

# Review of: "Tocilizumab Plus Corticosteroid in Elderly Patients Hospitalized With COVID-19 Pneumonia: A Retrospective Cohort Study"

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Potential competing interests: No potential competing interests to declare.

Dear authors,

Congrats for your interesting work. It helps to question and reflect on the clinical use of tocilizumab in addition to steroid therapy that is now considered the backbone for COVID-19, specifically for elderly patients, whom are those with a greater risk of progression when treating COVID-19 disease.

I have only few notes that I would like to share with you:

1. It would be important to know if tocilizumab dose of 400 mg was in accordance with the current guideline indications of 8 mg/kg or if it was underdosed and how many used the full dosage compared to how many were underdosed according to the patients' weight. I think that this content should be better specified and underlined in the text if we consider that the fixed dose of 400 mg is not currently mentioned in the guidelines.
2. Considering that the patients treated with corticosteroids alone in a higher percentage of cases had low flow oxygen support therefore they presented a milder form of covid compared to those treated with a combination therapy (tocilizumab plus corticosteroids) which had, instead, higher levels of respiratory support. I believe that the statistical analysis should be corrected through propensity score matching. This analysis is important because between the two groups there were important differences in the pharmacological treatments administered (remdesivir and doxycycline were used in a higher percentage of cases using only corticosteroid group rather than the tocilizumab plus corticosteroids group in which azithromycin and hydroxychloroquine were more used).
3. Were the patients (those with less than three days of hospitalization and those deceased within three days) excluded from the study only because they didn't have the criteria to receive either of the two possible drug groups?
4. Could you clarify the reason why in secondary endpoint of in-hospital mortality at day-28 odd ratio value was not specified and why in the "secondary outcomes paragraph" the OR, 95% CI and p-value is not specified? Furthermore, I think that it would be better to specify p-value in *table 1* [Baseline demographics and characteristics of patients receiving Tocilizumab plus corticosteroids and corticosteroids at one community hospital in the Northeastern, US (n=355)] and in *table 3* [Adverse events through Day 28 in the safety population of patients receiving Tocilizumab plus corticosteroids and corticosteroids at one community hospital in the Northeastern, US (n=355)] to better define the differences between the two groups. Moreover, in *table 2*, it would be better to specify the difference (95% CI) about ventilation variable.

5. Overall, the statistical data should be more detailed and you should add references on modification/abandoning of terms such as statistical significance and significantly different etc. defined by American Statistical Association in April 2019 that you reported in the statistical analysis paragraph.

I think that it is necessary to deepen and clarify the above-mentioned points before publishing the present article.