

e-Table 1. Inclusion and exclusion criteria

Inclusion criteria

- 1) Age 40 years old or greater
- 2) Smoking 20 pack-years or greater
- 3) Those who were diagnosed with COPD by the GOLD criteria (<http://goldcopd.org/>)
- 4) Those who had enrolled in our prospective observational cohort study for at least one year
- 4) Those who were in a stable state judging from the personal diary

Exclusion criteria

- 1) Patients with an apparent swallowing disorder
 - 2) Patients with bronchial asthma
 - 3) Patients who suffered from malignant tumour diseases within 5 years or who have a malignant tumour
 - 4) Patients who have or had clinically evident cerebrovascular diseases
 - 5) Patients who were implanted with a cardiac pacemaker
 - 6) Patients with dementia
 - 7) Patients who could not perform lung function tests
 - 8) Patients who were judged inappropriate by medical doctors
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