

Review of: "Impact of early corticosteroids on 60-day mortality in critically ill patients with COVID-19: A multicenter cohort study of the OUTCOMEREA network"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

In this interesting study the authors evaluate the impact of the early use of corticosteroids on mortality in critically ill COVID-19 patients.

Dupuis C. et al, analyzed the data collected by the OutcomeREA a national database of COVID 19 patients. The main finding of this scientific work is that early administration of corticosteroids in severe COVID-19 did not impact on 60days mortality.

Secondary findings are that aerly used of corticosteroids seem to reduced mortality in patients aged more than 60years and in patients with biochemical signs of inflammation at admission.

Other secondary findings are that early used of corticosteroid increased the cases of hyperglycemia, but it did not increased the risk of healthcare infections.

The subject of the study is extremely intersting and important, but unfortunately the work had some limitations.

The most important limitations is that the observational and unblinded design of the study is not corrected for evaluated the effect of a drug treatment, despite this the data could be used for design new prospective randomized controlled study, I suggest to underline this possible used of these data and explain better that the results of the present work are not ready for daily clinical used and a differente title of the paper could be more correct for example: "IMPACTS OF EARLY CORTICOSTEROIDS IN 60 DAY MORTALITY IN CRITICALLY ILL PATIENTS WITH COVID-19: A PROSPECTIVE FOR NEW RANDOMIZED STUDIES. In the methods, "definition, group assignment" the authors define the groups of high doses and low doses of corticosteroids but I did not found in the results the evaluation of the differences in mortality and other endpoint; this mean that there are not significantly differences or mean that the analysis is not possible because of the un-balance of the two groups (low dose VS high dose of CS). I suggest to explain better in the text.

The statistics is quite complex, I suggest to the editor a review of the method by a professional statistician.