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INDACATEROL ADD-ON THERAPY IMPROVES LUNG FUNCTION, EXERCISE CAPACITY AND QUALITY OF LIFE OF COPD PATIENTS

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Chronic obstructive pulmonary disease (COPD) is a progressive, inflammatory condition, involving airways and lung parenchyma. Both pathologies lead to airflow limitation, and pulmonary hyperinflation, resulting in dispnoea, decreased exercise tolerance and impaired quality of life of COPD patients. COPD pharmacotherapy guidelines are based on combination of long-acting beta2-agonists (LABA), long-acting antimuscarinic agents (LAMA) and methyloxantins. Recently, Indacaterol, ultra long acting beta2-agonist, has been introduced. The aim of our study was to assess the impact of Indacaterol add-on therapy on lung function, excercise tolerance and quality of life of COPD patients. Thirty four COPD patients, receiving stable bronchodilator therapy were randomly allocated into two arms of add-on treatment (1:1 - Indacaterol:placebo) for three months. Indacaterol replaced LABA in all cases receiving LABA. In all patients spirometry, lung volumes, DLCO, St George's Respiratory Questionnaire (SGRQ) and 6 Minute Walk Distance (6-MWD) were performed before and after therapy. Results: In Indacaterol group FEV1 did not changed significantly. There was significant improvement in ERV (before, and after therapy, respectively): 1,96L vs 1.31L; IC: 2.0L vs 2,28L; 6-MWD: 540m vs 559m, and 6-MWD-related dispnoea score. We also found that degree of desaturation before and after 6-MWD, and fatigue levels significantly improved in Indacaterol group. Patients' quality of life evaluated using SGRQ has also favoured Indacaterol treatment arm. Placebo group did not changed significantly which resulted in significant difference between both treatment arms regarding all above mentioned data at three months of therapy. We conclude that Indacaterol add-on therapy improves lung function, exercise capacity and quality of life of COPD patients.