

Non-ST-elevation acute coronary syndrome management in elderly patients at the University Hospital Centre Zagreb

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Introduction: Elderly patients with non-ST-elevation acute coronary syndrome (NSTEMI-ACS) are often not revascularized, which may contribute to lower survival rates.¹

Patients and Methods: This retrospective study analyzed consecutive NSTEMI-ACS patients aged ≥ 80 who were admitted to the University Hospital Centre Zagreb between November 2018 and October 2023. Statistical analysis was performed using data from medical records. The objective was to analyze treatment strategies (revascularization vs. non-revascularization) and clinical outcomes at 6-month follow-up: mortality, recurrent myocardial infarction (MI), and cerebrovascular incident (CVI).²

Results: Of the 274 NSTEMI-ACS patients with a median age of 84, 42.3% were women, and 238 (86.9%) had a non-ST-elevation MI. Coronary angiography was performed in 199 (72.6%) patients. Revascularization was performed in 136 (49.6%) patients, and the majority underwent percutaneous coronary intervention, except for two patients who underwent surgery. Revascularized patients were younger (83 [81–85] vs. 84 [82–88], $p < 0.001$) than the non-revascularized, who, on the other hand, had a higher prevalence of aortic stenosis (AS) and a history of CVI, developed more frequent infections, and had a left ventricular ejection fraction of $\leq 40\%$. Female sex (OR = 0.52; 95% CI: 0.30–0.90; $p = 0.020$), moderate or severe AS (OR = 0.43; 95% CI: 0.20–0.90; $p = 0.025$), and anemia (OR = 0.41; 95% CI: 0.17–0.99; $p = 0.048$) were predictors negatively influencing the selection of revascularization as a treatment. During the 6-month follow-up, 56 (20.4%) patients died, with significantly lower mortality of revascularized patients (8.1% vs. 32.6%, $p < 0.001$; **Figure 1**). There were no significant differences between the groups in the incidence of recurrent MI (3.3%) or CVI (1.5%). Multivariable regression analysis identified revascu-

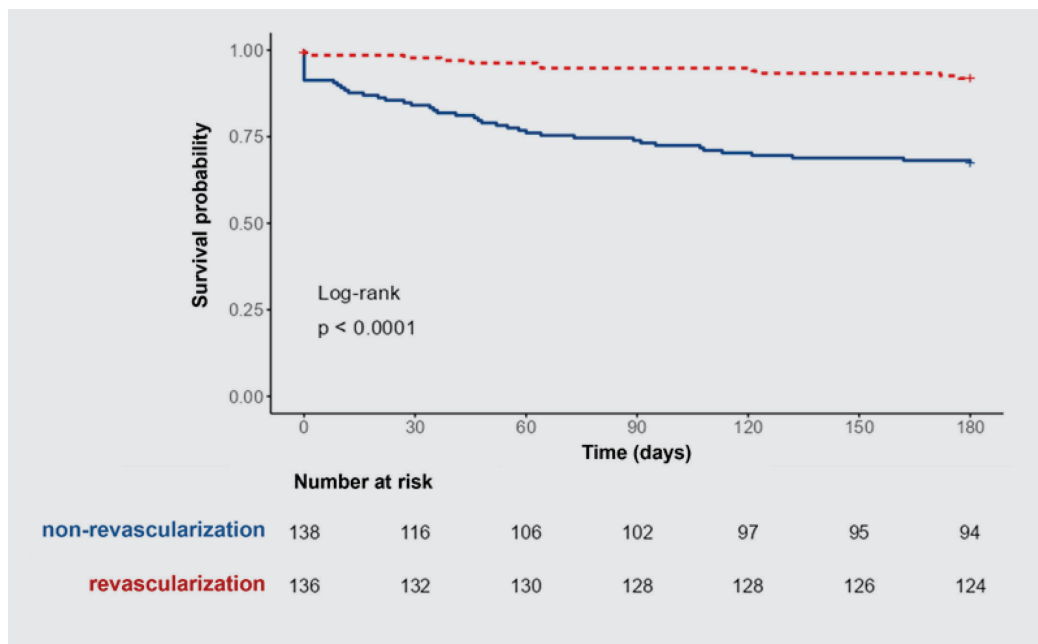


FIGURE 1. Kaplan-Meier survival curve comparing revascularization and non-revascularization in elderly patients with non-ST-elevation acute coronary syndrome at the University Hospital Centre Zagreb.

