

## Best Poster Award – Third Prize

## The Perilousness of Antidepressant Drugs in a Real-world Cohort of Patients with Acute Coronary Syndrome

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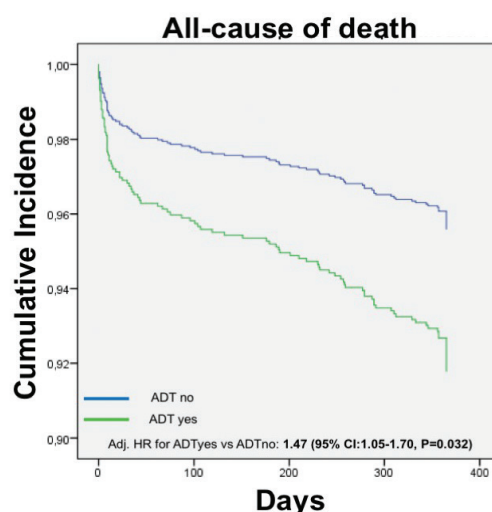
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**Background:** Although antidepressant therapy has been related to increased cardiovascular risk, depression, and its adverse effects on prognosis, is a well-recognised entity among acute coronary syndrome (ACS) patients. The aim of the study was to evaluate prevalence and outcome of antidepressant treatment in a real-world cohort of ACS patients.

**Methods:** We sought to assess the prevalence of established antidepressant therapy (ADT) and its impact among 2,168 all-comers patients admitted to four Swiss university hospitals for ACS and enrolled in the prospective multicentre SPUM registry (NCT01000701). The primary endpoint was all-cause mortality. The association between ADT and mortality was tested by adjusted multivariable conditional logistic regression.

**Results:** Out of 2,168 ACS patients, 141 patients (6.5%) were on ADT. Compared with the general ACS population, ADT patients were more likely to be unemployed ( $p=0.001$ ), men ( $p=0.002$ ), diabetic ( $p=0.010$ ) and already treated with cardiovascular (CV) preventive therapy with statins or beta-blockers ( $p<0.001$ ). Patients with ADT had a twofold risk of all-cause mortality (OR 2.2, 95% CI [1.20–4.00],  $p=0.009$ ) with a threefold risk of non-CV death (OR 3.24, 95% CI [1.10–9.70],  $p=0.026$ ) and a 77% not significant higher risk of CV death (OR 1.77, 95% CI [0.83–3.80],  $p=0.130$ ). This enhanced risk persisted after adjustment for confounding significant baseline characteristics, with a 47% (adjusted HR 1.47, 95% CI [1.05–1.70],  $p=0.032$ , *Figure 1*).

Figure 1.



**Conclusion:** Among a real-world cohort of ACS patients, ADT is associated with a significantly increased rate of all-cause mortality and non-CV death. These observations should lead clinicians to further individualise ADT, employing newer and safer ADT, generally associated with a lower CV risk. ■