**On-line Fig 1.** Illustration of the custom CT-based, automated classifier computer algorithm that was used in this project to characterize carotid artery plaque CT features (adjusted from Wintermark et al[23]). Lipid clusters were depicted in *yellow*, blood products in *red*, calcification in *blue*, and remaining connective tissue in *green*. The software was then able to quantify these features 3-dimensionally, independent of any subjective, human interpretation. Carotid wall thickness was measured as the distance from the lumen-intima interface to the outer edge of the adventitia.
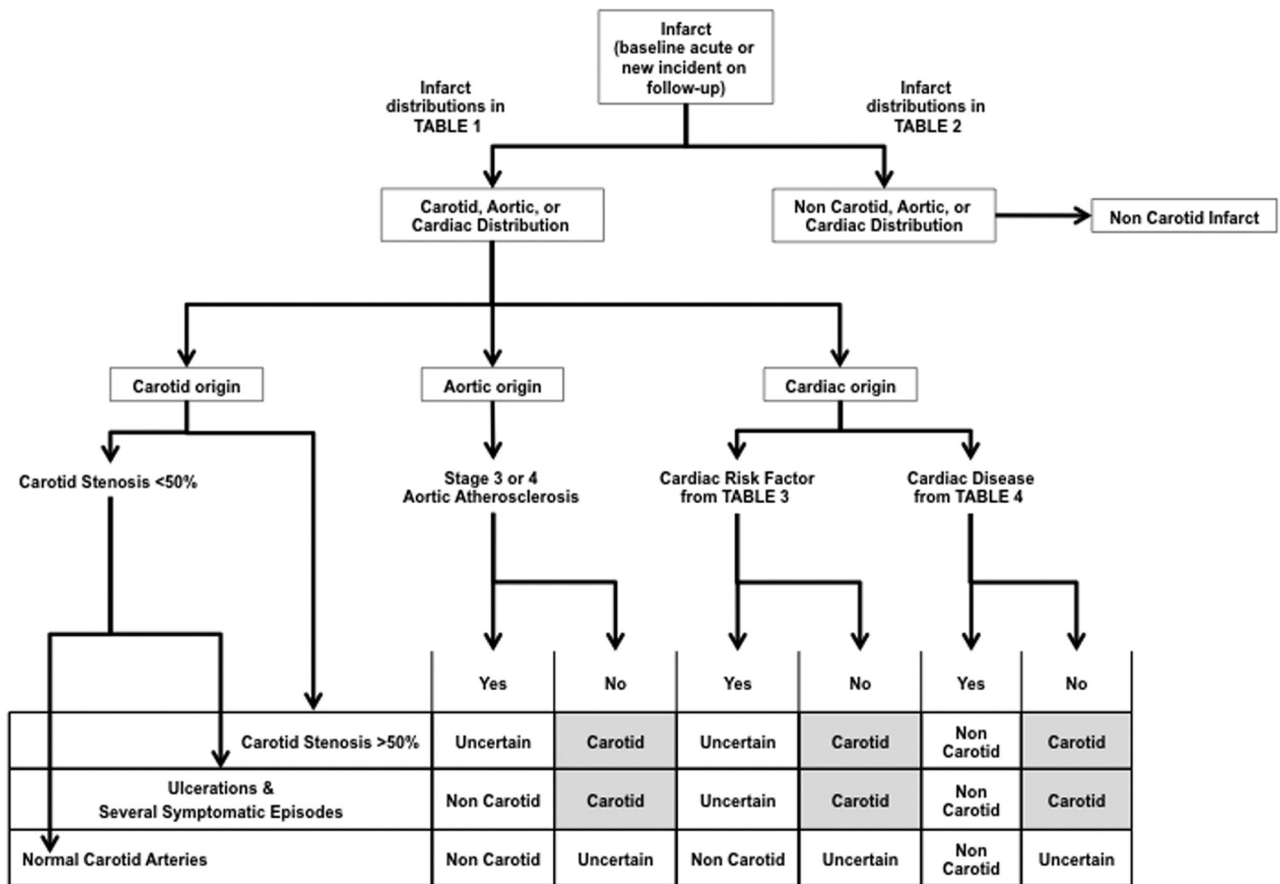
On-line Fig 2. Graphic depiction of the method used to differentiate "carotid infarcts" from "noncarotid infarcts."

On-line Table 1: Carotid, aortic, or cardiac infarct distributions

Single, basal ganglia >15 mm
Single, cortical lesion
Single, corticosubcortical >15 mm
Single, subcortical >15 mm
Multiple, scattered lesions <15 mm in one vascular territory
Multiple, unilateral lesions >15 mm in anterior circulation
Multiple, unilateral lesions in anterior and posterior circulations, if PComA
    open on side of infarct

Note:—PComA indicates posterior communicating artery.

On-line Table 2: Noncarotid, aortic, or cardiac infarct distributions

Single, lacunar (basal ganglia or brain stem, <15 mm)
Single, subcortical <15 mm (usually centrum semiovale)
Multiple, unilateral lesions in posterior circulation
Multiple, bilateral lesions, all or majority acute
Multiple, bilateral lesions, all or all but one chronic/age-indeterminate
Watershed (single or multiple)

On-line Table 3: Cardiac risk factors

Recent myocardial infarction
Mitral annular calcification
Rheumatic mitral valve
Rheumatic aortic valve
Bioprosthetic valve
Mechanical valve
Ejection fraction <30%
Cardiomyopathy
Endocarditis
Patent foramen ovale

On-line Table 4: Cardiac disease

Atrial fibrillation
Atrial flutter
Sick sinus syndrome
Cardiac thrombus