

## Are my patients with rheumatic diseases at higher risk of COVID-19?

According to the last WHO situation report (10 March 2020), the novel Coronavirus disease 2019 (COVID-19) has been confirmed in 113 702 patients, most of them in China (71.1%) and the rest in other 109 countries, with a global case-fatality rate (CFR) of 3.5% (4012 deaths among 113 702 confirmed cases).<sup>1</sup> Most patients have presented with fever, dry cough and fatigue, about 81% of cases reported in China have been classified as mild, 14% severe and 5% critical, the higher CFR has been observed among older patients and with comorbid conditions (cardiovascular disease, diabetes, chronic respiratory disease, hypertension, cancer, etc).<sup>2</sup> To our knowledge none of the fatal cases reported has been associated with rheumatic diseases.

Patients with rheumatic diseases are known to be at higher risk of infection attributed to disease activity, comorbidities, immunosuppressive therapy, etc.<sup>3</sup> The WHO promotes that the general population take some basic protective measures against COVID-19 and other respiratory viruses that include: frequent hand washing; social distancing (at least 1 m between the patient and anyone who is coughing or sneezing); reducing face touching and respiratory hygiene practices such as covering mouth and nose with bent elbow or tissue when coughing or sneezing. If there is fever, cough and shortness of breath, medical care should be sought early. All these measures must also be employed and promoted by healthcare workers.

In a recent study, chloroquine showed potent in vitro antiviral effect in a COVID-19 assay by increasing endosomal pH that is required for virus/cell fusion as well as interfering with glycosylation of cellular receptors,<sup>4</sup> adding its well-known immunomodulating action. Chloroquine is being considered to be included in the next version guidelines for the prevention, diagnosis and treatment of pneumonia caused by COVID-19 issued by the National Health Commission of the People's Republic of China.<sup>5</sup>

Based on the clinical information published to date from the new and previous outbreaks caused by coronaviruses (severe acute respiratory syndrome and Middle East respiratory syndrome), there is no overwhelming evidence that patients with rheumatic diseases are at an increased risk compared with other comorbidities.<sup>2-6</sup> Although further information regarding this outbreak need to surface before any solid conclusion can be made. We believe that based on the knowledge of other viral infections and the effect of the therapies used in rheumatic patients leads us to think that there is an increased probability for this population to acquire COVID-19. In counterpart, there is also some evidence of the potential benefit of a drug widely used in rheumatic diseases: chloroquine. Only time and the directed clinical trials will clarify the prophylactic or therapeutic role of chloroquine and its effect on the risk of COVID-19 in rheumatic patients.

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