

## An Analysis of Factors Affecting 90-Day Survival in Patients whose First Presentation of Cardiovascular Disease was an Acute Coronary Event

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### ABSTRACT

**Background:** Acute coronary syndrome (ACS) is a life-threatening manifestation of atherosclerosis. Despite marked improvements in in-hospital outcomes for patients with ACS, short- and long-term outcomes after hospital discharge remain poor. Patients with previous myocardial infarction, multivessel disease, and partial revascularization have higher mortality and morbidity rates following the second ACS event. However, few studies have analyzed the characteristics that influence outcomes in patients with the first ACS event. Several studies have reported associations between poor clinical outcomes in patients with ACS and each of the following factors: sex, advanced age, glomerular filtration rate, bundle branch block on electrocardiography, and left anterior descending (LAD) artery disease as the infarct-related artery.

**Objective:** To determine which of these factors is associated with poor outcomes (a composite of death, reinfection, or hospitalization for heart failure) within the first 90 days in discharged patients whose first presentation of cardiovascular disease was ACS.

**Design :** A Retrospective Study.

**Setting:** Cardiology department, University Hospital Center Zagreb, Croatia.

**Methods:** Participants comprised 2565 patients with ACS between January 2013 and December 2017.

**Results.** Logistic regression analyses revealed the LAD artery as the culprit artery and renal function as important predictors. Moreover, older female patients with the LAD artery as the culprit artery and impaired renal function were a high-risk subgroup.

**Conclusion :** These findings may aid clinicians in identifying high-risk patients who would most benefit from intensive follow-up and aggressive risk factor reduction and help tailor diagnostic and therapeutic strategies at the individual level.

**Keywords:** Chronic kidney disease, Myocardial infarction, Outcome, Risk factors, Sex

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