

中文題目：高血脂患者使用 statins 降血脂藥物治療之觀察性研究

英文題目：*Observational study to Explore the Treatment Insight of Statins Medication on Patients with Hyperlipidemia*

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**Background:** Hyperlipidemia is associated with an increased risk of cardiovascular events. Elevated low density lipoprotein cholesterol (LDL-C) has been indicated by studies to be a very important risk factor for coronary heart disease (CHD), and the primary goal of clinical lipid management is to reduce LDL-C level to lower CHD risk. Although various anti-hyperlipidemic agents have been recognized as effective in lowering LDL-C, there were still patients failed to achieve their cholesterol goals. In clinical practice, switching patients from one statin to another that is more potent in lowering LDL-C is a therapeutic option. In addition, patient education about hyperlipidemia disease may improve compliance, which could in turn improve the treatment to goal.

The objective of this study was to evaluate the efficacy of various commercially available statins under local clinical practice in treating patients with hyperlipidemia, as well as treatment to goal and patient awareness of statin medication.

**Methods:** This was a non-interventional, multicenter, open-label, phase IV study. This surveillance study imposed no investigator interventions to the naturalistic approach of the management of hyperlipidemia. Patient's lipid data were collected during course of usual clinical practice or captured upon the availability, and patient's treatment-to-goal was defined by investigator according to the NCEP-ATP III 2004 guidelines. A total of 3270 patients were enrolled at 17 medical centers and each enrolled patient was observed for 3~6 months, during which physician's insight was collected once through questionnaires, and patient's insight was probed by questionnaires twice, at study enrolment and at 3~6 months post-enrollment.

**Results:**

A total of 3197 patients completed the study (52% men and 48% women). The mean age, waist,

and weight were  $61.35 \pm 11.32$  years old,  $89.03 \pm 13.29$  cm, and  $67.48 \pm 12.25$  kg, respectively. In this study, a reduction in LDL-C, TC, and triglycerides level of  $-45.61 \pm 42.24$  mg/dL;  $-54.93 \pm 49.40$  mg/dL; and  $-25.43 \pm 126.74$  mg/dL were observed in all treatment groups from baseline until end of study, respectively.

The proportion of patients reaching the treatment to goal for rosuvastatin, atorvastatin, lovastatin, simvastatin, fluvastatin, and pravastatin was 77% , 75%, 76%, 73%, 65%, and 59% respectively. The major three reasons for not achieving treatment-to-goal are poor compliance, un-resistible reason, and lost to follow up.

In the compliance evaluation, patients who seldom forgot to take medicine or forgot once time per week, was 90%, 89%, 91%, 85%, 79%, and 85% for rosuvastatin, atorvastatin, simvastatin, lovastatin, pravastatin and fluvastatin, respectively.

By multi-choice questionnaires, over 71% physicians agreed that physician's trust in the drug is important for patient's good compliance, and 73% agreed that understanding the risk of coronary heart disease is also important. Additionally, physicians agreed that the blood lipid level (61%), no side effects from medication (41%), previous family history of cardiovascular disease (55%) are also important factors to consider when evaluating patient's compliance to statins.

Physicians agreed that patients must be informed about the laboratory results of their lipid profile. Additionally, approximately 40% of patients were explained about the risk of coronary heart disease in future 10 years. Furthermore, over 70% physicians strongly agreed that the explanation to patients was able to improve treatment's compliance and increase the treatment-to-goal.

Patient's disease awareness, patient education from physicians, lipid control, and treatment compliance showed significant improvement at post-enrollment ( $p < 0.05$ ).

**Conclusion:** During the study, the percentage of patients achieving target goals was similar through different statins; however, rosuvastatin reached a numerical higher treatment to goal rate. In clinical practice, informing patient about the lipid profile, strengthening patient education, and medical personnel providing continuous prescription reassurance to patients appear to improve compliance might also the reason to increase treatment to goal.