Evolocumab is initiated in Central and Eastern Europe at Much Higher LDL-C Levels than Recommended in Guidelines: Results from the Observational HEYMANS Study

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Objective: We examined clinical characteristics and LDL-C lowering in patients initiating evolocumab in real-world practice in a Central and Eastern European (CEE) cohort from the pan-European HEYMANS study.

Materials and methods: Patients from Bulgaria, Czech Republic, and Slovakia were enrolled at initiation of evolocumab (baseline) as per local reimbursement criteria. Demographic/clinical characteristics, lipid lowering therapy (LLT) and lipid values were collected from medical records for ≤6 months before baseline and ≤30 months after evolocumab initiation.

Results: Overall, 333 patients were followed over a mean (SD) duration of 25.1 (7.5) months. Of 333 patients, 48% received evolocumab monotherapy, while approximately one-quarter received evolocumab with statin and ezetimibe combination, and the rest with statin or ezetimibe alone. Median (Q1, Q3) baseline LDL-C was 4.7 (4.0, 5.9) mmol/L and fell by 58% to 2.1 (1.3, 2.9) mmol/L by month 3, a reduction sustained over time (30-month LDL-C: 2.1 [1.5, 2.9] mmol/L). Achievement of the ESC/EAS LDL-C goal of <1.4 mmol/L was 50% overall and 59% when evolocumab/oral LLT combination was used. At 12-months and 30-months, 94% (304/324) and 93% (180/193) received evolocumab, respectively.

Conclusion: In the HEYMANS CEE cohort, patients initiated on evolocumab had baseline LDL-C levels >3x higher than guideline-recommended thresholds for PCSK9i initiation. Therefore, only half of patients achieved the goal of LDL-C <1.4 mmol/L. However, evolocumab use was associated with a substantial and sustained LDL-C reduction of >50%. Lowering the LDL-C reimbursement threshold for PCSK9i initiation would allow more patients to receive combination therapy, thus improving LDL-C goal attainment. ❑