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IN BRIEF

ANTIPLATELET THERAPY

Prehospital administration of ticagrelor in patients with STEMI is safe, but does not improve reperfusion

Antiplatelet therapy can improve outcomes when administered in hospital to patients with ST-segment elevation myocardial infarction (STEMI); therefore, researchers designed the ATLANTIC trial to investigate the potential benefit of prehospital administration of ticagrelor. A total of 1,862 patients with STEMI were randomly allocated to receive ticagrelor in either the ambulance or the catheterization laboratory. Data presented at the ESC Congress 2014 show that the rates of major adverse cardiovascular events and major bleeding were similar in each group, suggesting that early administration of the drug is safe. However, the co-primary end points of ST-segment elevation resolution and restoration of blood flow in the infarcted artery also did not significantly differ between the two groups, indicating that prehospital ticagrelor does not improve reperfusion before percutaneous coronary intervention.

Original article Montalescot, G. *et al.* Prehospital ticagrelor in ST-segment elevation myocardial infarction. *N. Engl. J. Med.* doi:10.1056/NEJMoa1407024

INTERVENTIONAL CARDIOLOGY

New ultrathin, biodegradable-polymer stent noninferior to existing durable-polymer model

The design of stents for percutaneous coronary intervention continues to evolve in attempts to optimize long-term outcomes. In the single-blind, randomized BIOSCIENCE trial, a novel sirolimus-eluting stent with biodegradable polymer and ultrathin struts was compared with an everolimus-eluting stent with durable polymer and thin struts. Researchers recruited 2,119 patients with 3,139 lesions from nine hospitals in Switzerland. The biodegradable-polymer stent was noninferior to the durable-polymer stent in terms of target-lesion failure after 12 months, and no significant difference in the rate of definite stent thrombosis was reported with either stent.

Original article Pilgrim, T. *et al.* Ultrathin strut biodegradable polymer sirolimus-eluting stent versus durable polymer everolimus-eluting stent for percutaneous coronary revascularisation (BIOSCIENCE): a randomised, single-blind, non-inferiority trial. *Lancet* doi:10.1016/S0140-6736(14)61038-2

HYPERTENSION

Blood-pressure lowering most beneficial in patients at highest cardiovascular risk

The Blood Pressure Lowering Treatment Trialists' Collaboration has performed a meta-analysis involving data from 11 trials and 26 randomized studies ($n=51,917$) of antihypertensive therapy. Participants were stratified into one of four groups according to their baseline 5-year major cardiovascular risk. Treatment to lower blood pressure reduced the risk of cardiovascular events in all groups, but was most beneficial in those at the greatest baseline risk. "This finding," comment the investigators, "provides support for the notion that blood-pressure-lowering treatment should target those at greatest cardiovascular risk, not just those with the highest blood-pressure levels."

Original article The Blood Pressure Lowering Treatment Trialists' Collaboration. Blood pressure-lowering treatment based on cardiovascular risk: a meta-analysis of individual patient data. *Lancet* **384**, 591–598 (2014)