**Supplementary Figure 3:** Patients’ yearly changes in outcomes of COPD progression during a mean follow-up of 2.6 years, according to physical activity changes status (persistently active, decliners and persistently inactive).

FEV$_1$ = forced expiratory volume in 1 second, FVC = forced vital capacity, DL$_{CO}$ = diffusion capacity of the lung carbon monoxide, 6MWD = 6-min walk distance, HGF = hand grip force, MIP = maximal inspiratory pressure, MEP = maximal expiratory pressure, SGRQ = Saint George’s respiratory questionnaire, BMI = body mass index, FFM = fat free mass, FFMi = fat free mass index.

Data presented as estimated marginal means (Least squares means), adjusted for the baseline of the outcome of interest. A subgroup of patients with PA data at both time points were divided into persistently active (PA; mean step count $\geq$5000 steps.day$^{-1}$ at both time points, n=47), decliners (DEC; mean step count $\geq$5000 steps.day$^{-1}$ at baseline and <5000 steps.day$^{-1}$ at follow-up, n=19) and persistently inactive (PI; mean step count <5000 steps.day$^{-1}$ at baseline and follow-up, n=26). Solid lines represent the p-values compared to the PA group.