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## Letter to the Editor

## 'High prevalence of heterotopic ossification in critically ill patients with severe COVID-19' – Author's reply

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We are grateful for the thoughtful comments by de l'Escalopier *et al.* [1] and appreciate the opportunity to respond.

We agree with de l'Escalopier *et al.* that systemic inflammation directly or indirectly associated with coronavirus disease 2019 (COVID-19) might be implicated in the pathogenesis of heterotopic ossification. However, in our case series [2], we did not observe any association between the level of C-reactive protein and the risk to develop heterotopic ossification. In fact, the only significant

predictor of heterotopic ossification in the multivariate analysis was prolonged immobilization, suggesting that this risk factor was the most important in the setting of the first wave of the pandemic in our population.

More data, in particular from biopsy of the involved muscles, are needed to assess the role of local inflammation in the pathogenesis of heterotopic ossification and the impact of dexamethasone on the incidence of this debilitating complication.

## Transparency declaration

All authors report no conflicts of interest relevant to this letter.

## References

- 1 de l'Escalopier N, Mathieu L, Duret C, Banzet S, Genet F, Salga M. Re: 'High prevalence of heterotopic ossification in critically ill patients with severe COVID-19' by Stoirà *et al.* Clin Microbiol Infect 2021;27:1051–2.
- 2 Stoirà E, Elzi L, Puligheddu C, Garibaldi R, Voinea C, Chiesa AF, Collaborators. High prevalence of heterotopic ossification in critically ill patients with severe COVID-19. Clin Microbiol Infect 2021;27:1049–50.

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