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# COPD: still an unpredictable journey

Alex Bottle<sup>1</sup> and Jenni Quint <sup>2</sup>

**Affiliations:** <sup>1</sup>Dept of Primary Care and Public Health, Imperial College London, London, UK. <sup>2</sup>National Heart and Lung Institute, Imperial College London, London, UK.

**Correspondence:** Alex Bottle, Dr Foster Unit, Imperial College London, 3 Dorset Rise, London EC4Y 8EN, UK. E-mail [robert.bottle@imperial.ac.uk](mailto:robert.bottle@imperial.ac.uk)



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**New study of hospital-recruited COPD patients finds that three biomarkers explain 13% of the total explained 8-year mortality, but still long way to go for risk prediction** <https://bit.ly/3h4jKyV>

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COPD is the fourth leading cause of death and affects nearly 400 million worldwide, causing much disability as well as early mortality [1]. Management should be tailored to each patient to improve outcomes, for instance by stratifying patients according to the risk of acute exacerbations of COPD, in order to prescribe treatments including inhaled corticosteroids or phosphodiesterase-4 inhibitors earlier. Treatment is particularly important before the patient's first acute exacerbation, as each subsequent exacerbation damages the lungs and treatment is less effective thereafter [2–4]. Prior acute COPD exacerbation is well known to be a strong predictor of later events [5]. In this issue of the *European Respiratory Journal*, CELLI *et al.* [6] aim to tackle the more general problem of the lack of disease activity measures, such as biomarkers. The concept of “active” disease in COPD has been around for a while, but it is not known whether this should be defined by frequent acute exacerbations, inflammation by one or other biomarker, or “fast” decline of forced expiratory volume in 1 s (FEV<sub>1</sub>). Rather than answer this directly, CELLI *et al.* [6] explored the relationship between disease severity measures “as surrogate markers of disease activity” (and changes in those measures over time) and mortality. We now discuss some key issues regarding the study's dataset, analysis, contribution to collective knowledge, and implications for clinical practice and research.