

## IN BRIEF

## ➤ RISK FACTORS

**HDL-C levels not specific to cardiovascular mortality**

Individuals with low ( $\leq 30$  mg/dl) levels of high-density lipoprotein cholesterol (HDL-C), have higher cardiovascular and noncardiovascular mortality than individuals with intermediate levels of HDL-C. However, individuals with high levels of HDL-C ( $>70$  mg/dl in men;  $>90$  mg/dl in women) also have increased noncardiovascular mortality. These findings come from an analysis of 631,762 individuals without previous cardiovascular conditions or severe comorbidities in the CANHEART cohort. "HDL-C level is a marker of poor general health and may not be an independent modifiable risk factor specifically for cardiovascular disease," summarize the investigators.

**ORIGINAL ARTICLE** Ko, D. T. *et al.* High-density lipoprotein cholesterol and cause-specific mortality in individuals without previous cardiovascular conditions: the CANHEART study. *J. Am. Coll. Cardiol.* **68**, 2073–2083 (2016)

## ➤ DYSLIPIDAEMIA

**Optimizing child–parent screening for FH**

Child–parent screening is effective and feasible to detect familial hypercholesterolaemia (FH) in primary care practice, according to a new study involving 10,095 children aged 1–2 years. A screening strategy of a cholesterol level  $\geq 1.53$  multiples of the median (MoM), plus either the presence of an FH-associated mutation or a repeat elevated cholesterol level 3 months later, identified 28 children (0.3% of the total) with a positive result for FH. Using a cut-off value of 1.35 MoM plus a mutation, or two cholesterol readings  $\geq 1.50$  MoM, identified 40 children (0.4%) with a positive screening result for FH and, therefore, a high risk of cardiovascular disease.

**ORIGINAL ARTICLE** Wald, D. S. *et al.* Child–parent familial hypercholesterolemia screening in primary care. *N. Engl. J. Med.* **375**, 1628–1637 (2016)

## ➤ IMAGING

**New OCT-based strategy to guide PCI**

The procedural efficacy of a new optical coherence tomography (OCT) strategy to guide percutaneous coronary intervention (PCI) is similar to that with intravascular ultrasonography (IVUS) or angiography, according to a randomized, controlled trial (LUMIEN III: OPTIMIZE PCI) involving 450 patients. The final median minimum stent area (primary end point) was 5.79 mm<sup>2</sup> with OCT guidance, 5.89 mm<sup>2</sup> with IVUS guidance, and 5.49 mm<sup>2</sup> with angiography guidance. The investigators now plan to test the OCT strategy in a clinical outcome trial.

**ORIGINAL ARTICLE** Ali, Z. A. *et al.* Optical coherence tomography compared with intravascular ultrasound and with angiography to guide coronary stent implantation (LUMIEN III: OPTIMIZE PCI): a randomised controlled trial. *Lancet* [http://dx.doi.org/10.1016/S0140-6736\(16\)31922-5](http://dx.doi.org/10.1016/S0140-6736(16)31922-5) (2016)

## ➤ CARDIAC RESUSCITATION

**Real-world evidence for public-access defibrillation**

Public-access defibrillation is known to improve survival rate in out-of-hospital cardiac arrest, but evidence on a population level is currently lacking. In a Japanese registry study involving 43,762 patients with ventricular fibrillation cardiac arrest, 1-month survival with a favourable neurological outcome was 38.5% in individuals who received public-access defibrillation, and 18.2% in individuals who did not (adjusted OR 2.03, 95% CI 1.87–2.20). Furthermore, the estimated number of survivors with a favourable neurological outcome attributable to public-access defibrillation increased from six in 2005 to 201 in 2013 ( $P < 0.001$ ).

**ORIGINAL ARTICLE** Kitamura, T. *et al.* Public-access defibrillation and out-of-hospital cardiac arrest in Japan. *N. Engl. J. Med.* **375**, 1649–1659 (2016)