*Nature Reviews Cardiology* **12**, 622 (2015); published online 15 September 2015; doi:10.1038/nrcardio.2015.146; doi:10.1038/nrcardio.2015.147; doi:10.1038/nrcardio.2015.148

# **IN BRIEF**

### **CORONARY ARTERY DISEASE**

#### Long-term FAME of FFR-guided revascularization

In the FAME study, patients with multivessel coronary artery disease were randomly assigned to undergo percutaneous coronary intervention (PCI) guided by either angiography (in which case, all identified stenoses were revascularized) or fractional flow reserve (FFR; in which case, only stenoses with an FFR  $\leq$ 0.80 were stented). The investigators now report the 5-year outcomes of the trial. Major adverse cardiac events (the primary end point) occurred in 31% of patients who underwent angiography-guided PCI and in 28% of patients who received FFR-guided PCI (P=0.31). Moreover, fewer stents were placed in the angiography group (mean 1.9) than in the FFR group (mean 2.7; P<0.0001). The long-term safety and lower resource use mean that "FFR guidance of multivessel PCI should be the standard of care in most patients", conclude the investigators.

Original article van Nunen, L. X. et al. Fractional flow reserve versus angiography for guidance of PCI in patients with multivessel coronary artery disease (FAME): 5-year follow-up of a randomised controlled trial. *Lancet* doi:10.1016/ S0140-6736(15)00057-4

### ACUTE CORONARY SYNDROMES

#### No benefit of peri-infarct pacing after myocardial infarction

In the PRomPT trial presented at the ESC Congress 2015, 126 patients with a large myocardial infarction were randomly assigned to receive dual-site biventricular pacing or singlesite left ventricular pacing from an implanted cardiac resynchronization therapy–defibrillator, or not to have a device implanted. After 18 months of follow-up, the increase in left ventricular end-diastolic volume compared with baseline was not significantly different in the two peri-infarct pacing groups combined ( $16.7 \pm 30.5$  ml) compared with in the control group ( $15.3 \pm 28.6$  ml; P=0.92). The researchers conclude that "peri-infarct pacing did not prevent left ventricular remodelling or improve functional or clinical outcomes ... in patients with [a] large first myocardial infarction".

**Original article** Stone, G. W. *et al.* Peri-infarct zone pacing to prevent adverse left ventricular remodelling in patients with large myocardial infarction. *Eur. Heart J.* doi:10.1093/eurheartj/ehv436

## ATRIAL FIBRILLATION

# ATP-guidance of pulmonary vein isolation does not reduce recurrence of atrial tachyarrhythmia

In the UNDER-ATP trial presented at the ESC Congress 2015, 2,113 patients with paroxysmal, persistent, or longlasting atrial fibrillation were randomly assigned to receive conventional or ATP-guided pulmonary vein isolation (PVI). With ATP guidance, patients received additional radiofrequency energy applications if ATP provoked dormant pulmonary vein conduction. After 1 year, 67.1% of patients in the conventional PVI group were free from recurrent atrial tachyarrhythmia (the primary end point) compared with 68.7% of the ATP-guided PVI group (P=0.25). ATP-guidance had no significant effect on the rate of repeat ablation, and no significant differences in these outcomes were detected according to atrial fibrillation type.

**Original article** Kobori, A. *et al.* Adenosine triphosphate-guided pulmonary vein isolation for atrial fibrillation: the UNmasking Dormant Electrical Reconduction by Adenosine TriPhosphate (UNDER-ATP) trial. *Eur. Heart J.* doi:10.1093/eurheartj/ehv457