

LETTER TO EDITOR

Correspondence: Short- and long-term prognosis of glycemic control in COVID-19 patients with type 2 diabetes

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Dear Editor,

We read with great interest the prospective study by Zhan *et al.*¹ investigating whether glycemic control upon admission has an impact on the short- and long-term prognosis among diabetic patients having coronavirus disease 2019 (COVID-19) infection.¹ They indicated that the benefit of well-controlled diabetes (i.e. less glycemic variability) was negatively correlated with critical outcomes such as disease progression, intensive care unit admission, invasive mechanical ventilation and death. Notwithstanding our gratitude to Zhan *et al.* for their timely and practical research findings, there are some concerns that we would like to discuss further.

First, the robustness of results based on a mere assessment of the patients' glycemic status on admission without detailed baseline information about their hypoglycemic medication regimen and adherence remains questionable.

Second, because the RECOVERY trial has already shown that dexamethasone could reduce mortality in patients diagnosed with COVID-19 who require oxygen therapy,² the effects of dosage and duration of dexamethasone on the fluctuations in blood glucose in the diabetic population deserve further elucidation.³ Moreover, since the treatment plan for diabetic inpatients is highly individualized (e.g. the need for aggressive glycemic control through consultation with an endocrinologist), the potential

impact of therapeutic variations on the study outcomes may need to be addressed.

Third, considering the known association between the use of angiotensin-converting enzyme inhibitors/angiotensin receptor blockers and an increased risk of severe COVID-19 diseases,⁴ the high prevalence of patients (around 60%) in the study by Zhan *et al.*¹ may warrant a subgroup analysis focusing on antihypertensive medications to further explore this issue.

Finally, taking into account the protective effects of SARS-CoV-2 vaccination against severe disease and fatal outcomes, information on the vaccination status of the participants would be valuable to the readers for correct interpretation of the results.

Conflict of interest: None declared.

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