

IN BRIEF

ACUTE CORONARY SYNDROMES**Anti-inflammatory therapy after acute MI**

Maladaptive processes after myocardial infarction (MI) might involve p38 mitogen-activated protein kinase (MAPK)-stimulated inflammation. However, in the LATITUDE-TIMI 60 trial, treatment with losmapimod to inhibit p38 MAPK in patients with acute MI did not reduce the risk of major ischaemic cardiovascular events compared with placebo. A total of 3,503 patients were randomly assigned to losmapimod (7.5 mg orally twice daily) or placebo. The primary end point (a composite of cardiovascular death, MI, or severe recurrent ischaemia requiring urgent coronary revascularization) occurred in 8.1% and 7.0% of patients in each group, respectively, during the 12-week follow-up (HR 1.16, 95% CI 0.91–1.47). On the basis of these exploratory findings, the investigators did not proceed to a larger efficacy trial that had been planned.

ORIGINAL ARTICLE O'Donoghue, M. L. *et al.* Effect of losmapimod on cardiovascular outcomes in patients hospitalized with acute myocardial infarction: a randomized clinical trial. *JAMA* <http://dx.doi.org/10.1001/jama.2016.3609> (2016)

HEART FAILURE**Vitamin D supplementation in chronic heart failure**

Patients with chronic heart failure are often deficient in vitamin D, which is associated with impaired prognosis. In the VINDICATE study, 229 patients with chronic heart failure and vitamin D deficiency were randomly allocated to 1 year of vitamin D₃ supplementation (100 µg daily) or matching non-calcium-based placebo. The primary end point, 6-min walking distance, was not significantly different between the two groups. However, supplementation was associated with significant improvement in cardiac function (left ventricular ejection fraction +6.07%) and reversal of left ventricular remodelling (left ventricular end-diastolic diameter –2.49 mm, and left ventricular end-systolic diameter –2.09 mm). Whether these changes translate into improvements in clinical outcomes remains to be established. “Vitamin D might be a cheap and safe additional option for ... patients [with chronic heart failure],” conclude the researchers, “and may have beneficial effects on multiple features of the syndrome.”

ORIGINAL ARTICLE Witte, K. K. *et al.* Effects of vitamin D on cardiac function in patients with chronic HF: the VINDICATE study. *J. Am. Coll. Cardiol.* <http://dx.doi.org/10.1016/j.jacc.2016.03.508> (2016)

HEART FAILURE**Vagal nerve stimulation in chronic heart failure**

Vagal nerve stimulation is an emerging device-based therapy for autonomic modulation in patients with heart failure. In the open-label INOVATE-HF trial, 707 patients with chronic heart failure (NYHA class III symptoms and left ventricular ejection fraction ≤40%) were randomly assigned to continued medical therapy with or without device implantation for vagal nerve stimulation. After follow-up (mean 16 months), the primary end point (all-cause mortality or first event for worsening heart failure) occurred in 30.3% and 25.8% of patients in each group, respectively (HR 1.14, 95% CI 0.86–1.53). However, in secondary end point analyses, quality of life, NYHA classification, and 6-min walking distance were improved with vagal nerve stimulation. The mixed results from the INOVATE-HF trial and previous studies of vagal nerve stimulation “probably illustrates the complexity of autonomic modulation with many different factors that may affect outcomes”, conclude the investigators.

ORIGINAL ARTICLE Gold, M. R. *et al.* Vagus nerve stimulation for the treatment of heart failure: the INOVATE-HF trial. *J. Am. Coll. Cardiol.* <http://dx.doi.org/10.1016/j.jacc.2016.03.525> (2016)