

Self-assessment questions: Phenotyping chronic obstructive pulmonary disease (COPD) exacerbations: realising personalised medicine

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1 Regarding COPD :

- (a) It is predicted to be the third leading cause of death worldwide by 2030
- (b) It is diagnosed by clinical symptoms and forced expiratory volume in one second (FEV₁)/forced vital capacity (FVC) ratio <0.8
- (c) Patients all have radiological evidence of emphysema on computed tomography images
- (d) It develops in about 70 % of people who smoke
- (e) Exacerbations are associated with accelerated decline in lung function
- (f) Biomass fuel exposure is a recognised cause

2 Regarding biomarkers for COPD:

- (a) Most airways inflammation in COPD is neutrophilic
- (b) C-X-C motif chemokine 10 (CXCL10) has been shown to identify bacterial exacerbations
- (c) C-reactive protein (CRP) is useful to predict the severity of COPD exacerbations
- (d) Procalcitonin has a role in identifying acute bacterial exacerbations of COPD
- (e) The eosinophil count in peripheral blood has been used as a biomarker for sputum eosinophilia

3 Regarding targeted therapy for COPD:

- (a) The phosphodiesterase-4 inhibitor roflumilast reduces exacerbations in patients with severe airways obstruction, a history of exacerbations and chronic sputum production
- (b) Lung volume reduction surgery (LVRS) is recommended for the subgroup of patients COPD with lower lobe emphysema and a poor response to exercise therapy
- (c) Patients with sputum neutrophilia tend to respond well to corticosteroid therapy
- (d) In acute exacerbations of COPD, procalcitonin levels can be used to reduce the duration of antibiotic courses
- (e) Using peripheral blood neutrophil count to guide outpatient treatment of COPD exacerbations leads to a reduction in inappropriate oral corticosteroid prescriptions

Answers to these self-assessment questions can be found on page s92.