Response to: ‘Clinical features of patients with rheumatic diseases and COVID-19 infection in Sarawak, Malaysia’ by Wan et al

We thank Dr. Wan and colleagues for their comments on our manuscript reporting the clinical features of COVID-19 pneumonia in patients with rheumatic disease.1 Wan et al analysed 569 cases of COVID-19 in Sarawak, Malaysia and found 4 patients with rheumatic diseases (2 systemic lupus erythematosus, 1 dermatomyositis, and 1 scleroderma). Among these four patients with COVID-19 and rheumatic disease, they noted one case requiring ventilation (25%, 1/4) and one case developing an SLE flare at admission (25%, 1/4). These were in agreement with our findings that respiratory failure was more common in patients with COVID-19 with rheumatic disease (38% vs 10%, p<0.001) and some patients with COVID-19 and rheumatic disease may experience a flare of rheumatic disease during the clinical course of COVID-19 (19%, 4/21).2

Fredi et al and Wan et al raised an important question that whether the poor outcome and susceptibility of COVID-19 in patients with rheumatic disease are caused by the presence of rheumatic disease or the older age and comorbidities.1 3 The overall effect of rheumatic disease on COVID-19 is complicated and both rheumatic condition and antirheumatic drugs may have potential roles in clinical course of COVID-19. Current evidence, including ours, showed that there were no significant differences in the duration of hospital stay and mortality between patients with rheumatic disease and those without rheumatic disease.2 4 However, the presence of rheumatic disease may affect certain manifestation of COVID-19. As mentioned above, Wan’s data indicate a considerable rate of respiratory failure (needs for ventilation), although the sample size was not large enough for statistical analysis. A recent report by D’Silva also confirmed that patients with COVID-19 with rheumatic disease in the greater Boston, Massachusetts area had higher rates of intensive care admission and mechanical ventilation compared with those without rheumatic disease (48% vs 18%; OR 3.11, 95% CI 1.07 to 9.05, p=0.01), although mortality was similar.4 In the report of COVID-19 cases in northern Italy by Fredi et al, patients with rheumatic disease also had a higher, but not statistically significant, rate of high-dose glucocorticoids (65% vs 48%, p=0.14) and tocilizumab (23% vs 18%, p=0.55), which were used for the treatment of ‘worsening of respiratory condition’.5 Nevertheless, we agree that further investigations with larger sample size are required to assess the exact effects of rheumatic disease on COVID-19 outcome.

The COVID-19 Global Rheumatology Alliance has established a large database of global cases with COVID-19 and rheumatic disease.1 Further analyses on those cases may provide a better understanding of the clinical manifestation of COVID-19 in patients with rheumatic disease.

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REFERENCES