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Suggested considerations for the treatment of rheumatic diseases in adult patients with COVID-19: comment on the article by Mikuls et al

To the Editor:

We read with great interest the latest American College of Rheumatology (ACR) consensus-based guidance for managing rheumatic diseases in adult patients with COVID-19, as presented by Dr. Mikuls and colleagues (1). We would first like to note that our nationwide retrospective cohort studies have shown that hydroxychloroquine treatment not only presents no increased risk of cardiac arrhythmia in multiple rheumatic diseases (2), but also likely provides cardiovascular protection (3). Therefore, we believe the task force should reconsider the implications of halting hydroxychloroquine treatment in the context of SARS-CoV-2 infection.

Furthermore, we would like to emphasize the potential role of the JAK inhibitor baricitinib in limiting the damage of SARS-CoV-2 infection (4). A recent randomized controlled trial of hospitalized adults with COVID-19 demonstrated that combination therapy with baricitinib and remdesivir was more effective than remdesivir alone in terms of recovery time and clinical improvement (5). Since there was no apparent increase in rates of infection and venous thromboembolism with the addition of baricitinib, the optimal protocol for continuing baricitinib use in the treatment of rheumatic diseases could be discussed in the context of confirmed or presumptive COVID-19 infection.

Finally, we would like to highlight the need for the ACR guidance to stratify based on sex and age. A recent cohort study by Avouac et al demonstrated an association between rituximab treatment and poorer COVID-19 outcomes (6). However, older men were specifically more likely to be treated with rituximab, further confounding the potential causes of this association. Another

study highlighted lower risks of hospitalizations for rheumatic disease patients within a predominantly older cohort of female patients treated with disease-modifying antirheumatic drugs or JAK inhibitors (7). These potential differences in age- and sex-related disease outcomes in rheumatic diseases and COVID-19 calls attention to the need for guidelines that address the risk/benefit ratio of rheumatologic treatments at an age- and sex-specific level.

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