We prospectively recruited 4100 participants from department of neurology and health screening center of Qingdao Municipal Hospital during January 2014 to June 2018.

3034 participants have complete neuroimaging and laboratory examination

Excluded: atrial fibrillation or had been on statin or fibrate (n=128) → Excluded: history of stroke (n=556) → Excluded: infection; nausea; tumor; chronic liver disease and renal insufficiency (n=45) → Excluded: refuse the written informed consent (n=15)

Excluded: artery dissection; arteritis; moyamoya disease; muscular fiber dysplasia (n=80)

Totally 2210 participants were finally included in the study

Supplementary Figure 1. The flowchart of the screening process about the included participants.
Supplementary Figure 2. Distributions of 4 study groups (A) extent of ICAS lesions (B) according to the apoB/AI ratio quartiles. Values represent percentages of patients. As the apoB/AI ratio quartiles increased, the presence of ischemic stroke, ICAS and extent of stenosis lesions increased. ICAS, intracranial atherosclerotic stenosis.

Supplementary Figure 3. Several pictures for the MRI. (A) MRA showing stenotic lesions at right middle cerebral artery (61.7%), left posterior cerebral artery (55%) and right and left vertebral arteries (65% and 50%). (B) MRA showing stenotic lesions at right middle cerebral artery (70%), left vertebral artery (occlusion) and right and left posterior cerebral artery (55% and 55%). (C) MRA showing stenotic lesions at right and left anterior cerebral arteries (occlusion). (D) MRA showing stenotic lesion at basilar artery (almost occlusion). (E) MRA showing stenotic lesion at left posterior cerebral artery (90%). (F) MRA showing stenotic lesion at left middle cerebral artery (occlusion). (G) MRA showing stenotic lesion at internal carotid artery (occlusion). (H) MRA showing stenotic lesion at left vertebral artery (almost occlusion).
Supplementary Figure 4. The Doppler sonography showed the formation of atheromatous plaques in internal carotid artery.