

# Letter to the Editor

## Tocilizumab: do not be the next chloroquine!

Dear Editor,

We read with great interest the article by Wang et al<sup>1</sup> in which the researchers reported tocilizumab was effective for a critical COVID-19 patient. However, we think more evidence should be provided in this study, or it may not be a rigorous conclusion.

COVID-19 has become a global emergency, taking much threat and challenges to the world health. The current treatments of this new virus are mainly supportive. In this case, the patient had taken abidol, Lianhua Qingwen capsules, and received gamma globulin, methylprednisolone and chloroquine before using tocilizumab. These treatments could be the interference factors to prove that applying tocilizumab was effective in this patient. We also feel confused that the level of IL-6 was greater than the normal upper limit at 2 weeks after tocilizumab infusion. If IL-6 was a key factor involved in the cytokine storm as mentioned in the paper<sup>2</sup>, how can we explain that the respiratory symptoms of the patient were improved but the level of IL-6 was remarkably increased? In addition, some laboratory indicators of reflecting the severity of cytokine storm, such as IL-2, IL-7, IL-10, TNF- $\alpha$ , were not mentioned after tocilizumab infusion in this case. It posed a doubt which was as follows: the condition of this patient who started to getting better was relevant to tocilizumab use or just self-recovering?

Some of previous studies<sup>3,4</sup> have reported that tocilizumab was an effective treatment to improve the clinical outcome and reduce mortality in severe or critical COVID-19 patients. However, most of them are case series reports or single center study with limited samples. Thus, tocilizumab could be a possibility and a direction, as concluded in the paper, but this strategy requires clinical registration studies with a large number of severe COVID-19 patients to prove its suitability.

In conclusion, we should take these potential treatments more seriously in clinical application and avoid unnecessary controversy.

### Conflict of Interest

The Authors declare that they have no conflict of interests.

### References

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