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larization (HR = 0.33; 95% CI: 0.16–0.69; $p = 0.003$) and the use of renin-angiotensin-aldosterone system blockers (HR = 0.34; 95% CI: 0.17–0.67; $p = 0.002$) to be positively associated with survival. Type 2 diabetes (HR = 2.11; 95% CI: 1.14–3.89; $p = 0.017$) was negatively associated with survival (Figure 2).

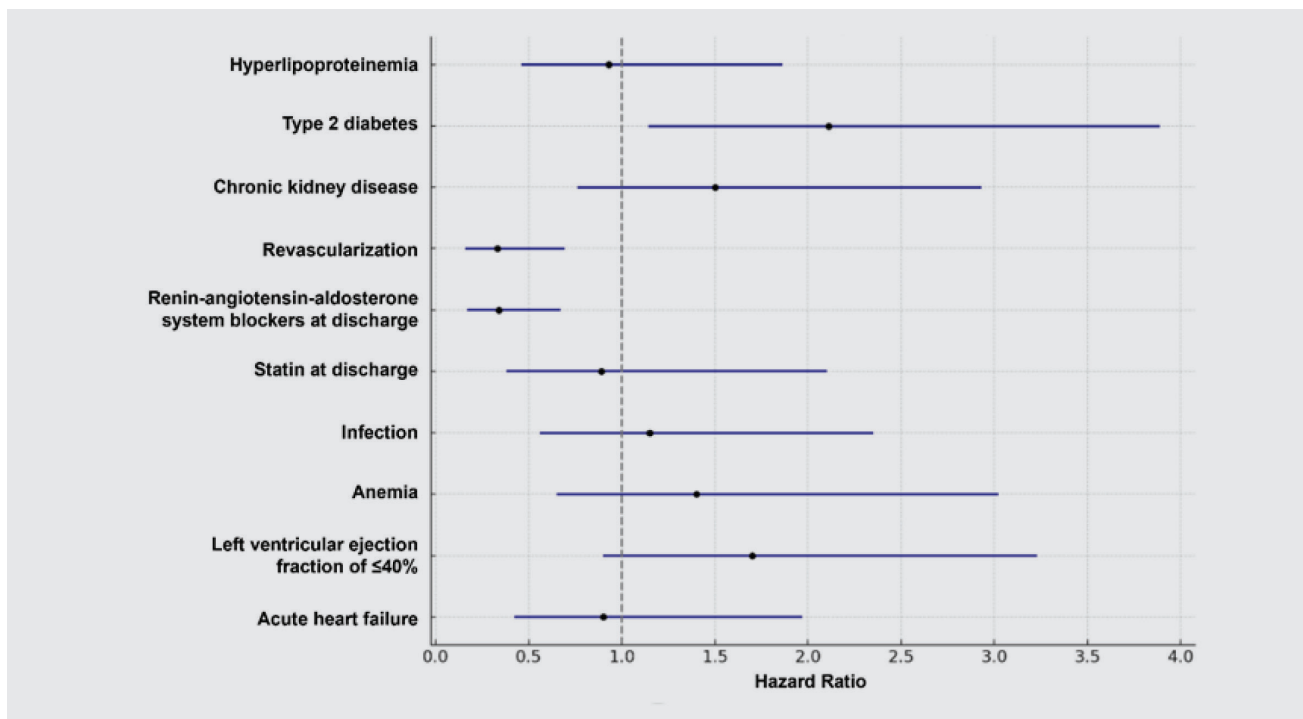


FIGURE 2. Multivariable Cox regression analysis of 6-month survival in elderly patients with non-ST-elevation acute coronary syndrome at the University Hospital Centre Zagreb.

Conclusion: Older NSTEMI-ACS patients who received revascularization treatment had a statistically higher 6-month survival rate than those who were not revascularized.

LITERATURE

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