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ACC.i2 Interventional Cardiology

OPTIMAL P2Y12 INHIBITOR IN PATIENTS WITH ST SEGMENT ELEVATION MYOCARDIAL INFARCTION UNDERGOING PRIMARY PERCUTANEOUS CORONARY INTERVENTION: A NETWORK META-ANALYSIS

Poster Contributions
Poster Area, South Hall A1
Sunday, April 03, 2016, 9:45 a.m.-10:30 a.m.

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Background: Limited data exists regarding the comparative efficacy and safety of new higher potency P2Y12 inhibitors in patients with ST segment elevation myocardial infarction (STEMI) undergoing primary percutaneous intervention (PPCI). We compared various P2Y12 inhibitors in patients with STEMI undergoing PPCI.

Methods: We identified clinical trials including STEMI patients and extracted demographic, procedural and clinical outcomes data. Major adverse cardiovascular events (MACE) events were defined as composite of death, myocardial infarction (MI), and target vessel revascularization (TVR). Network meta-analysis was performed using Bayesian methods.

Results: We analyzed 37 studies with 88402 STEMI patients and 5077 MACE events. At 1-month and 1-year prasugrel was associated with: lower MACE, death, and MI than standard, high-dose or upstream clopidogrel, and standard ticagrelor; lower MACE and death than upstream ticagrelor; lower stroke risk than standard clopidogrel and standard or upstream ticagrelor; lower stent thrombosis (ST) than standard or upstream clopidogrel (Figure). MACE was particularly lower with prasugrel in studies where patients received bivalirudin or drug-eluting stents (DES), or did not receive glycoprotein IIb/IIIa inhibitor.

Conclusions: In STEMI patients undergoing PPCI, prasugrel and ticagrelor are more efficacious than standard or high-dose clopidogrel; however, prasugrel appears superior to standard ticagrelor.

