

## **Clopidogrel Failure as a Prognostic Factor in Patients with Acute Coronary Syndrome (ACS): For The ACSIS 2008 Study Group**

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**Objectives:** Patients sustaining Acute Coronary Syndrome (ACS) despite chronic aspirin treatment, suffer from worse prognosis as compared to aspirin naïve patients, a phenomena designated “Aspirin Failure”. Despite growing use of clopidogrel, there are no data regarding the prognostic significance of "clopidogrel failure".

**Methods:** The study comprised 1821 consecutive patients with ACS who were drawn from the ACSIS 2008 survey. Patients were followed-up for 30 days.

**Results:** Out of 1821 patients, 194 (11%) were treated with clopidogrel prior to the index ACS. They were older (66 Vs.63 years;  $p < 0.01$ ), and were more likely to have diabetes, hypertension, dyslipidemia as well as prior cardiovascular history, including prior M.I, revascularization, CABG, PVD and CVA. They were less likely to present with STEMI (23% Vs 47%;  $p < 0.0001$ ), and had smaller infarct size as manifested by lower peak CK ( $421 \text{ u/l} \pm 710$  Vs  $855 \pm 1283 \text{ u/l}$   $p < 0.0001$ ). Clopidogrel failure was associated with higher incidence of sub-acute stent thrombosis (2.9% Vs 0.8%;  $p < 0.001$ ) and a trend towards higher 30 days MACE (19% Vs 14%;  $p = 0.08$ ), but after controlling for differences in baseline characteristics by logistic regression which included propensity score for chronic clopidogrel treatment, clopidogrel failure was not an independent predictor of 30 days MACE (OR= 1.2 95%; CI 0.8-1.4,  $p=0.34$ ).

**Conclusions:** Although “clopidogrel failure“ patients were older and had higher risk profile, they had smaller infarcts, were less likely to present with STEMI and eventually did not showed worse prognosis.