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## **Functional status and impact of the disease in people with COPD according to symptoms' burden: a 6-months follow-up study**

COPD, Extrapulmonary impact

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Background: COPD is a progressive and heterogeneous disease. Better understanding of its trajectory, especially considering symptoms level which have been related to prognosis, may help to improve disease management. We aimed to describe the evolution of functional status and impact of the disease in people with COPD according to their symptomatic level.

Methods: People with COPD were assessed monthly for 6 months. Participants were grouped by the Global Initiative for Chronic Obstructive Lung Disease (GOLD) criteria in low (GOLD A & C) or high (GOLD B & D) symptom burden, based on their baseline values in the modified medical research council dyspnoea scale. Quadriceps muscle strength (QMS)–handheld dynamometry, 1-minute sit-to-stand test (1STS) and COPD assessment test (CAT) were collected. Differences within/between groups over time were explored with (non-)parametric mixed ANOVAs and Bonferroni-adjusted pairwise comparisons.

Results: 87 people (85% male, 68±9y, FEV<sub>1</sub> 51±20pp, 54% high symptoms) participated. People with low symptoms presented higher 1STS (p=0.01) and lower CAT (p<0.01). Improvements in 1STS and CAT over time (p<0.01) were found regardless of group allocation (Fig. 1). There were no group\*time interaction or other significant differences.

Conclusion:

The pattern of progression in functional status and impact of the disease seems to be similar in individuals with COPD independently of symptoms' burden, with improvements in CAT and 1STS over time. Reasons for this finding should be explored.