

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

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Corticosteroid alone is not sufficient to treat some cases of severe COVID-19, and the combination of immunosuppressive agents such as tocilizumab is a promising treatment option. However, few reports have examined the combination of corticosteroid and tocilizumab in the real world, and this report was interesting because it examined a very large number of patients.

As noted in the discussion, the problem is that the timing of tocilizumab administration in this report is at the discretion of the attending physician. Another problem is that it is a retrospective, observational cohort study.

If the patients had improved on corticosteroids alone, they may not have needed additional doses of tocilizumab. If the poor response to corticosteroids alone led to the addition of tocilizumab, the combination group would have worse outcomes.

Second, we believe that the P/F ratio at the time of tocilizumab administration is important, not the oxygen saturation at the time of admission. The approximate P/F ratio is important even with low-flow oxygen dosing. Do you have that data?

At our institution, patients with P/F ratios below 100 at the start of tocilizumab had little benefit from the combination of tocilizumab and corticosteroids. We believe that it is necessary to reduce inflammation before the lungs become devastated. If the timing is too late, recovery will not be achieved, and patients who do not achieve recovery will have complications such as infection.

It would be interesting to clarify the P/F at the start of tocilizumab and whether the difference in P/F would allow for a difference in efficacy, which would be useful information to obtain under the conditions studied here.

This report showed that the combination group was ineffective and possibly harmful. It is concluded that prospective studies are needed. However, it would be an important report if the background to the lack of efficacy could be discussed, including the P/F of tocilizumab administration.