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## Niacin in the Treatment of Hyperlipidemias in Light of New Clinical Trials: Has Niacin Lost its Place?

Authors' Contribution:  
Study Design A  
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Statistical Analysis C  
Data Interpretation D  
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Niacin is considered to be a powerful drug for the treatment of lipid and lipoprotein abnormalities connected with “residual cardiovascular risk”, which persist in high-risk patients even when the target goals of LDL-C are achieved with statin therapy. Recent large randomized clinical studies – AIM-HIGH (Atherothrombosis Intervention in Metabolic Syndrome With Low HDL/High Triglycerides) and HPS2-THRIVE (Heart Protection Study 2-Treatment of HDL to Reduce the Incidence of Vascular Events) – delivered some disappointing results, leading to the conclusion that no further benefit (decreased parameters of cardiovascular risk) is achieved by adding niacin to existing statin therapy in patients with high cardiovascular risk. Moreover, in these studies, several adverse effects of the treatment were observed; therefore, niacin treatment for hypolipidemias is not recommended. In this paper, we analyze the mechanisms underlying the hypolipidemic and antiatherogenic effects of niacin as well as some limitations of the designs of the AIM HIGH and HP2-THRIVE studies. We also provide the possibilities of rational usage of niacin for specific types of dyslipidemias.

**MeSH Keywords:** **Cardiovascular Diseases • Chemistry, Pharmaceutical • Lipids • Morbidity • Niacin • Prostaglandin Antagonists**

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