

Response to: 'Concerns and needs of patients with systemic lupus erythematosus regarding hydroxychloroquine supplies during the COVID-19 pandemic: results from a patient-centred survey' by Plüß *et al*

We thank Plüß *et al* for their interest in our study reporting on the course of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) disease 2019 (COVID-19) in a case series of patients with systemic lupus erythematosus (SLE) under long-term treatment with hydroxychloroquine (HCQ).^{1,2} Plüß *et al* highlight a major point with respect to the consequences of the SARS-CoV2 outbreak on patients with SLE, in particular the difficulties that the latter have experienced in securing HCQ supplies for a licensed indication as a consequence of the off-label use of this drug to treat COVID-19 in the general population.

Plüß *et al* report that 70% of patients with SLE in Germany expressed concerns regarding the inability to receive their prescriptions for HCQ which was furthermore underscored by the observation that 46% also reported HCQ supply issues, including 17% of patients having received a different product instead of HCQ. A report by Fragoulis *et al* confirmed that HCQ shortage in Greece was a considerable problem for patients with systemic rheumatic diseases, with 54% of patients who discontinued treatment with HCQ being compelled to do so because of drug shortage.³ This has most likely created a very annoying situation for those patients particularly adherent to their treatment. Indeed, in the survey conducted by Plüß *et al*, almost all the patients expressly stated that HCQ was essential for their treatment, while four out of five confirmed to never forget taking this medication.

Fear of a shortage of HCQ, although fortunately often temporary, has arisen since the start of the pandemics, despite a lack of proven preventive or curative efficacy of HCQ against SARS-Cov-2 infection at that time, except in a few clinical studies marked by numerous methodological flaws,^{4,5} as well as attempts of public authorities in many countries, such as France and Germany, to secure the prescription of HCQ for patients suffering from rheumatic diseases.

However, data emphasising ineffectiveness of HCQ for the treatment against SARS-Cov-2 are now plentiful. Long-term treatment with this drug does not seem to prevent COVID-19 in patients with SLE^{1,6,7} or rheumatic diseases⁸ as reported by us and others. Additionally, several large observational studies have reported that the administration of HCQ to patients hospitalised for COVID-19 was associated with neither a lower, nor an increased, risk of transfer to an intensive care unit, intubation or death.^{9–11} Moreover, results from a multicentre, randomised controlled trial showed that administration of HCQ did not lead to a significant higher probability of negative conversion and alleviation of symptoms than standard of care in patients with mild to moderate COVID-19.¹² Finally, in a randomised, double-blind, placebo-controlled trial across the USA and parts of Canada it was confirmed that HCQ did not prevent COVID-19 manifestations when used as postexposure prophylaxis within 4 days after viral exposure.¹³ Together, the majority of studies at present demonstrate that there is no longer any reason to use HCQ in the battle against COVID-19 except in clinical trials. As a consequence, we can only hope that off-label use of HCQ for the treatment of COVID-19 will dramatically decrease and that patients with SLE will again have unrestricted access to HCQ for the treatment of their disease.

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