



## Letter to the Editor

## Effect of icosapent ethyl on stroke risk: Different strokes for different folks?



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## Dear Editor,

In the Reduction of Cardiovascular Events with Icosapent Ethyl–Intervention Trial (REDUCE-IT) [1], among patients with elevated triglycerides on statins, ischemic event risk was lower among those who received icosapent ethyl vs. placebo. However, while coronary events were reduced in both REDUCE-IT and another pure EPA trial, Japan EPA lipid intervention study (JELIS) [2], ischemic stroke risk was lowered in REDUCE-IT (HR 0.64, 0.49–0.85), but not decreased in JELIS (HR 0.97, 0.85–1.10). The discrepancy between these two pure EPA trials might be due to the varied race-ethnicity composition of participants, since participants in REDUCE-IT were mostly from the USA and Europe, while those in JELIS were all from Japan. Although most ischemic strokes are caused by underlying atherosclerosis, non-atherosclerotic intracranial diseases (e.g. moyamoya, dissection) are more common among Asians [3]. Moreover, extracranial atherosclerosis, which is more common in Caucasians is more aligned in pathogenesis to coronary atherosclerosis than intracranial atherosclerosis, the latter of which is more prevalent in East Asians [3]. It is worthwhile to mention that different daily doses of EPA (4 g in REDUCE-IT vs 1.8 g in JELIS, respectively) were used and could be a possible explanation for why there was a significant reduction in stroke in REDUCE-IT but not in JELIS since a recent cohort study suggested that adipose tissue

content of EPA was inversely associated with total ischemic stroke [4]. Additional investigation into the stroke protective benefits of icosapent ethyl among East Asians is warranted.

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