REAL-WORLD ANALYSIS ON THE ECONOMIC VALUE OF REACHING LIPID TARGET

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BACKGROUND AND OBJECTIVES

The control of lipid levels is one of the most effective strategies for cardiovascular disease prevention [1]. To date, few evidences are reported on the economic burden of patients treated with lipid-lowering drugs without reaching cholesterol control.

The study aimed to evaluate the healthcare direct costs for Italian National Health System for the management of patients treated with lipid-lowering drugs that do not achieve the low-density lipoprotein (LDL)-cholesterol target compared to those reaching their targets, and to analyze costs according to the distance from LDL target by using real-world data.

METHODOLOGY

✓ An observational analysis was performed on administrative and laboratory data from selected Italian Healthcare Departments, covering approximately 10% of Italian population (data were then repportioned on Italian population).

✓ Patients were included if they presented at least one laboratory LDL test between 2012 and 2019 and if they were prescribed lipid-lowering drugs during 6 months prior the last LDL detection (index date).

✓ Patients were sub-grouped in: TARGET REACHED and TARGET NOT REACHED cohorts (based on the ESC/EAS Guidelines available at the time of the analysis) [2].

✓ Mean annual direct costs were evaluated during 12 months period before index-date in terms of all drugs prescribed, all-cause hospitalizations and all outpatient services.

✓ Distance to LDL target was calculated as difference between the index LDL level and LDL target.

RESULTS

MEAN ANNUAL TOTAL HEALTHCARE DIRECT COST FOR PATIENTS REACHING vs NOT REACHING LIPID TARGET

Data repportioned on Italian population estimated around 4 million patient prescribed lipid-lowering drugs and with at least one LDL test.

As shown in Figure 1, total mean annual healthcare direct cost for patients that did not reach LDL target was higher compared to total cost of patients achieving LDL target (€3,678 vs €2,906).

Figure 1. Mean annual total direct costs

Costs were mainly driven by hospitalization (€1,330) followed by drugs expenditure (€1,012) and outpatient services (€563).

MEAN ANNUAL HEALTHCARE DIRECT COST RELATED TO RESOURCE CONSUMPTION FOR PATIENTS STRATIFIED BY DISTANCE FROM LIPID TARGET

In Figure 3, the mean annual healthcare costs related to drug prescriptions, hospitalizations and outpatient services are reported. The trend of increased cost with the distance from LDL target was particularly evident for the cost item related to hospitalizations, that average €1,486 for patients with 10% distance from LDL target up to €2,819 for those with 50% or more distance from LDL target.

Figure 3. Mean annual direct costs related to resource consumption in patients stratified by the distance from LDL target

MEAN ANNUAL TOTAL HEALTHCARE DIRECT COST FOR PATIENTS STRATIFIED BY DISTANCE FROM TARGET

As reported in Figure 2, the mean total annual healthcare costs increased with the distance from LDL target, from €3,004 for patients with 10% distance from LDL target up to €4,123 for those with 40-49% distance and €4,823 for those with 50% or more distance from LDL target.

Figure 2. Mean annual total direct costs in patients stratified by the distance from LDL target

CONCLUSIONS

✓ Results from this real-world study highlighted the higher economic burden for patients that do not reach the therapeutic LDL target.

✓ Mean annual direct healthcare costs that tend to rise in patients without LDL target, along with increasing distance from the LDL target.

✓ This trend is also evident for costs related to hospitalization, that represent the major cost-driver.

✓ Overall, our findings could suggest that reducing the distance from LDL target could have a positive impact also on the economic outcomes for these patients.

AUTHORS

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