

AIM-LO: Icosapent ethyl (IPE)

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Introduction

Hello, I'm Amelia Yip and in this video, I'm going to provide an overview of the efficacy and safety of IPE, and some guidance on when this agent should be prescribed for the secondary prevention of ASCVD.

What is IPE?

IPE is a non-statin therapy that consists of a highly purified, pharmaceutical-grade form of the omega-3 fatty acid, eicosapentaenoic acid or EPA.

EPA has been shown to reduce triglycerides and it has pleotropic cardioprotective actions beyond triglyceride lowering that include enhanced lipid metabolism, anti-inflammatory and antithrombotic effects, antioxidant effects, cell membrane stabilization and plaque stabilization, and improved endothelial function.

Evidence from the REDUCE-IT Trial

Until recently, there hasn't been convincing evidence for omega-3 fatty acid to reduce cardiac outcomes. REDUCE-IT was a large trial of patients with established ASCVD or diabetes with CV risk factors who had elevated triglycerides despite statin therapy.

After 1 year, patients receiving IPE had a modest 18% reduction in triglycerides from baseline, with a statistically significant 25% reduction in a composite primary endpoint of 5-point MACE and 20% reduction in CV death. These benefits were offset by a significantly higher incidence of atrial fibrillation and edema compared to placebo.

Guideline Recommendations for IPE

On the basis of these findings, the 2021 Canadian Cardiovascular Society's guidelines for the management of dyslipidemia for the prevention of cardiovascular disease in adults upgraded their guidance on the use of omega-3 fatty acids, specifically IPE.

IPE is now recommended to decrease the risk of CV events in persons with established ASCVD or diabetes and one or more CVD risk factors, whose fasting triglyceride level is between 1.5 and 5.6 mmol/L despite maximally tolerated statin therapy.

IPE is dosed at 2g orally twice daily. This strong recommendation is specifically for IPE, and it should not be extended to other omega-3 fatty acid formulations that have not demonstrated high-quality evidence for cardio-protection.