Medication persistence with lipid-lowering treatment in Slovenia

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Background Low medication persistence on lipid-lowering agents decreases their long-term clinical benefits in patients at risk for cardiovascular events. The persistence with these agents seems to be low and a large proportion of users discontinue within the first year.

Purpose The study aimed to evaluate medication persistence with lipid-lowering agents after treatment initiation in Slovenian population.

Method The patients initiated on lipid-lowering therapy in 2009 that could be followed until the end of 2013 were included in the study. National health claims database on all outpatient prescription medicines obtained from the Health Insurance Institute of Slovenia was used. The parameters used were the active substance according to Â©C10Â© class of the Anatomic Therapeutical Chemical Classification, units dispensed and dispensing date. Once daily dosing was predicted, so the number of units dispensed equalled the number of days covered. Median time and probability of persistence were evaluated using the Kaplan-Meier survival curve. The discontinuation was detected if medication possession ratio was less than 33%. Log-rank test was also used to assess the impact of different factors affecting persistence.

Findings The persistence was determined for 30,571 patients initiating lipid-lowering monotherapy. Their mean age was 60±11 years and 50.5% were female. The majority (97.0%) were initiated a statin treatment, the remaining patients were prescribed other agents (fibrates, ezetimibe, omega-3 fatty acids, and nicotinic acid). Altogether, 48.6% of the patients discontinued within the first year. Median persistence time was 502 days (1.4 years). However, 12.8% of patients were dispensed only one prescription. Men were more persistent than women (median time 544 vs. 466 days; p < 0.01), patients older than 65 years were more persistent than younger (median time 600 vs. 455 days; p < 0.01) and patients treated with statins were more persistent than patients on fibrates or ezetimibe (median time 516 vs. 211 and 266 days, respectively; p < 0.01). Treatment re-initiation occurred in 11,234 patients representing 59.0% of those who discontinued. After second start, median persistence time was 391 days (1.1 year), meaning that 48.8% discontinued within the first year.

Conclusion Several Slovenian patients discontinue lipid-lowering agents very early after treatment initiation. Although many of them restart, approximately half discontinue again. As the beneficial effects of lipid-lowering agents increase with the length of treatment, Slovenian patients do not seem to benefit of the therapy. More careful considerations should be undertaken when introducing this treatment.