Lipid lowering with inclisiran: a single-center experience from Slovakia

Stefan Toth[1], Marianna Barbierik Vachalcova[2], Adriana Jarolimkova[1], Martin Sevcik[3], Tibor Poruban[2]
[1]Gerontology and Geriatrics Clinic and School of Medicine, Pavol Jozef Safarik University, Kosice, Slovakia
[2]East Slovak Institute of Cardiovascular Diseases and School of Medicine, Pavol Jozef Safarik University, Kosice, Slovakia
[3]Department of Infectious diseases, Faculty hospital of Jan Adam Rayman, Presov, Slovakia

Background: Inhibiting proprotein convertase subtilisin/kexin type 9 activity is an effective strategy to lower LDL cholesterol (LDL-C), a major cardiovascular risk factor. Inclisiran, the first small interfering RNA targeting PCSK9, has shown a 50% LDL-C reduction in clinical trials.
Aims: The aim of this study was to describe the effects of inclisiran in real-world clinical settings, along with the first clinical experiences of its use in Slovakia.
Methods: In this observational study, 36 patients were selected for inclisiran therapy as part of standard clinical assessments, procedures, and reimbursement from public health insurance. Each patient underwent a standard lipid profile assessment and high-sensitivity C-reactive protein (hsCRP) testing before submitting applications for therapy approval, and again one month after receiving two doses of inclisiran. The average change in lipid profile levels was calculated for each patient who completed the third dose of inclisiran.
Results: Inclisiran therapy was approved for 36 patients, including 27 with atherosclerotic coronary artery disease and 9 with prior strokes. The cohort included 1 statin-intolerant patient, 28 on maximum statin doses, and 7 on reduced doses. After 3 months, LDL-C dropped by 57.5 %, hsCRP to 1.2 mg/dL, and lipoprotein(a) by 14.3 ± 6.4 %. Safety outcomes mirrored clinical trials, with mild injection-site pain in 26 cases and flu-like symptoms in 3.
Conclusions: Inclisiran demonstrated an effective reduction in LDL-C and hsCRP levels, slightly exceeding clinical trial outcomes, but lipoprotein(a) reductions varied among patients. Safety was consistent with expectations, confirming inclisiran's potential for broader clinical use.

Key words: inclisiran, LDL-C, hsCRP, lipoprotein(a), target values.

Hypolipidemická liečba inklisiranom: skúsenosti jedného slovenského pracoviska

Úvod: Inhibícia aktivity proproteín konvertázy subtilizín/kexín typu 9 predstavuje účinnú stratégiu na zníženie LDL cholesterolu (LDL-C), ktorý je jedným z hlavných kardiovaskulárnych rizikových faktorov. Inklisiran, prvá malá interferujúca RNA cielená na PCSK9, preukázal v klinických štúdiách zníženie LDL-C o 50 %.
Ciele: Cieľom tejto štúdie bolo opísať účinky inklisiranu v reálnych klinických podmienkach spolu s prvými klinickými skúsenosťami s jeho používaním na Slovensku.
Metódy: V tejto observačnej štúdii bolo na liečbu inklisiranom vybraných 36 pacientov v rámci štandardných klinických vyšetrení, postupov a úhrady zo zdravotného poistenia. U každého pacienta sa pred podaním žiadosti o schválenie terapie vykonalo štandardné hodnotenie lipidového profilu a stanovenie vysokosenzitívneho C-reaktívneho proteínu (hsCRP), ktoré sa zopakovalo mesiac po podaní dvoch dávok

DECLARATIONS:

Ethics approval and consent to participate:
All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

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Not applicable.

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Not applicable

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MUDr. Tibor Poruban, Ph.D., MPH, MBA
tporuban@vusch.sk