

## We Can REDUCE-IT!



Findings from the Reduction of Cardiovascular Events with Icosapent Ethyl–Intervention Trial (REDUCE-IT) show that icosapent ethyl, a purified ethyl ester of eicosapentaenoic acid (EPA) reduces the risk of major adverse cardiovascular effects (MACE) by 25%. This included a 20% reduction in death from cardiovascular causes, reductions in other pre-specified endpoints, 31% reduction in myocardial infarction (MI), a 28% reduction in stroke, a 32% reduction in hospitalisation for unstable angina, and a 35% reduction in urgent coronary revascularisation.

The trial included 8179 patients with atherosclerosis or diabetes mellitus plus one additional risk factor, with triglyceride levels of 1.52 to 5.63mmol/L while on statin therapy. Patients were randomised to either icosapent ethyl or placebo. Median follow-up time was 4.9 years. The primary endpoint was 5-point MACE which included cardiovascular death, MI, stroke, coronary revascularisation or hospitalisation for unstable angina). Secondary endpoints included cardiovascular death, MI, or stroke.

Results of the trial showed a reduction of 5-point MACE from 22% to 17.2%. Cardiovascular death, MI or stroke was reduced from 14.8% to 11.2%.

More patients in the icosapent ethyl group were hospitalised for atrial fibrillation compared to the placebo group. There was also an increase in serious bleeding with icosapent ethyl, but there were no bleeding-associated deaths with either icosapent ethyl or placebo.

The large risk reductions demonstrated in REDUCE-IT make icosapent ethyl an effective option. Cardiovascular death was significantly reduced in the trial. There was a lower all-cause mortality and no increase non-cardiovascular mortality. With longer treatment and follow-up, a decrease in total mortality can easily be expected based on these results. There were also significant reductions in sudden cardiac death and cardiac arrest. The overall benefits of icosapent ethyl observed in this trial suggest that it might have multiple mechanisms of action. Icosapent ethyl is also known to lower triglycerides as well as inflammatory markers. This can help reduce a number of ischaemic endpoints.

Overall, findings from the REDUCE-IT trial clearly show that icosapent ethyl could be an important addition to the armamentarium of preventive medicine for cardiovascular disease and it could be a novel approach to reduce cardiovascular risk. Applied to patients worldwide, the use of icosapent ethyl could produce a significant reduction in atherosclerotic events.

Source: European Journal of Cardiology

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