



## Reply to: Room for methodological improvement in gait speed study for COPD patients

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Reply to N. Kuroda and co-workers:

We thank N. Kuroda and co-workers for their interest our work [1], and for sharing their methodological expertise. We agree with their comments and were transparent about the limitations of the study in our discussion. The comments around internal validation and model performance comparison are particularly pertinent to the development of risk prediction models.

Our work, however, did not aim to develop and fully validate a clinical risk prediction model, but rather to prospectively determine whether 4-m gait speed (4MGS) is relevant to the prognosis of patients following hospitalisation with acute COPD exacerbation, and whether it adds additional information to well-established variables, such as age and forced expiratory volume in 1 s. This is important as clinical risk prediction models in this setting have either been retrospective, with limited utility for planning post-hospital care, or have identified factors that are not easily amenable to intervention after discharge [2].

As a simple, quick and potentially ameliorable measure, we hope our work will stimulate the scientific community to consider 4MGS when developing future clinical risk prediction models in people hospitalised with acute exacerbation of COPD.



Shareable abstract (@ERSpublications)

**This study shows 4-m gait speed adds prognostic information for patients following an acute exacerbation of COPD; it should be considered in the development of future risk prediction models with appropriate validation and methodology** <https://bit.ly/3jTSdED>

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### References

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- 1 Walsh JA, Barker RE, Kon SSC, *et al.* Gait speed and adverse outcomes following hospitalised exacerbation of COPD. *Eur Respir J* 2021; 58: 2004047.
- 2 Bellou V, Belbasis L, Konstantinidis AK, *et al.* Prognostic models for outcome prediction in patients with chronic obstructive pulmonary disease: systematic review and critical appraisal. *BMJ* 2019; 367: l5358.