Figure S1 Change of estimated coefficients with respect to the change of the penalty parameter.
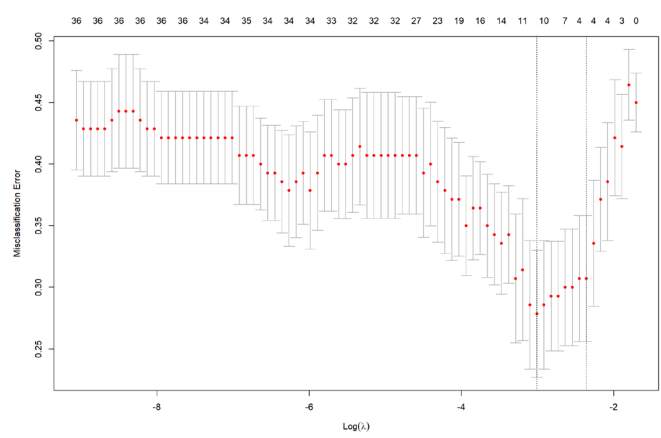

Figure S2 Cross-validation results with some proper range of log(λ) and MSE. The lambda value that minimises the test MSE turns out to be 0.04931158. MSE, mean squared error.
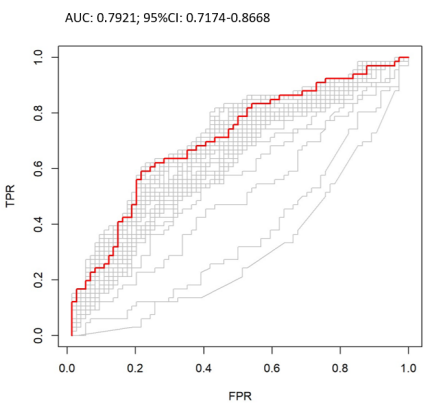

Figure S3 Cross-validated areas under the receiver operating characteristic curve (AUC). Model with best λ is red. TPR, true positive rate; FPR, false positive rate; CI, confidence interval.

Table S1 Lasso regression coefficients

Variables	Values
Intercept	−1.670166
Age	–
Female	−0.698693
BMI	–
Hypertension	–
Smoke	–
Diabetes	–
Hypercholesterolemia	0.1549233
CAD	0.4154227
AMI	0.4062652
Previous cardiac surgery	0.1757243
Peripheral vascular disease	–
COPD	–
Atrial fibrillation	0.1572084
Definitive PMK	–
Stroke	–
CKD	–
EuroSCORE II ≥5	–
Etiology degenerative	–
Etiology endocarditis	–
Etiology functional	–
Etiology rheumatic	–
NYHA	–
Heart failure	–
Previous resynchronization therapy	–
Severity of MR	–
Rvol	–
LVEDDI	–
LVESDI	–
LVEDVI	0.0178042
LVESVI	–
PASP	–
LVEF	–
RV dysfunction	0.0649269
TVR	–
MV calcification	−0.164066
MAD	−0.06214

BMI, body mass index; CAD, coronary artery disease; AMI, acute myocardial infarction; COPD, chronic obstructive pulmonary disease; PMK, pacemaker; CKD, chronic kidney disease; NYHA, New York Heart Association; MR, mitral regurgitation; Rvol, regurgitant volume; LVEDDI, left ventricular end diastolic diameter indexed; LVESDI, left ventricular end systolic diameter indexed; LVEDVI, left ventricular end diastolic volume indexed; LVESVI, left ventricular end systolic volume indexed; PASP, pulmonary artery systolic pressure; LVEF, left ventricular ejection fraction; RV, right ventricular; TVR, MV, mitral valve; MAD, mitral annular disjunction.