

Supplementary material Text- Methods*SCORE risk estimation*

Based on a pool of datasets from 12 European cohort studies, mainly carried out in general population settings, European experts performed the SCORE project to develop a risk scoring system for use in the clinical management of CV risk in European clinical practice.[23] The SCORE risk estimation system offers direct estimation of fatal CV risk in a format suited to the constraints of clinical practice.[24] It estimates the 10-year risk of a first fatal atherosclerotic event, whether heart attack, stroke, or other occlusive arterial disease, including sudden cardiac death. Risk estimates have been produced as charts for high and low risk regions in Europe.[23] Spain was included in the low risk region in Europe.

A task force of the European League Against Rheumatism (EULAR) has proposed to adapt the CV risk management calculated in RA patients according to the SCORE function by the application of a multiplier factor of 1.5 in those patients with 2 of 3 criteria: disease duration >10 years, rheumatoid factor (RF) and/or anti-cyclic citrullinated peptide (anti-CCP) antibody positivity, and presence of severe extra-articular manifestations.[8] (information shown as a footnote in **Tables 2A,2B and 2C**).

Both SCORE and EULAR modified SCORE (mSCORE) according to the EULAR recommendations were calculated to determine the 10-year risk of fatal CV disease in a population at low CV disease risk (as it was considered for the Spanish population).[8,23] SCORE chart assessment was based on the following risk factors: age, gender, smoking, systolic blood pressure, atherogenic index (total cholesterol/HDL-cholesterol).[8,23] A subject's written consent was obtained in all the cases. The study was approved by the local Ethical Committee.

Multi-detector computed tomography imaging assessment and analysis of data

To determine the CACS all subjects underwent computed tomography imaging of coronary arteries using a 32-slice MDCT scanner (Lightspeed, Pro 32, GE Healthcare, USA). It was performed following current guidelines on the screening for CAC for cardiac risk assessment.[25] As previously described,[19] all scans were performed with the subjects in the supine position which included regions from the carina to the fundus of the heart. Prospective electrocardiogram-gated cardiac scan was obtained with following scan parameters: rotation time=0.35s; slice thickness=2.5mm; 120kV; trigger delay=70% R-R interval. Patients were instructed to hold their breath during scanning. The acquired MDCT images were reviewed at the post-processing image workstation (Advantage Windows 4.02, GE Healthcare, USA). Measurement of CACS was performed by a commercially available software “smart_score” (General Electric Healthcare, USA) using the threshold option set for pixels greater than 130 Hounsfield units and expressed in Agatston unit. Agatston CACS is based on the amount of calcium found in the coronary arteries.

Analysis of all the scans and interpretation of calcium scores was performed by a radiologist (JAP), who was blind to the clinical information. The intraobserver variability correlation coefficient of CAC score measurements was 0.93.

Carotid US examination

Carotid US examination included the measurement of cIMT in the common carotid artery and the detection of focal plaques in the extracranial carotid tree that was performed as recently described.[16] A commercially available scanner, Mylab 70, Esaote (Genoa, Italy) equipped with 7-12 MHz linear transducer and the automated software guided technique radiofrequency -Quality Intima Media Thickness in real-time (QIMT, Esaote, Maastricht, Holland)- was used. Automated radiofrequency -based US measurement of the common cIMT was measured at the far wall of the right and left common carotid arteries, 10 mm from

the carotid bifurcation, over the proximal 15 mm-long segment, using US technology based on radiofrequency. The reproducibility of the cIMT measurements was evaluated in 20 patients within 1 week of the first US examination. The correlation coefficient for cIMT was 0.97. The plaque criteria in the accessible extracranial carotid tree (common carotid artery, bulb and internal carotid artery) were defined as previously reported.[16,27] Plaque was defined as a focal protrusion in the lumen at least cIMT>1.5 mm, protrusion at least 50% greater than the surrounding cIMT, or arterial lumen encroaching>0.5 mm, according to Mannheim consensus criteria.[27] Carotid plaques were counted in each territory and defined as no plaque, unilateral plaque or bilateral plaques.[16].

References

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charts including HDL-C are available as Addendum I to these guidelines on the ESC website (www.escardio.org/guidelines).

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