

## Real-world Coronavirus disease-19 vaccine hesitancy in systemic sclerosis. Reply to Bertoldo *et al.*

Sirs,

We have read with great interest the correspondence by Bertoldo *et al.* (1), a comment on our original study on COVID-19 vaccine hesitancy in patients with systemic sclerosis (SSc) (2). The authors demonstrated a vaccine acceptance rate of 88.1% in a large SSc cohort (1), while in our study 72.2% of patients had clearly positive feelings. These data confirm, through real-world experience, a positive attitude towards COVID-19 vaccine in the majority of SSc patients. We agree that, as mentioned by the authors, a possible reason is that patients with SSc may perceive themselves at a higher risk of COVID-19 (3). However, we also believe that a key issue not touched in our reports is resilience, defined as the psychological phenomenon representing the capacity of individuals to cope successfully with significant change, adversity or risk (4).

As shown in an elegant commentary by Dubè and MacDonald (5), addressing hesitancy and building vaccine resilience are equally important to ensure the success of an immunisation program. Patients with rheumatic diseases, and SSc in particular, have demonstrated a strongly resilient be-

haviour during the pandemic (6, 7) and, in our opinion, it is conceivable that resilience positively affected the decision to receive the vaccine. SSc patients are considered a high-risk population for severe complications of COVID-19 (8) but, although accepting vaccination was by far the most common decision, Bertoldo *et al.* showed that 11.9% of SSc individuals refused the vaccine (1). In our study, 18.3% of patients were “very unsure” or “strongly hesitant”. Our data suggest that a significant proportion of SSc patients are reluctant to receive the safe and recommended COVID-19 vaccines, thus highlighting the critical role of rheumatologists to build and enhance confidence in vaccination and convince hesitant individuals.

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Conflict of interest: none declared.

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