and evolocumab were approved for primary hypercholesterolaemia (heterozygous family (HFHe) and non-familial (HNF)) and mixed dyslipidaemia (DM). Due to their recent approval and high cost, it is crucial to evaluate their real world results.

**Aim and objectives** To analyse the long term effectiveness of PCSK9I over 3 years, approved by the pharmacy service (PS).

**Material and methods** This was an observational retrospective study conducted at a third level hospital from January 2016 to March 2019. All PCSK9I were evaluated by the PS according to the criteria of the Regional Pharmacotherapeutic Commission. Patients approved who initiated the treatment were included.

Biodemographic, clinical and pharmacotherapy data was collected from the medical records. Parameters were evaluated at treatment initiation and after 6 months. Clinical response, defined as a reduction in low density lipoprotein (LDL) >30%, was analysed by indication.

**Results** PS accepted 93 of 123 patient requests. Only 72 patients (median age 58 years (37–84), 56% men) were included due to lack of data. Cardiovascular risk factors were: hypertension (47.2%), family history of ischaemic heart disease (40.3%), smoking (38.3%), obesity (15.3%), diabetes (12.5%) and ischaemic heart disease (58.3%).

Initial LDL values (mg/dL) were 100–129 (23.6%), 130–159 (34.8%), 160–190 (20.8%), and >190 (20.8%). Frequency of additional lipid lowering drugs were: 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% of patients showed statin intolerance and 88.9% reached their maximum tolerated dose.

After initiating PCSK9I, 83.3% of patients maintained the same dose of statin, 8.3% reduced the dose, 6.9% stopped taking the medication, 4.3% switched to another statin and 1.4% increased the dose. LDL plasma concentration decreased by more than 50% in 52.1% of patients, by 30–50% in 31.2% of patient and by <30% in 16.7% of patients. The clinical response in primary HFHe prevention was alirocumab 16.7% versus evolocumab 50%, and in secondary HFHe, alirocumab 68.8% versus evolocumab 83.3%. The clinical response in primary HNF prevention was alirocumab 60% (no evolocumab patient) and in HNF/DM secondary prevention, alirocumab 50% versus evolocumab 100%.

**Conclusion and relevance** We found that 16.7% of our population did not achieve a clinical response; PS may play a relevant role, suggesting treatment cessation in these patients. Evolocumab could be especially effective in HFHe; more studies are needed to confirm this finding.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

No conflict of interest.

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**4CPS-021**  **ALIROCUMAB AND EVOLOCUWAB: RESULTS IN CLINICAL PRACTICE**

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Background and importance Hypercholesterolaemia is a well established risk factor for developing coronary heart disease and increasing the risk of cardiovascular events (RCE). Alirocumab and evolocumab, proprotein convertase subtilisin-kexin type 9 (PCSK9) inhibitors, can complement the management of patients who do not achieve target cholesterol levels with standard treatment or are intolerant to it.