# **IN BRIEF**

## **GENETICS**

# ANGPTL3 deficiency protects from CAD

Deficiency of angiopoietin-like 3 (ANGPTL3), an inhibitor of lipoprotein lipase, is associated with a reduced risk of coronary artery disease (CAD), according to a study that involved atherosclerotic phenotyping of three individuals with complete ANGPTL3 deficiency, a population-based genomic analysis of ANGPTL3 loss-of-function variants, and a biomarker study in patients with myocardial infarction (MI). None of the individuals with complete ANGPTL3 deficiency had coronary atherosclerotic plagues, and heterozygous carriers of a ANGPTL3 loss-of-function mutation (approximately 1 in 309 of people analyzed) had a 34% decreased risk of CAD compared with noncarriers (OR 0.66, 95% CI 0.44-0.98, P = 0.04). Heterozygous carriers also had lower plasma levels of triglycerides and LDL cholesterol. Plasma ANGPTL3 levels were lower in healthy individuals than in patients with MI, and those in the lowest tertile of ANGPTL3 levels had a 35% reduced risk of MI. ANGPTL3 inhibitors are already in clinical development. ORIGINAL ARTICLE Stitziel, N. O. et al. ANGPTL3 deficiency and protection against

**ORIGINAL ARTICLE** Stitziel, N. O. *et al.* ANGPTL3 deficiency and protection agains coronary artery disease. *J. Am. Coll. Cardiol.* **69**, 2054–2063 (2017)

#### HEART FAILURE

#### No effect of ularitide in heart failure outcomes

Results from the TRUE-AHE trial on ularitide show that early administration of this intravenous vasodilator to patients with acute heart failure (HF) reduces systolic blood pressure and plasma levels of N-terminal pro-brain natriuretic peptide (NT-proBNP), but has no effect on the coprimary end point of initial 48-h clinical course and long-term cardiovascular mortality. This double-blind trial included 2,157 patients with acute HF who were randomly assigned to receive continuous intravenous infusion of either ularitide (15 ng per kg of body weight per min) or placebo for 48 h. Despite the early beneficial effects of ularitide in reducing systolic blood pressure, plasma levels of NT-proBNP, and rate of in-hospital heart-failure events during the infusion, changes in cardiac troponin T levels between baseline and 48 h were similar in both groups, and no significant between-group differences were found for the coprimary outcomes of initial 48-h clinical course and cardiovascular mortality (median follow-up 15 months).

ORIGINAL ARTICLE Packer, M. et al. Effect of ularitide on cardiovascular mortality in acute heart failure. N. Engl. J. Med. http://dx.doi.org/10.1056/NEIMoa1601895 (2017)

#### **PUBLIC HEALTH**

## Active commuting can lower your risk of CVD

The mode of transport you use to commute to work matters. A new study shows that cycling or walking to and from work reduces the risk of cardiovascular disease (CVD) incidence and death compared with nonactive commuting (using the car or public transport). Commuting by cycling also reduces the risk of cancer incidence and all-cause death. This prospective, population-based study included 263,450 participants recruited from 22 sites across the UK, with a median follow-up of 5 years for all-cause, CVD, and cancer mortality and 2.1 years for incident CVD and cancer. These associations had dose-response trends and were independent of confounding factors such as sex, age, residence in deprived regions, ethnicity, smoking status, recreational and occupational physical activity, sedentary behaviour, and dietary intake.

**ORIGINAL ARTICLE** Celis-Morales, C. A. *et al.* Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. *BMJ* **357**, j1456 (2017)