Evidence of Protective Effect of Hydroxychloroquine on COVID-19

To the Editor:

We would like to share ideas on the report "Hydroxychloroquine in Patients with Rheumatic Disease Complicated by COVID-19: Clarifying Target Exposures and the Need for Clinical Trials". Balevic noted that "well-designed clinical trials that include patients with rheumatic disease are urgently needed to characterize the efficacy, safety, and target exposures for hydroxychloroquine." The effect of hydroxychloroquine (HCQ) against the coronavirus disease 2019 (COVID-19) is an interesting issue in clinical rheumatology. In a recent publication, the observation of an extremely low rate of COVID-19 among patients with rheumatic disease who received HCQ therapy triggered global interest in the clinical efficacy of HCQ. Some researchers expressed the idea that there is no evidence that HCQ can prevent COVID-19. Romão, et al recently reported on 2 patients with systemic lupus erythematosus (SLE) who got stable HCQ medication. These data can show that SLE patients taking HCQ might develop COVID-19, but it cannot conclude on the protective effect of the drug.

New data are required for any new drugs for management of COVID-19. At present, not only HCQ but also several classic drugs require clinical trials for management of COVID-19. The COVID-19 pandemic is a global problem and requires urgent global solutions. Sometimes, the complete process of clinical trials might not take place before the use of drugs in clinical practice. HCQ is a classic drug with much data on its safety. This drug might be safer for management of COVID-19 than newly available antiviral drugs. We need further data on the usefulness of HCQ against SARS-CoV-2. In a recent publication from France, combined HCQ and azithromycin in early COVID-19 was safe and could result in a lower mortality rate. But another publication from the United States showed a neutral effect of HCQ.

An important consideration is the dosage of HCQ. The baseline dose of HCQ for the patient with SLE might not be sufficient for management of COVID-19. A higher dose might be required. And an increased dose of antiretroviral drugs may be required for management of COVID-19. In a recent report from China, Yao, et al recommended a loading dose of 400 mg twice daily of HCQ sulfate given orally, followed by a maintenance dose of 200 mg twice daily for 4 days for SARS-CoV-2 infection. These new studies are interesting, and there might be a protective effect of HCQ on COVID-19 if the proper dose is administered.