

中文題目: Ticagrelor 比較 clopidogrel 在台灣急性冠心症患者之效應及安全  
性分析: 一個多中心的回溯性前驅研究

英文題目: **The efficacy and safety of ticagrelor versus clopidogrel in acute  
coronary syndrome in Taiwan: a multicenter retrospective pilot study**

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**Background:** The efficacy and safety of ticagrelor as compared to clopidogrel in acute coronary syndrome (ACS) has never been evaluated in Eastern Asians, who are supposed to have a different response to P2Y12 antagonists than Caucasians, in a real-world manner.

**Methods:** A multi-center retrospective study was performed to evaluate 928 consecutively eligible patients (324 ticagrelor; 604 clopidogrel) with ACS receiving aspirin and one P2Y12 antagonist. By propensity score matching, 448 patients were selected with equal sample size in each group. Kaplan-Meier analysis was used to study patient survival and event-free status, using the log-rank test. All uni-variables with P value less than 0.1 were put into multi-variate Cox proportional hazard model to identify independent covariates.

**Results:** In the entire cohort, there were some variables with significant difference between both groups. During mean 164.3 ( $\pm 116.4$ )-day follow-up, ticagrelor treatment had no significant effect on primary efficacy endpoint (myocardial infarction, stroke or vascular death) in the overall cohort. However, in matching cohort, patients with ticagrelor had lower incidence of primary endpoint [hazard ratio (HR): 0.56, 95% confidence interval (CI): 0.30-1.04, P = 0.07] and stroke (HR: 0.15, 95% CI: 0.02-1.24, P = 0.08) with marginally statistical significance, and tended to have higher bleeding rate except major bleeding. The protective effect in favor of ticagrelor treatment was consistent in all subgroups. A multi-variate analysis showed use of ticagrelor was inversely associated with the occurrence of primary endpoint despite only marginally statistical significance. More patients treated with ticagrelor experienced dyspnea (21.0% vs. 11.6%, P = 0.007) and underwent discontinuation in P2Y12 antagonist treatment due to dyspnea.

**Conclusions:** Ticagrelor treatment could provide a marginally favorable effect at the expense of more chance of dyspnea and a borderline increase in other bleedings in a real-world manner. This pilot study provides a scientific base to call for a larger, suitably powered phase 4 prospective or observational study in this ethnic population. The hypothesis regarding higher bleeding risk with anti-platelet treatment in East

Asians warrants further evaluation in Chinese.