



# ANALYSIS OF USAGE PROFILE, EFFECTIVENESS AND SAFETY OF ALIROCUMAB IN A TERTIARY HOSPITAL

Mondelo García C, Fernández Bargiela N, Fernández Oliveira C, Balea Filgueiras J, Giménez Arufe V, Martín Herranz MI.

Pharmacy Service. Instituto de Investigación Biomédica de A Coruña (INIBIC), Complexo Hospitalario Universitario de A Coruña (CHUAC), Sergas. Universidade da Coruña (UDC). As Xubias, 84. 15006 A Coruña, Spain.

## Background

- ❖ Hypercholesterolaemia is a common and growing health problem, above all in developed countries, which can cause serious consequences in patients who suffer from it.
- ❖ Alirocumab is a monodegraded inside cells, increasing their number in the surface of cells to join with LDL cholesterol and remove it from blood. oclonal antibody that blocks a protein called PCSK9 and prevents LDL cholesterol receptors being absorbed and and degraded inside cells, increasing their number in the surface of cells to join with LDL cholesterol and remove it from blood.

## Objective

Our objective is to analyse the use, effectiveness and safety of alirocumab in a tertiary level hospital.

## Methods

Observational retrospective study of all patients treated with alirocumab from 1 December 2016 to 1 October 2017.

- ❖ **Data sources:** electronic prescription program and electronic medical records.
- ❖ **Main variables:** sex, age, cause of statins' failure, previous clinical trial, alirocumab dose, adverse effects and LDL cholesterol levels after 3 months treatment.



## Results



- ✓ 50 patients
- ✓ 66% male
- ✓ Mean age: 60 ± 11.5 years-old

All patients included in the study were **instructed in the correct use of the dispositive** of alirocumab in the first visit to the hospital pharmacy

Alirocumab posology	% patients
75 mg / 14 days	10%
150 mg / 14 days	84%
150 mg / 28 days	6%

**16 patients** were previously treated with anti-PCSK9 in clinical trials

All of them continued with adequate levels of LDL cholesterol

**30% patients** Start treatment with alirocumab due to the **ineffectiveness of statins**

**20% patients** Start treatment with alirocumab because of **statins intolerance**

**Muscle symptoms** completely **disappeared** with the treatment change

All patients who started alirocumab treatment during the study period

achieved adequate levels of LDL cholesterol in 3 months

**65.1 ± 25.9 mg/dL**

Adverse effects	Number of patients
Rinitis	4
Diarrhoea	2
Cutaneous reactions	2
Jaw pain	1



Adverse effects were few and slight. Alirocumab was **well tolerated**.

## Conclusions

- ❖ Alirocumab constitutes an effective, safe and well-tolerated alternative to decreased LDL cholesterol to adequate levels when patients are intolerant to statins or when statins are ineffective.