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## Correspondence

## Answer to De Marchi et al. Joint Bone Spine 2022;89: 105408



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We thank Doctor De Marchi for his comment [1] about our observation [2]. We agree that vaccine protection against SARS-CoV2 is not exclusively through the humoral response. Your example illustrates this point perfectly. Recent data from our hematology colleagues show that in patients with lymphoma on B-cell depleting therapy, a post-vaccination T-cell response remains equivalent to that of healthy controls [3]. T-cell response may also induce a significant cross-recognition against SARS-CoV-2 variants [4]. To date, we do not have enough experience to know whether this cellular vaccine response confers equivalent protection against severe forms of COVID as a combined humoral and cellular response. Nevertheless, several elements show that the multiplication of booster doses allows for the recovery of vaccine responders. Thus, nearly 20% of seronegative patients seroconvert after a third dose [5,6] and had a little increase in T-cell response [7]. In our case report, anti SARS-CoV2 IgM rapidly became negative and it was only after a third dose of vaccine (6 months later) that correct humoral immunization was observed with significant IgG levels. Although we currently have reassuring data on the vaccine response, caution is still warranted and optimization of the vaccine response remains a major challenge in patients treated with rituximab. Thus, the delay after the last rituximab infusion remains important as well as the dose [8–10].

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None.

## Disclosure of interest

The authors declare that they have no competing interest.

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