Coronary artery calcium score improved cardiovascular disease risk prediction in asymptomatic patients

I Md. Ady Wirawan¹, Rodney Wu², Malcolm Abernethy³, Sarah Aldington⁴, Peter Larsen⁴

¹School of Public Health, Faculty of Medicine, Universitas Udayana, Indonesia. ²Pacific Radiology Group, Wellington, New Zealand, ³Wakefield Heart Centre, Wakefield Hospital, Wellington, New Zealand, ⁴University of Otago, Wellington, New Zealand

DOI: http://dx.doi.org/10.19106/JMedScieSup005001201805

ABSTRACT

This study examined whether coronary artery calcium score (CACS) has a better accuracy than the cardiovascular risk prediction chart (CRPC), and evaluate the reclassification improvement of CACS if it is a screening tool compared with the CRPC. CACS has a better accuracy than the CRPC and reclassified a considerable proportion (39%) of a symptomatic patient into correct cardiovascular risk categories. CACS should be assessed in asymptomatic people with5-year CVD risk score of 5-10% and 10-15%.

Keywords: assessment tool - CACS - Framingham risk score - asymptomatic people - risk stratification

^{*}corresponding author: ady.wirawan@unud.ac.id