







# EFFECTIVENESS AND EFFICIENCY OF PCSK9 INHIBITORS: CLINICAL PRACTICE EXPERIENCE

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## **BACKGROUND AND IMPORTANCE**

In recent years, the use of PCSK9 inhibitors (iPCSK9) has increased due to their results in lowering LDL cholesterol (LDL-C) and their corresponding impact on patients cardiovascular health.

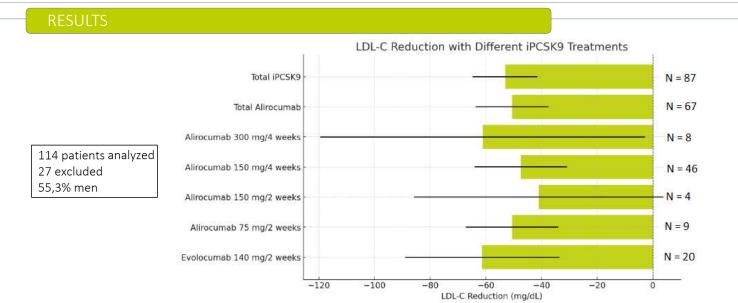
#### AIM AND OBJECTIVES

The primary objective is to compare the effectiveness and efficiency in reducing LDL-C between the off-label use of alirocumab 150 mg/month and the other dosing regimens indicated in the drug's technical data sheet. The secondary objective is to compare the effectiveness between the iPCSK9 alirocumab and evolocumab.



## MATERIAL AND METHODS

A retrospective observational study was conducted with patients from our hospital receiving any iPCSK9 in various dosing regimens. The following data were collected: iPCSK9 drug, dosing regimen, indication, and lipid profile. Patients without a second blood test or with a treatment duration of less than 28 days were excluded. To compare the mean LDL reduction between different treatment regimens, the Student-Fisher t-test was used. For cost calculations, prices were obtained through the Nomenclator.



No significant differences were observed between alirocumab and evolocumab: -10.8 mg/dL (95%CI: -38.6 to 17.1). Similarly, no significant differences were found between the 75 mg/2-week and 150 mg/4-week regimens of alirocumab, 14.5 mg/dL (95%CI: -24.5 to 53.5); nor between the 150 mg/2-week and 150 mg/4-week regimens, 6.4 mg/dL (95%CI: -50.8 to 30.8). The difference between alirocumab 300 mg/4-weeks and 150 mg/month was -13.7 mg/dL (95%CI: -58.3 to 30.8). All dosing regimens have the same monthly cost, except for the off-label regimen, which would result in a 50% cost reduction.

### **CONCLUSION AND RELEVANCE**

Given that the monthly cost is the same for all alirocumab dosing regimens, and no significant differences were found between the regimens, the administration of alirocumab 150 mg/month was identified as the most efficient regimen. We found no significant differences in LDL-C reduction between the various alirocumab dosing regimens. Additionally, no differences were observed between alirocumab and evolocumab.