After the survey, all patients desired to continue with iPCSK9.

Conclusion After 6–12 weeks of iPCSK9 treatment, all patients reduced LDL level except 1 who was non-adherent. The LDL reduction ranged between 54%–71% and all patients on evolocumab achieved a LDL <70 mg/dL.

The tolerability was excellent and only mild adverse events in about 8% of patients were experienced.

A high acceptance of both alirocumab and evolocumab was reported by all patients who would continue with iPCSK9 treatment.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-025 LIPID MODIFICATION THERAPY FOR PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE

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Background Cardiovascular disease (CVD) is the leading cause of mortality worldwide, totalling almost one-third of all deaths. Lipid optimisation is a key public health priority to decrease CVD morbidity, mortality and consequential economic burden on healthcare systems. A reduction in cholesterol by 1 mmol with statin therapy reduces the risk of CVD events by 20%–24%, in people with an estimated 10 year CVD risk greater than 10%. In the UK, the National Institute of Clinical Excellence (NICE) recommends atorvastatin 20 mg for primary prevention of CVD in these people, using QRISK2 to estimate their level of risk.

Purpose To assess adherence to NICE lipid modification guidance in patients presenting with acute coronary syndrome (ACS).

Material and methods Data on lipid-lowering therapy was collected prospectively, over an 8 week period in August 2018, for all patients presenting with ACS. QRISK2 scores were calculated for patients admitted with ACS naïve to statin therapy. Ethics approval was not required.

Results Two-hundred and fifty-two patients presented with ACS: mean total cholesterol and low-density lipoprotein (LDL) levels on admission were 4.7 and 2.8 mmol/L respectively. One-hundred and thirty-six (54%) patients were naïve to statin therapy prior to admission, of these 91 (67%) had a QRISK2 score greater than 10% (mean 18.45%). All patients were subsequently discharged on high-intensity statins, 124 (91%) on atorvastatin 80 mg.

Conclusion Two-thirds of patients naïve to statin therapy prior to admission had a 10 year CVD risk of 10% or greater, as estimated using QRISK2, and would have been eligible for atorvastatin 20 mg for primary prevention of CVD as per NICE guidance. Identifying patients in primary care at risk of CVD events is key to ensuring appropriate lifestyle modifications are undertaken and statin therapy initiated, both of which have been shown to reduce CVD event rates. Community services, such as NHS health checks at community pharmacies, and development of GP practice-based pharmacists should be targeted and supported by secondary care to ensure high-risk patients are prescribed optimum lipid modification therapy for primary prevention of CVD, thereby reducing the risk of CVD morbidity, mortality and associated financial implications to the health system.

REFERENCES AND/OR ACKNOWLEDGEMENTS

https://www.nice.org.uk/guidance/cg181/chapter/1-Recommendations#lipid-modification-therapy-for-the-primary-and-secondary-prevention-of-cvd-2

No conflict of interest.

4CPS-026 ADHERENCE AND EFFECTIVENESS OF PCSK9 INHIBITORS IN ROUTINE CLINICAL PRACTICE

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Background Alirocumab and evolocumab are monoclonal antibodies that belong to a new class of cholesterol-lowering drugs by inhibiting the proprotein convertase subtilisin/kexin type-9 (PCSK9) enzyme.

Purpose The main objective of this study was to evaluate the adherence to alirocumab and evolocumab therapies and its relation to drug effectiveness.

Material and methods Observational, descriptive and retrospective study conducted in a tertiary hospital. All patients that initiated treatment with alirocumab and evolocumab from October 2016 to February 2018 were included.

Data sources were patients' electronic medical records and outpatients' electronic prescription and dispensation programme. Main variables collected were: gender, age, indication, prescriber's medical departments and low-density lipoprotein (LDL-C).

Adherence was calculated indirectly by consulting dispensing data in the outpatient prescription tool.

Effectiveness was defined as the percentage decrease in LDL-C from baseline to week 24.

Results Forty patients were included: 22 men (55%) and 18 women (45%), with median age 57 years (19–85). Nine patients (22.5%) had heterozygous primary hypercholesterolaemia, seven (17.5%) heterozygous primary hypercholesterolaemia and severe cardiovascular disease, 11 (27.5%) severe cardiovascular disease, 10 (25%) severe cardiovascular disease and statin intolerance, and three (7.5%) statin intolerance. Alirocumab was prescribed in 19 patients (47.5%) and evolocumab in 21 (52.5%).

Mean adherence index was 1.03 (SD 0.13). Mean basal LDL-C and LDL-C after 24 weeks were 125, 42 mg/dl (SD 43.34) and 61, 22 mg/dl (SD 44.17), respectively. The percentage decrease in LDL-C from baseline to week 24 was 43%, 31% in the alirocumab group and 54% in the evolocumab group. The adherence index in both groups was similar.

Twenty-eight patients (70%) had a percentage decrease in LDL-C >40% with an adherence index of 1.04 (SD 0.12), while 12 patients (30%) had a percentage decrease in LDL-C <40% with an adherence index of 1.01 (SD 0.15).

Conclusion

- Patients under PCSK9-inhibitors treatment are strong adherents to these therapies
- Effectiveness of PCSK9-inhibitors in routine clinical practice has been proven with data comparable to randomised clinical trials. Apparently, evolocumab shows better effectiveness than alirocumab.