

ROFLUMILAST IN CHRONIC OBSTRUCTIVE LUNG DISEASE (COLD) TREATMENT

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Nowadays COLD is a significant social-economic and medical problem. World Health Organization (WHO) forecasts that by 2030 COLD would take the third place among world death reasons.

International experts' opinion, which is reflected on the pages of Global Initiative for Chronic Obstructive Lung Disease (GOLD), claims that one of the main goals of treating the disease is the decrease the number of disease occurrences and its severity.

Present-day ideas show that the key-part in COLD pathogenic mechanism has the inflammatory process that is realized also by phosphodiesterase of 4th type (PDE-4) – enzyme that regulates adenosine-monophosphate periodic metabolism (pAMP). The reduction of pro-inflammatory cells activity, while suppressing PDE-4, designated this special interest for opportunities of pharmacological enzyme inhibition as the way of influence on COLD chronic inflammation intensity.

The Roflumilast is the first representation of the new class of anti-inflammatory drugs – selective PDE-4 inhibitors, that purposefully affects treatment of constitutional and lung inflammatory processes that are connected with COLD. It is recommended by GOLD since 2010.

The Roflumilast effectiveness confirmations in treating patients who have COLD, were obtained while multiple placebo-controlled clinical studies. The drug has significant anti-inflammatory effect, which lowers the COLD relapses and elongates remission periods. The Roflumilast is well combined with background therapy of COLD: with prolonged β_2 -agonists and with cholinergic antagonists, also with inhaled glucocorticosteroids, which effect is enhanced. The drug is prescribed to patients who have severe COLD forms. The Roflumilast helps to increase forced expiratory volume per second significantly.

The Roflumilast is registered under the trade name (Dacas®) in Ukraine, European Union countries, Canada. The drug is to be taken per os one time in 24 hours by 500 mcg.

Appearance of the Roflumilast in the arsenal of drugs that are used to treat COLD, boosts COLD drug therapy opportunities and allows to influence its pathogenetic mechanisms. In accordance with already existing recommendations on treating COLD (GOLD 2011), the drug may be used as an add-on therapy to the group of patients in the most difficult state, especially with frequent disease relapses.