CARDIOVASCULAR RISK SCORES, AGREEMENTS AND DISCREPANCIES BETWEEN FRAMINGHAM, REGICOR AND SCORE.

Luis Garcia Ortiz (1), Manual A Gomez Marcos (2), Luis J. Gonzalez Elena (1), Antoni Mendoza Petite (1), Emiliano Rodriguez Sanchez (1), Lourdes Melón Barrientos (1), Carmen Herrero Rodriguez (1), Pilar Bodega Sanchez (2), Almudena Morales Sanchez (1), Loreto Martin Cid (1), Laura Gonzalez Sanchez (1), Carmela Rodriguez Martin (1), Carmen Castaño Sanchez (1), Nadezhna Carrillo Peña (1), Pilar Olivares Mesonero (1), (1) La Alamedilla, Salamanca-Spain, (2) Garrido Sur, Salamanca-Spain,

OBJECTIVE. To evaluate the agreements and discrepancies in cardiovascular risk estimation in hypertensive patients with Framingham, Regicor (Framingham calibrate to Spain) and SCORE methods
METHODS. Design: Descriptive observational study. Subject and setting: 820 hypertensive patients (64% women, 36% men) selected by simple random sampling of the 3284 hypertensive followed in Primary care. Mean age was of 69.8 years (70.7 women, 68.2 men). Main measurement: Age, sex, blood pressure, glycaemia, lipids and tobacco. Cardiovascular risk (CVR) in 10 years was estimate with Framingham score (Grundy 99) (Global and hard coronary risk), Regicor (Global coronary risk) and SCORE project (Cardiovascular mortality risk). **RESULTS**: Framingham: Global coronary risk was 17.18% (IC95%:16,55÷17,82), men 21.66% and women 14.68% ($p < 0.05$). Hard coronary risk was 12.45% (IC95%:11,89÷13,01), men 17.19% and women 9.80% ($p < 0.05$). Regicor: Global coronary risk was 5.69% (IC95%:5,4÷5,9), men 6.7% and women 5.1% ($p < 0.05$).
SCORE: Mortality cardiovascular risk was 3.71% (IC95%: 3,46-3,96), men 4.85% and women 3.08% ($p < 0.05$). According risk categories we found, Low risk: 52% Framingham, 98% Regicor and 62% SCORE. Moderate risk: 23% Framingham, 1% Regicor and 16% SCORE. High risk: 15% Framingham, 1% Regicor and 14% SCORE . Very high risk: 10% Framingham, 0%, Regicor and 7% SCORE ($p < 0.05$). We found 291 (35%) patient classified with Framingham and 165 (20%) with SCORE as high or very high risk whereas were classified in low risk by Regicor. Also there are 23 patients classified with Framingham in high risk and low risk with SCORE and 22 to inverse. We found intense positive correlation ($r > 7$, $p < 0.01$) between three scales, with the following regression equations: SCORE = -1,15 (-1,52 ÷ -0,78) + 0.28 (0.26-0.30)) x Framingham (r = 0.713 R2 = 0.509). Regicor = 0.68 (0,41-0,96) + 0,29(0.28- 0.309) x Framingham (r = 0.816 R2 = 0.665). Regicor = 3.07 (2.87-3.27) + 0.70 (0.66-0.74) x SCORE (r = 0.785 R2 = 0.616).
CONCLUSIONS: We found intense positive correlation between Framingham, Regidor and SCORE scales. Nevertheless there are important discrepancies at the time of classifying to the patients in the different categories from risk, specially between the Regicor with other two scales.

RS - Risk Assessment