ALIROCUMAB AND EVOLOCUMAB: EFFECTIVENESS AFTER 3 YEARS OF FOLLOW-UP IN A REAL WORLD SETTING

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C10 - Lipid modifying agents

4CPS-019

Background

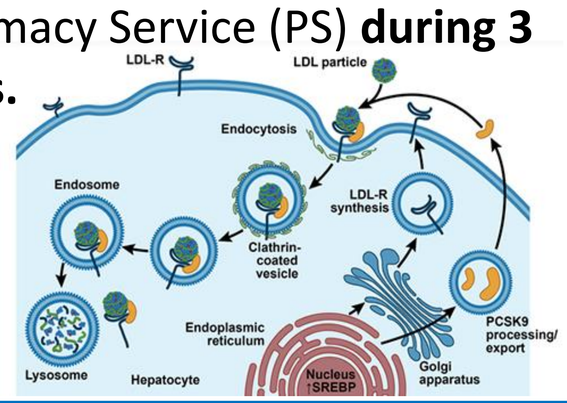
Hypercholesterolemia leads to higher risk of atherosclerosis and cardiovascular events. **Familial hypercholesterolemia is more resistant** to usual treatments.

In 2015 **PCSK9 inhibitors (PCSK9I) alirocumab and evolocumab** were approved for the treatment of primary hypercholesterolemia (heterozygous family [HFHe] and non-familial [HNF]) and mixed dyslipidemia(DM).

Due to their **recent approval and high cost**, it is **crucial** to **evaluate their results in the real-world setting**.

Aim and objectives

To **analyze long-term effectiveness of PCSK9I** approved by the Pharmacy Service (PS) **during 3 years.**



Material and methods

OBSERVATIONAL, RETROSPECTIVE STUDY *[Jan 2016-Mar 2019]*

- ❑ All PSCK9I were evaluated by the PS according to Regional Pharmacotherapeutic Commission criteria. **Patients approved** who initiated the treatment were **included.**
- ❑ **Biodemographic, clinical and pharmacotherapy** data were collected from medical records.
- ❑ Parameters were **evaluated** at treatment **initiation and after 6 months**.
- ❑ **Clinical response**, defined as low density lipoprotein **(LDL) reduction greater than 30%,** was analyzed by indications.

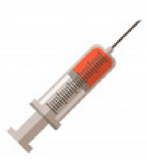
Results

PS accepted 93 patients out of 123 requested.
Only 72 patients (median age 58 years[37-84], 56% men) were included due to lack of data.

Cardiovascular risk factors: hypertension (47.2%), family history of ischemic heart disease (40.3%), smoking (38.3%), obesity (15.3%), diabetes (12.5%) and ischemic heart disease (58.3%).

Initial LDL value(mg/dl) [100-129]: 23.6% **[130-159]**: 34.8% **[160-190]**: 20.8% **>190**: 20.8%

Frequency of additional hypolipemiant treatments:
atorvastatin (40.3%), rosuvastatin (27.8%), fluvastatin (2.8%), pitavastatin (2.8%), statin-free (26.4%), and ezetimibe (72.2%)
*During the study 41.7% patients showed *statin intolerance* and 88.9% *reached their maximum tolerated dose.*



After initiating PCSK9I:
a) Statin dose: 83.3% maintained, 8.3% reduced, 6.9% stopped, 4.3% switched and 1.4% increased.
b) LDL plasma concentration decreased > 50% in 52.1% of the patients, **30-50%** in 31.2%, **< 30%** in 16.7%.

Patients(%) who reached *Clinical response* with :	Alirocumab	vs	Evolocumab
primary HFHe prevention	16.7		50
secondary HFHe prevention	68.8		83.3
primary HNF prevention	60		(no evolocumab patient)
HNF/DM secondary prevention	50		100

Conclusions

- ✓ The **16.7%** of our population **did not reach clinical response**.
- ✓ **Pharmacy Service may play a relevant role suggesting treatment cessation** in these patients.
- ✓ Evolocumab could be specially effective in HFHe; more studies are needed to confirm this finding.

https://www.eahp.eu/25-4CPS-019