related independent prognostic predictors. The prognostic capability of the score was compared in both groups.

Results: During a median follow-up of 31 months, 1,230 patients died: 622 (9%) in the modeling and 608 (9%) in the validation group (p<0.08). Independent predictors of mortality were ischemia at SE (HR 1.77, 95% CI 1.49–2.12; p<0.0001) and six parameters: age >65 years (HR 3.03, 95% CI 2.53–3.63; p<0.0001), WMA at rest (HR 1.95, 95% CI 1.60–2.39; p<0.0001), diabetes mellitus (HR 1.74, 95% CI 1.46–2.07; p<0.0001), left bundle branch block (HR 1.45, 95% CI 1.17–1.81; p<0.001), ongoing anti-ischemic therapy (HR 1.28, 95% CI 1.09–1.50; p=0.033), and male sex (HR 1.30, 95% CI 1.09–1.56; p=0.004). Risk score resulted in an effective prognostication in the modeling and validation groups, both with and without inducible ischemia subset. (see fig). In particular, when it was resulted in an effective prognostication in the modeling and validation groups, both with and without inducible ischemia subset. (see fig).

Survival rates in the score categories

Conclusion: SE results should be placed in the context of simple clinical variables to optimize risk stratification potential, and this can be easily done with a simple, user-friendly, composite six-item clinical risk score

P6147 | BEDSIDE Regional Wall Motion, Coronary Flow Velocity Reserve and Global Left ventricular contractile reserve: triple imaging in Stress Echo 2020

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Background: Stress echo (SE) positivity based on regional wall motion abnormalities (RWMA) has been steadily declining over the last 40 years. New positivity criteria based on coronary flow velocity reserve (CFVR) on left anterior descending artery and left ventricular contractile Reserve (LVCR) have been proposed.

Purpose: To assess the feasibility, positivity rate and incremental prognostic value over RWMA of CFVR and LVCR in the prospective, multicenter, international, effectiveness SE2020 study.

Methods: 526 patients (age 64±10 years, 333 males) with known or suspected coronary artery disease and referred to clinically-driven semi-supine exercise (n=74) dipyridamole (n=439) or dobutamine (n=13) SE were enrolled in 10 centers from 5 countries (Italy, Brazil, Russia, Serbia, Bulgaria) within the Stress Echo 2020 study network. All underwent triple imaging: 1- assessment of RWMA (positivity criterion, worsening of regional function in ≥2 segments, 17-segment model of the LV); 2- pulsed-wave Doppler CFVR assessment in mid-distal LAD (positivity criterion: stress/rest peak diastolic flow velocity ≥2.0); 3- LVCR assessment with stress/rest ratio of LV elastance (systolic blood pressure by cuff sphygmomanometer/end-systolic volume from 2D by Simpson rule, apical 4- and 2-chamber view). Previously established positivity criteria of LVCR were stress-specific: <1.1 for dipyridamole, 2.0 for exercise and dobutamine. All readers had passed upstream preliminary quality control of SE reading. A subset of 331 patients without RWMA had follow-up >3 months and were considered for prognostic end-points.

Results: RWMA and LVCR were interpretable in 526/526 (feasibility 100%); CFVR in 452/468 (feasibility: 96%, lower with exercise compared to pharmacological stress: 89% vs 98%, p<0.001). The overall positivity rate was 9% for RWMA, 20% for LVCR, 17% for CFVR, and 27% for any of the 3 criteria combined. In the 331 patients with median follow-up of 7 months and negative SE by RWMA, there were 41 events. Event rate was lowest in patients with double (CFVR and LVCR) negativity, intermediate in those with either one positivity, and highest in those with double positivity (χ²=78.2, p<0.001, see Figure).

Conclusions: CFVR and LVCR assessment is highly feasible during pharmacological and – albeit to a lesser extent for CFVR – also during exercise SE. The SE positivity rate is sharply increased if LVCR and/or CFVR are added to conventional RWMA. The prognostic value of new criteria is additive in patients with negativity for RWMA, who may still be at intermediate risk.