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IN BRIEF

DYSLIPIDAEMIA

PCSK9 inhibitor reduces need for lipoprotein apheresis in familial hypercholesterolaemia

The need for lipoprotein apheresis — the removal of apoprotein B100-containing lipoproteins from the blood — is reduced in patients with heterozygous familial hypercholesterolaemia treated with the PCSK9 inhibitor alirocumab. In the double-blind ODYSSEY ESCAPE trial, 62 patients were randomly assigned to receive 150 mg of alirocumab or placebo subcutaneously twice weekly for 18 weeks. The rate of apheresis treatments was reduced by 75% in patients who received alirocumab compared with those who received placebo. Of the patients receiving the PCSK9 inhibitor, 63.4% avoided all apheresis, and 92.7% avoided at least half of the treatments. "The findings from this study suggest a role for alirocumab in the overall management of patients with heterozygous familial hypercholesterolaemia undergoing regular lipoprotein apheresis therapy," conclude the researchers.

ORIGINAL ARTICLE Moriarty, P. M. *et al.* Alirocumab in patients with heterozygous familial hypercholesterolaemia undergoing lipoprotein apheresis: the ODYSSEY ESCAPE trial. *Eur. Heart J.* http://dx.doi.org/10.1093/eurheartj/ehw388 (2016)

DYSLIPIDAEMIA

Benefit of dual lipid-lowering therapy after CABG surgery for ACS

Patients who have undergone coronary artery bypass graft (CABG) surgery for acute coronary syndrome (ACS) derive particular benefit from the addition of ezetimibe to statin therapy. This finding comes from an analysis of the IMPROVE-IT trial in which 18,134 patients with ACS were randomly allocated to simvastatin plus either ezetimibe or placebo. Patients who had previously undergone CABG surgery (9.3% of the participants) and who received simvastatin and ezetimibe had an 8.8% lower absolute risk of the primary end point (cardiovascular death, major coronary event, or stroke) compared with those who received simvastatin and placebo. By contrast, patients who had no history of CABG surgery had a 1.3% lower absolute risk with ezetimibe compared with placebo. "The benefit of adding ezetimibe to statin appears to be enhanced in patients with prior CABG [surgery]," summarize the investigators, but emphasize that patients without previous CABG surgery should not necessarily be excluded from intensive lipid-lowering therapy after ACS.

ORIGINAL ARTICLE Eisen, A. *et al.* The benefit of adding ezetimibe to statin therapy in patients with prior coronary artery bypass graft surgery and acute coronary syndrome in the IMPROVE-IT trial. *Eur. Heart J.* http://dx.doi.org/10.1093/eurheartj/ehw377 (2016)

ANTICOAGULATION THERAPY

Use of edoxaban in cardioversion for AF

In the open-label, phase IIIb ENSURE-AF trial, 2,199 patients undergoing electrical cardioversion of atrial fibrillation (AF) were randomly assigned to receive the oral direct factor Xa inhibitor edoxaban (60 mg daily), or enoxaparin and warfarin. The primary efficacy and safety end points occurred in only 1% of patients in each group. On the basis of the low rates of major bleeding and thromboembolism, the investigators conclude that "edoxaban is an effective and safe alternative to the best possible conventional treatment with enoxaparin and vitamin K antagonist strategy and might allow prompt cardioversion to be performed".

ORIGINAL ARTICLE Goette, A. *et al.* Edoxaban versus enoxaparin–warfarin in patients undergoing cardioversion of atrial fibrillation (ENSURE-AF): a randomised, open-label, phase 3b trial. *Lancet* http://dx.doi.org/10.1016/S0140-6736(16)31474-X (2016)