



Acute and Stable Ischemic Heart Disease

EFFICACY AND SAFETY OF NOVEL ORAL P2Y12 RECEPTOR INHIBITORS IN ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION PATIENTS UNDERGOING PCI: A SYSTEMATIC REVIEW AND META-ANALYSIS

Poster Contributions
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Background: The efficacy and safety of novel oral P2Y₁₂ receptor inhibitors (prasugrel and ticagrelor) are subjects of contention in ST-segment elevation myocardial infarction (STEMI) patients undergoing PCI, the optimal duration of therapy remains uncertain.

Methods: We searched PubMed, Embase, Cochrane Library, CNKI, VIP, and WanFang Data to identify randomized controlled trials comparing novel oral P2Y₁₂ receptor inhibitors to clopidogrel in STEMI patients undergoing PCI until February 2016. The primary efficacy and safety endpoint were all-cause mortality and major/minor bleeding.

Results: Twelve studies were included. Novel oral P2Y₁₂ inhibitors significantly reduced the incidence of all-cause death (relative risk [RR]: 0.65, 95% CI: 0.53 - 0.78), MACE (0.68 [0.56 - 0.83]) and stent thrombosis (0.56 [0.43 - 0.75]) without significant difference in bleeding (P = 0.20) compared with clopidogrel. Identical results were observed in the longer dual antiplatelet therapy (DAPT) and shorter-DAPT subgroups, albeit Chinese patients with ticagrelor treatment had a slight increase in bleeding (P = 0.08). Furthermore, the pooled RR ratio for each endpoint showed no significant difference between the longer-DAPT and shorter-DAPT subgroups.

Conclusions: STEMI patients undergoing PCI who received novel oral P2Y₁₂ receptor inhibitors had significant reductions in the risk of all-cause death, MACE, and stent thrombosis without causing more bleeding events compared with clopidogrel.

