Supplementary Figures

**Suppl Figure 1:** FLOW-DIAGRAM. Flow-diagram of the selection of cases and controls among individuals with COPD in the Copenhagen General Population Study.

The Copenhagen General Population Study
An ongoing study initiated in 2003, aiming to recruit more than 100,000 participants.

N=55,731
enrolled until 2008

N=5,812
COPD
(airflow limitation (forced expiratory volume in one second divided by forced vital capacity, \(\text{FEV}_1/\text{FVC}<0.70\)), age > 40 years, and no self-reported asthma)

N=530
Cases
(individuals with at least one exacerbation during three years of follow-up from the examination)

N=1,546
individuals
with COPD in 1:2 matched case-control study

N=1,016
Controls
(matched on age, gender, GOLD stage, smoking status, and comorbidity, using risk set sampling)

**Suppl Figure 2:** STATINS AND EXACERBATIONS. Variables included as possible confounders in the multivariable conditional logistic regression analysis in the case-control study, and their associated odds of exacerbations. Abbreviations: GP=general practitioner; ICS/LABA= fixed-dose combinations of inhaled corticosteroids with long-acting beta-agonists; LABA=long-acting beta-agonists; LAMA=long-acting anti-cholinergics.
Suppl Figure 3: STATINS AND CRP. Variables included as possible confounders in the multivariable logistic regression analysis, and their associated odds of having a high CRP. Abbreviations: GOLD=Global initiative of Obstructive Lung Disease; GP=general practitioner; ICS/LABA= fixeddose combinations of inhaled corticosteroids with long-acting beta₂-agonists; LABA=long-acting beta₂-agonists; LAMA=long-acting anti-cholinergics.
Suppl Figure 4: POTENTIAL CONFOUNDERS. Potential measured and unmeasured confounders that could affect the association between statin use and exacerbation.
Measured potential confounders

- Age
- Gender
- Pulmonary function
- Smoking
- Comorbidity (cardiovascular)
- Pulmonary medications
- Health behaviour (visits to the general practitioner (GP) and regular use of vitamins)
- CRP (C-reactive protein)
- Socio-economic status (school education and household income)
- Frailty: markers of psychological distress
- Alcohol consumption categories
- Exacerbations: admissions and treatment with systemic corticosteroids

Unmeasured potential confounders

- Lipid levels
- Medications (others than statins and pulmonary)
- Comorbidity (non cardiovascular)
- Markers of systemic inflammation (not CRP)
- Health behaviour: (not GP visits and vitamin use)
- Frailty: not markers of psychological distress
- Others