

IMPACT OF ADDED LIPID-LOWERING THERAPY ON CONTROL OF LDL CHOLESTEROL LEVELS IN PATIENTS RECEIVING ALIROCUMAB OR EVOLOCUMAB: A COMPARATIVE ANALYSIS IN REAL WORLD CLINICAL PRACTICE

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BACKGROUND AND IMPORTANCE

Maintaining a calculated level of LDL cholesterol (cLDL) below 70 mg/dL is a minimum goal in patients at high cardiovascular risk to reduce the likelihood of further events. Proprotein convertase subtilisin/kexin type 9 inhibitors (PCSK9i), such as alirocumab and evolocumab, effectively manage cLDL levels. However, the relative efficacy of combining these drugs with other lipid-lowering therapies is less well-known.



AIM AND OBJECTIVES

To describe the level of cLDL control in patients treated with PCSK9i for the prevention of secondary cardiovascular events and to evaluate the impact of adjunctive lipid-lowering therapy on cLDL levels.



MATERIAL AND METHODS

- Cross-sectional study was conducted among patients receiving evolocumab or alirocumab
- **Inclusion:** patients on active secondary prevention treatments, with cLDL measurements taken at least two months post-PCSK9i initiation.
- Four groups based on their added lipid-lowering treatments: no added therapy, high-efficacy statin (atorvastatin/rosuvastatin) and ezetimibe, high-efficacy statin alone, and ezetimibe alone. Patients with poor adherence were assigned to the no-added therapy group.
- Kruskal-Wallis and Fisher tests were used to compare mean cLDL levels and the proportion of patients achieving cLDL < 70 mg/dl, respectively.



RESULTS

138 patients included

31% women, mean age 65.8±10.9 years

71% of cases had cLDL < 70 mg/dl

Mean cLDL levels were 57.1±22.7 mg/dl

MEAN cLDL LEVELS

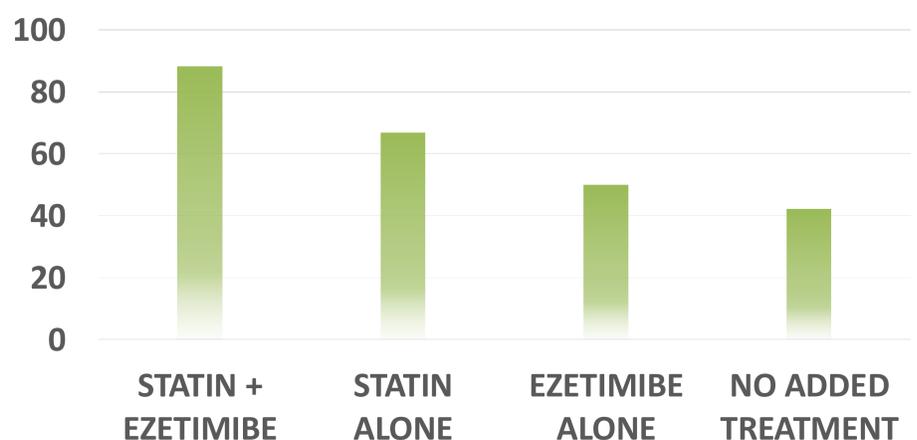
48.4±16.3 mg/dl for statin plus ezetimibe (n=77)

56.27±25.8 mg/dl for statin alone (n=15)

69.9±14.9 mg/dl for ezetimibe alone (n=8)

72.4±25.1 mg/dl for no added treatment (n=38)

PATIENTS cLDL < 70mg/dL (%)



Patients on a statin plus ezetimibe had double the likelihood of achieving control (RR = 2.1, 95%CI:1.4-3.1)

No differences were found in the primary outcomes between patients treated with alirocumab or evolocumab

CONCLUSION AND RELEVANCE

More than two-thirds of the patients had their cLDL levels under control, with those adhering to a high-efficacy statin plus ezetimibe treatment regimen demonstrating significantly better outcomes compared to other treatment groups.

