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MYOCARDIAL ISCHEMIA AND INFARCTION

PROTON PUMP INHIBITORS ARE ASSOCIATED WITH CARDIOVASCULAR RISK INDEPENDENT OF CLOPIDOGREL USE IN PATIENTS WITH MYOCARDIAL INFARCTION: A NATIONWIDE PROPENSITY SCORE MATCHED STUDY

ACC Poster Contributions

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Session Title: Acute Myocardial Infarction--New Insights into Antiplatelet Therapy

Abstract Category: Acute Myocardial Infarction--Therapy

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Background Controversy remains to whether the combination of clopidogrel and proton pump inhibitors (PPI) associated with diminished antiplatelet effect causes reduced clinical effect of clopidogrel. This prompted us to analyze the risk of adverse cardiovascular (CV) outcomes related to the concomitant use of PPI and clopidogrel in an unselected population of patients with prior myocardial infarction (MI).

Methods Consecutive patients hospitalized with first-time MI between 2001 and 2007 and subsequent use of clopidogrel and PPI after discharge was identified by individual-level-linkage of administrative registers. The risk of CV death, MI or stroke associated with use of PPI was studied by propensity score matched Cox-regression models and Kaplan-Meier analysis. Follow up was one year.

Results 56774 patients were included in the study; 9167 experienced MI, CV death or stroke. 28237 (49.7%) of the patients received clopidogrel and 5723 (20.3%) of these received PPI. For use of PPI in combination with clopidogrel the hazard ratio (HR) and 95% confidence intervals for CV death, MI or stroke was 1,27 (1,15 to 1,40) while the HR for the use of PPI in patients not receiving clopidogrel was 1,14 (1,06-1,22) (Figure 1). There was no difference between the different subtypes of PPI.

Conclusion In patients with MI, PPI use is associated with increased cardiovascular risk independent of concomitant use of clopidogrel. This study does not suggest a clinically significant interaction between clopidogrel and PPI.

1 year Cardiovascular Death, Myocardial Infarction or stroke

