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IN BRIEF

DYSLIPIDAEMIA

Anacetrapib reduces LDL cholesterol in patients with heterozygous familial hypercholesterolaemia

The cholesterol ester-transferase protein inhibitor anacetrapib reduced LDL-cholesterol levels in patients with heterozygous familial hypercholesterolaemia already receiving optimal lipid-lowering therapy. LDL-cholesterol levels were reduced in patients who received 100 mg oral anacetrapib for 52 weeks compared with those who were assigned placebo (placebo-adjusted percentage change -39.7% , 95% CI -45.7 to -33.7 ; $P < 0.001$). This study shows that anacetrapib in addition to current lipid-lowering treatments can decrease atherogenic lipids in circulation, but whether anacetrapib can prevent cardiovascular events remains to be determined.

Original article Kastelein, J. J. *et al.* Anacetrapib as lipid-modifying therapy in patients with heterozygous familial hypercholesterolaemia (REALIZE): a randomised, double-blind, placebo-controlled, phase 3 study. *Lancet* doi:10.1016/S0140-6736(14)62115-2

HEART FAILURE

No increase in heart failure rates with alogliptin

In a study of hospital admissions in the EXAMINE trial, treatment with the dipeptidyl peptidase 4 (DDP-4) inhibitor alogliptin did not increase the risk of heart failure in patients with type 2 diabetes mellitus and a recent acute coronary syndrome event. During follow-up (median 533 days), rates of major adverse cardiac events were similar in patients who received alogliptin and those who received placebo (16.0% vs 16.5%; HR 0.98, 95% CI 0.86–1.12), and hospital admissions for heart failure were also not different between the two groups (3.1% vs 2.9%; HR 1.07, 95% CI 0.79–1.46). Despite concerns over increased rates of heart failure observed with another DDP-4 inhibitor in a previous trial, heart failure outcomes were not changed by alogliptin in the present study.

Original article Zannad, F. *et al.* Heart failure and mortality outcomes in patients with type 2 diabetes taking alogliptin versus placebo in EXAMINE: a multicentre, randomised, double-blind trial. *Lancet* doi:10.1016/S0140-6736(14)62225-X

SURGERY

Restrictive transfusion threshold not superior to liberal threshold after cardiac surgery

A comparison of restrictive versus liberal transfusion thresholds to correct anaemia after cardiac surgery showed no differences in morbidity and total health-care costs. Patients allocated to a restrictive transfusion threshold (haemoglobin level < 7.5 g/dl, $n = 1,000$) or a liberal threshold (haemoglobin level < 9 g/dl, $n = 1,003$) had similar rates of the primary outcome of serious infection or ischaemic events within 3 months (35.1% vs 33.0%; OR 1.11, 95% CI 0.91–1.34, $P = 0.30$). Mortality was higher in the restrictive-threshold group than in the liberal-threshold group (4.2% vs 2.6%; HR 1.64, 95% CI 1.00–2.67; $P = 0.045$). Total health-care costs up to 3 months after surgery were similar in the two groups. Although restrictive thresholds require fewer units of red blood cells, the increased mortality in the restrictive-threshold group observed in this study raises concerns.

Original article Murphy, G. J. *et al.* Liberal or restrictive transfusion after cardiac surgery. *N. Engl. J. Med.* **372**, 997–1008 (2015)