

ORIGINAL INVESTIGATIONS

Outcome of Applying the ESC 0/1-hour Algorithm in Patients With Suspected Myocardial Infarction



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The **first column** indicates triage-performance of the ESC 0/1-h algorithm, quantified by the proportion of patients either ruled-out or ruled-in for non-ST-segment elevation myocardial infarction. The **second column** indicates proportion of outpatient management. The **third and fourth columns** indicate 30-day MACE rates in patients assigned to rule-out and rule-in outpatients, respectively. CAD = coronary artery disease; CKD = chronic kidney disease; CPO = chest pain onset; ESC = European Society of Cardiology; MACE = major adverse cardiac events; site A = University Hospital of Basel, Switzerland; site B = Instituto Cardiovascular de Buenos Aires, Argentina.

significantly longer as compared with that in the post-implementation cohort ($p < 0.001$) (Online Table 7). Overall, 61% of patients in the pre-implementation cohort were managed as outpatients, which was a significantly lower proportion than in the post-implementation cohort ($p < 0.001$). Within 30 days, MACE rate was 1.7% (95% CI: 1.0% to 2.4%) in outpatients in the pre-implementation cohort, which was significantly higher as compared with the rate in the post-implementation cohort ($p < 0.001$).

PERFORMANCE OF THE ESC 0/1-H ALGORITHM IN PRE-DEFINED SUBGROUPS. Pre-defined subgroup analyses of the ESC 0/1-h algorithm's performance according to time since chest pain onset, sex, age, presence of known coronary artery disease or chronic kidney disease, as well as recruitment site, revealed

0 of 613, respectively), as compared with 0.3% (3 of 874) and 0.1% (1 of 1,006) in late presenters ($p = 0.171$ and 0.435, respectively). In early presenters, 80% (95% CI: 78% to 83%) of patients were either triaged toward rule-out or rule-in and 75% (95% CI: 72% to 78%) underwent outpatient management as compared with 72% (95% CI: 69% to 74%) and 68% (95% CI: 66% to 71%) in late presenters, respectively ($p < 0.001$ and 0.001).

Data on predictors for hospital admission, cardiac stress testing and revascularization among patients ruled out for NSTEMI, as well as on predictors of outpatient management in patients triaged toward the observe or rule-in group by the ESC 0/1-h algorithm can be found in the result section of the Online Appendix, Online Tables 8 to 12.