All-cause mortality (*n*=23)	10 (12.8)	9 (39.1)	2.72 (1.17–6.31)	.02

Data are presented as n (%) of carotid plaques with spotty calcium detected on CTA.

ACS, acute coronary syndrome; CAS, carotid artery stenosis; HR, hazard ratio; MACE, major adverse cardiovascular event

[a]Any stroke, ACS, or cardiovascular mortality

Online Fig 1. Flow chart of carotid plaque inclusion

The analysis included 194 carotid plaques identified in 176 asymptomatic subjects with moderate to severe CAS, diagnosed using CTA and additional Doppler ultrasound. The associations between various demographic, clinical, and imaging features and subsequent MACE occurrence were evaluated.

CAS, carotid artery stenosis; CEA, carotid endarterectomy; MACE, major adverse cardiovascular event

[a]Subjects with recent cardiovascular events within 6 months
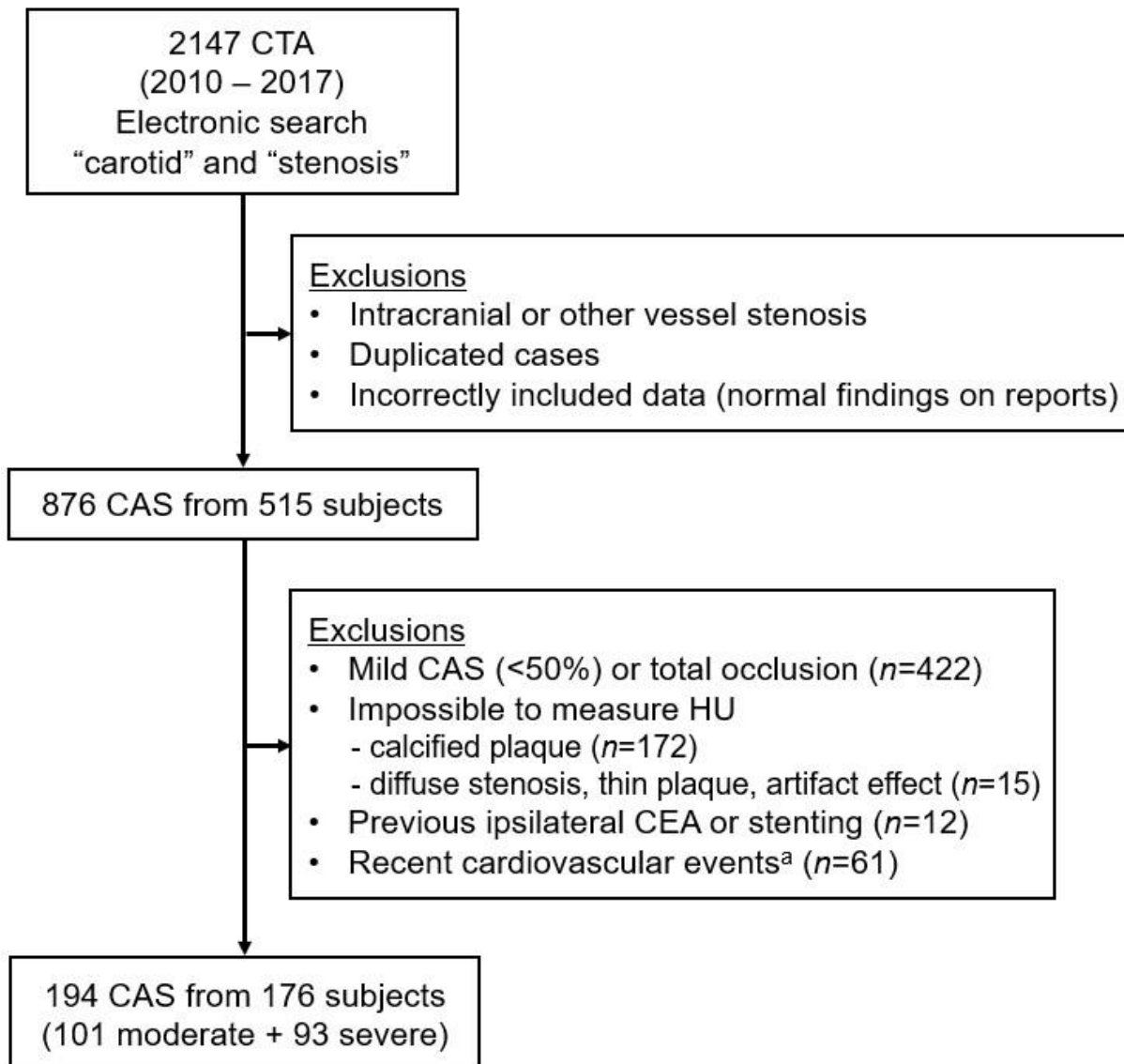
Online Fig 2. Boxplot of the degree of CAS on baseline CTA and additional Doppler ultrasound imaging

The distribution of the degree of CAS values revealed no significant difference between the non-MACE and MACE groups.

CAS, carotid artery stenosis; IQR, interquartile range; MACE, major adverse cardiovascular event
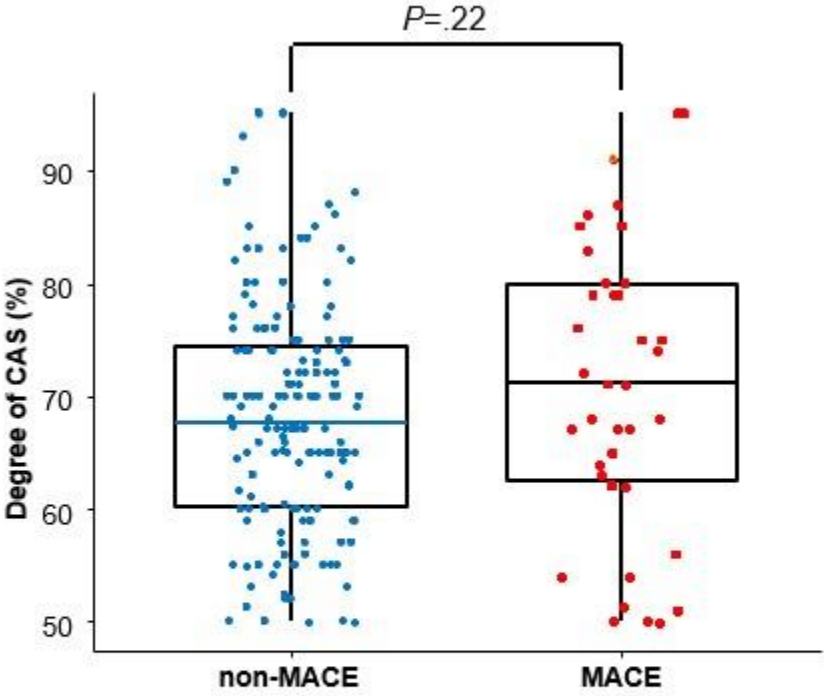
	Degree of CAS (%) Median (IQR)
non-MACE group	67.6 (62.0–74.8)
MACE group	71.0 (62.0–80.0)