

# **SINGLET-OXYGEN THERAPY IN TREATMENT PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE**

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Resume. As a new drug is not an antioxidant, bactericidal and bronchodilator treatment investigated singlet - oxygen therapy. It is based on inhalation and drinking singlet - oxygen mixture. It is composed of singlet oxygen ( $O_3$ ), nitrogen oxide (NO) and water vapor. Therapeutic effect leads to stabilization of cell membranes of nerve and muscle cells, reduction of bronchial hyperreactivity, restore sensitivity of the receptors of the bronchial tree to the action of bronchodilators, reduced pulmonary capillary spasm. Singlet oxygen  $O_3$  stimulates recovery “germicidal light barrier” by “priming” of alveolar macrophages, whose activity is significantly reduced in COPD.

The proposed method by applying the treatment of COPD singlet - oxygen therapy, which has antioxidant, bronchodilator and antibacterial properties, reduces the intensity of the inflammatory process in the bronchi, improve and stabilize over time clinical - functional performance, reduce the length of stay by an average of 4.2 days. The obtained results allow us to recommend the proposed scheme singlet - oxygen therapy for widespread use in clinical practice.

**Keywords:** *chronic obstructive pulmonary disease, singlet-oxygen therapy.*