Response to: 'Correspondence on 'Glucocorticoid-induced relapse of COVID-19 in a patient with sarcoidosis" by Jeny *et al*

We thank Cohen Aubart *et al* for their correspondence.[1] Their study on 36 patients with sarcoidosis and COVID-19 from 15 French centres provides interesting insights on the outcome of COVID-19 in this group of patients. These data provide evidence that a higher percentage of patients with sarcoidosis with COVID-19 might require intensive care support than in the general population. In contrast, sarcoidosis does not seem to affect the severity of COVID-19, and patients with sarcoidosis-associated interstitial lung disease (ILD) are not admitted more often to the intensive care unit (ICU) than patients without ILD.

The data by Cohen Aubart *et al*[1] show that 85% of the patients with sarcoidosis with COVID-19 admitted to the ICU received a long-term glucocorticoid therapy, in comparison with 61% of the patients who did not require admission to the ICU. The two groups received glucocorticoids in similar doses (median daily dose 7.5 and 8 mg of prednisolone, respectively). Although the numbers are too low for statistical analyses, these data may support a more severe course of COVID-19 in patients treated with glucocorticoids. This conclusion is also supported by other publications on the outcome of COVID-19 in patients with other immune-mediated inflammatory diseases treated with glucocorticoids.[2 3] Moreover, our case report provides first evidence that initiation of glucocorticoid treatment might induce relapse of COVID-19.[4]

The study of Cohen Aubart *et al*[1] also provides insights how the SARS-CoV-2 pandemic affected treatment decisions in rheumatology. Between 1 March and 30 May 2020, physicians decided to continue glucocorticoid therapy, whereas most tumour necrosis factor α (TNF-α) inhibitors were discontinued in patients with sarcoidosis. Recent data show, however, that patients with immune-mediated inflammatory diseases receiving treatment with cytokine inhibitors, in particular TNF-α blockers, have low prevalence of COVID-19 and tend to have a milder course of the SARS-CoV-2 infection.[3 5]

Taken together, the available data indicate that glucocorticoids may have a negative impact on the outcome of COVID-19, whereas cytokine-targeting therapies such as TNF-α blockers may not. In the context of sarcoidosis, this may argue for a temporary suspension of glucocorticoid therapy, but continuation of TNF-α inhibition.

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