P849

Comparison of long-term mortality risk assessed with recalculated (maximal) CADILLAC score vs. baseline (admission) CADILLAC score in STEMI patients undergoing primary PCI

Z. Mehmedbegovic[1], D. Milasinovic[1], D. Jelic[1], V. Zobenica[1], M. Radomirovic[1], I. Veljic[1], A. Pavlovic[2], V. Dedovic[1], J. Dudic[1], M. Asanin[1], V. Vukcevic[1], G. Stankovic[1]

[1]Clinical center of Serbia, Department of cardiology, Belgrade, Serbia; [2]University Children's Hospital of Belgrade, Belgrade, Serbia

Background: Since patients with STEMI have high rate of adverse events not only during hospital stay, but also during short and long-term follow–up, appropriate risk stratification is a key part of the management of these patients following hospital discharge. CADILLAC score was derived and subsequently validated as accurate clinical tool for identifying patients with heightened risk following index event.

Purpose: We aimed to compare predictive value of recalculated, maximal, (M-) CADILLAC score vs. baseline (B-) CADILLAC score for long-term mortality in hospital survivors.

Methods: From a prospective electronic registry of a high-volume catheterization laboratory in a period from January 2009 to December 2017, a total of 5387 consecutive patients STEMI who underwent primary PCI were included in analysis. For each patient B-CADILLAC score was calculated, and for survivors, we recalculated M-CADILLAC score, incorporating changes in three variable score individual contributors (worsening of Killip class, anemia development and renal function deterioration). As in original score derivation, patients with cardiogenic shock were excluded from analysis. Discrimination of the two risk models was evaluated by the C-statistic, Net reclassification index (NRI) and Integrated Discrimination Improvement (IDI) index.

Results: For 111 (2.1%) patients that died in-hospital, B-CADILLAC very well predicted the event (AUC 0.87, 95% CI 0.86–0.88; $p<0.0001$) (Figure 1A). For hospital survivors, both evaluated scores showed good discriminative ability for long-term mortality (11.7%) but recalculated M-CADILLAC score was statistically better predictor of long-term mortality, as assessed by C-statistics (Table 1 & Figure 1B):

NRI showed that 38% of patients were reclassified with M-CADILLAC with IDI slope 0.8% higher than in first model.

Conclusions: Baseline CADILLAC score has very good predictive ability for in-hospital mortality, but recalculated, maximal CADILLAC score offers discriminative advantage in hospital survivors for prediction of long-term mortality in STEMI patients undergoing primary PCI.

Table 1

4723 pts (follow-up=90% pts, 41±27 months)	AUC	95% CI	p
B-CADILLAC	0.756	0.744–0.768	p=0.018
M-CADILLAC	0.776	0.754–0.779	

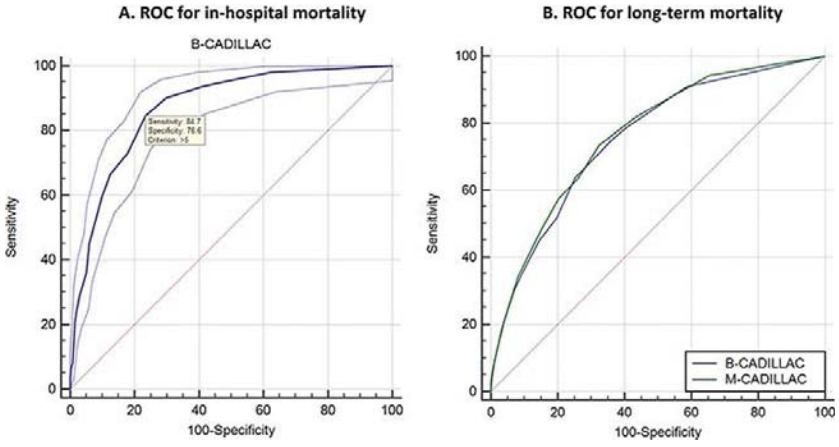

Figure 1

Downloaded from https://academic.oup.com/eurheartj/article/40/Supplement_1/ehz747.0447/5594125 by guest on 25 April 2024