



**Supplementary Figure 1.** Changes in clinical outcomes depending on the use of inhalers in chronic obstructive pulmonary disease (COPD) and asthma-COPD overlap (ACO) patients. (A) COPD assessment test (CAT) score, (B) St. George's Respiratory Questionnaire (SGRQ) score, (C) modified Medical Research Council (mMRC) dyspnea scale, (D) cough quality of life questionnaire (CQLQ) score, (E) EuroQol-5 dimension (EQ-5D) score, and (F) cough visual analogue scale (VAS) score. The analysis was carried out with five subjects (three COPD patients and two ACO patients). Increasing scores indicate worsening outcomes in CAT, SGRQ, CQLQ, VAS, and mMRC. Decreasing scores indicate worsening outcome in EQ-5D. Differences between the two groups were tested using repeated measures analysis of variance (RM-ANOVA). Visit 1, baseline; Visit 2, 3-month follow-up.