# TRENDS IN DISCONTINUATION OF LIPID-LOWERING AND ANTIHYPERTENSIVETHERAPIES: A REAL-WORLD DATA ANALYSIS IN ITALYAcceptance Code:<br/>HSD61

CICLICON S.R.L. SOCIETÀ BENEFIT, HEALTH, ECONOMICS & OUTCOMES RESEARCH

**BACKGROUND AND OBJECTIVES** 

Evidence suggests that improving adherence to cardiovascular medications is essential to successful treatment [1,2].

CliCon

A real-world data analysis was conducted on patients treated with lipid-lowering or antihypertensive drugs to assess treatment adherence over the last 6 years, in a clinical practice setting in Italy.

# TRENDS IN ADHERENCE TO LIPID-LOWERING AND ANTIHYPERTENSIVE THERAPIES

As **Figure 1** shows, a slight increase over time was found in the rate of adherence to lipid-lowering treatments, rising from **76.6%-75.6%** (2016-2017) to **78.4%-76.3%** (2020-2021).

Similarly, adherence to antihypertensive drugs ranged from **83.9%-83.1%** (2016-2017) to **84.7%-83.4%** (2020-2021).



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This is a **retrospective analysis** conducted on the administrative databases of geographically distributed healthcare entities covering around **5.5 million health-assisted individuals.** 

A monitoring system was used to evaluate **discontinuation of cardiovascular therapies** (lipid-lowering agents and antihypertensives) over the last 6-year period (**2016-2021**).

- A monitoring system called "<u>fail-to-refill</u>" was deployed thanks to the collaboration between CliCon and healthcare authorities in various geographical areas of Italy.
- ➤ This strategy is aimed at assessing the nonadherence to chronic therapies based on the date of the last prescription and the fulfillment by the patients of the administration schedule and posology.



6 YEARS 2016-2021

### % ADHERENT PATIENTS



### DEMOGRAPHIC AND CLINICAL FEATURES OF THE PATIENTS

#### **DEMOGRAPHIC VARIABLES**

*Gender.* Throughout the whole temporal span, no fluctuations were noticed in gender distribution (48% and 46% males treated with lipid-lowering and antihypertensive drugs, respectively – data not shown).

All those who should have picked up a prescription for a chronic therapy in the last month are identified, thus it is possible to verify whether this actually happened or not ("fail-to-refill").

In this analysis, discontinuation was thus determined through the fail-to-refill approach [3], mainly based on the date and dose coverage of all the prescriptions received (with a 50% tolerance). On the other hand, if a patient maintained this coverage throughout the reference period (refill), he/she was considered adherent (non-discontinuation).

Among the study population, demographic (age, gender) and clinical variables (presence of diabetes mellitus) were recorded.

# REFERENCES

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*Age.* Over the years, among the patients treated for the two drug classes, the average age was 73-75 years in 2016-2017 period, and 69-71 years in 2020-2021 (Figure 2).

#### **CLINICAL CHARACTERISTICS**

**Diabetes.** During the 6-years observation period, patients with diabetes mellitus diagnosis were around 29% and 19% of those receiving lipid-lowering and antihypertensive agents, respectively (**Figure 3**).

### DIABETES FREQUENCY AMONG TREATED PATIENTS



Figure 3

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## CONCLUSIONS

These data show that, among Italian clinical practice setting, over the last 6 years, there has been no substantial increase in adherence to lipid-lowering and antihypertensive drugs, which remains largely below the recommended levels, especially for lipid-lowering therapy.

Hence, further efforts are needed in the territorial pharmaceutical network for the **identification and monitoring of non-adherent patients to drive them in the proper therapeutic pathway.**