Asthma exacerbations are associated with a decline in lung function: a longitudinal population-based study

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The role of exacerbations on lung function trajectory in a broad asthma population

OPTIMUM PATIENT CARE RESEARCH DATABASE

Historical cohort study

n=,

Inclusion criteria

- Aged ≥ years old
- Asthma diagnosis
- Active asthma during the baseline year
- years of lung function data
- valid lung function measurements of the same type

Exclusion criteria

- Diagnosis of COPD or other chronic respiratory conditions

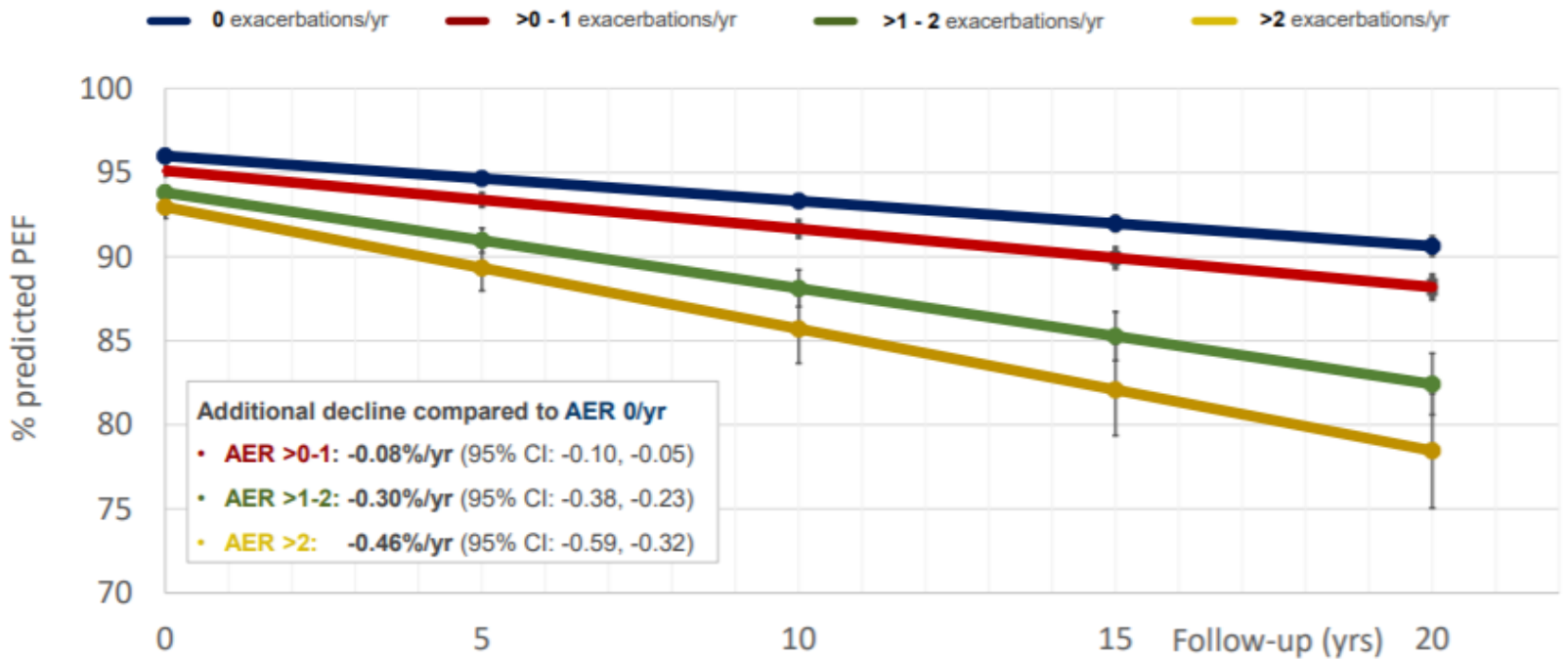
Primary outcome

Peak Expiratory Flow (PEF) rate – used to track lung function trajectories according to annual exacerbation rate

COPD = Chronic obstructive pulmonary disease

Soremekun S et al. Thorax 2022; 10.1136/thorax-2021-217032

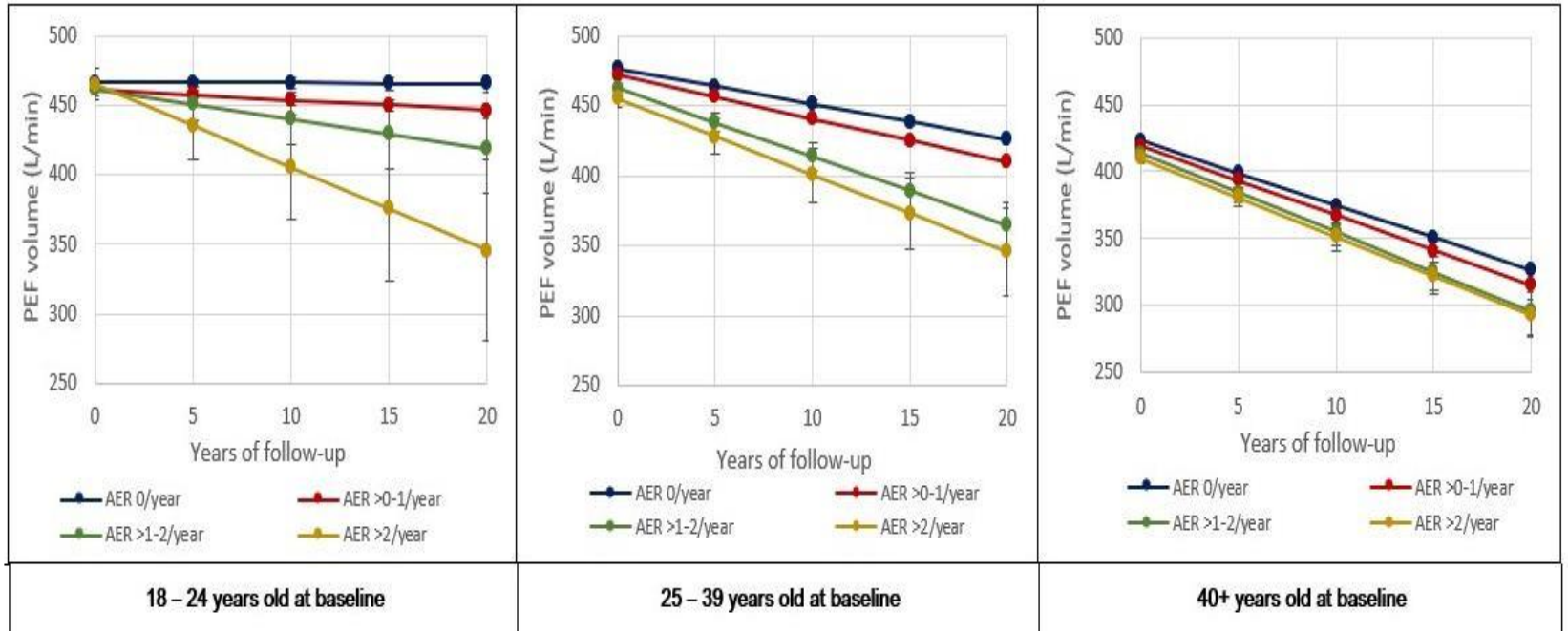
Exacerbations and lung function decline in asthma



AER = Annual exacerbation rate; PEF = Peak expiratory flow

Soremekun S et al. Thorax 2022; 10.1136/thorax-2021-217032

Age and lung function decline



Treating exacerbations may benefit lung function in the long term

AER = Annual exacerbation rate; PEF = Peak expiratory flow

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