Prognostic value of coronary computed tomographic angiography findings in asymptomatic individuals: a 6-year follow-up from the prospective multicentre international CONFIRM study.

The long-term prognostic benefit of coronary computed tomographic angiography (CCTA) findings of coronary artery disease (CAD) in asymptomatic populations is unknown. From the prospective multicentre international CONFIRM long-term study, we evaluated asymptomatic subjects without known CAD who underwent both coronary artery calcium scoring (CACS) and CCTA (n = 1226). Coronary computed tomographic angiography findings included the severity of coronary artery stenosis, plaque composition, and coronary segment location. Using the C-statistic and likelihood ratio tests, we evaluated the incremental prognostic utility of CCTA findings over a base model that included a panel of traditional risk factors (RFs) as well as CACS to predict long-term all-cause mortality. During a mean follow-up of 5.9 ± 1.2 years, 78 deaths
occurred. Compared with the traditional RF alone (C-statistic 0.64), CCTA findings including coronary stenosis severity, plaque composition, and coronary segment location demonstrated improved incremental prognostic utility beyond traditional RF alone (C-statistics range 0.71-0.73, all P 0.05, for all). Coronary computed tomographic angiography improved prognostication of 6-year all-cause mortality beyond a set of conventional RF alone, although, no further incremental value was offered by CCTA when CCTA findings were added to a model incorporating RF and CACS.