Response to: 'Towards optimal cut-off trough levels of adalimumab and etanercept for a good therapeutic response in rheumatoid arthritis. Results of the IMMUNOREMAR study' by Sanmarti *et al*

We thank Sanmarti *et al*¹ for their interest in our study² and the confirmation of our results in Caucasian patients with rheumatoid arthritis (RA). We agree that monitoring of serum drug trough levels would help to optimise anti-tumor necrosis factor (TNF)- α therapy for patients with RA in clinical practice.

The serum drug trough levels in our patients with RA who showed good therapeutic response were very close to those observed by Sanmarti *et al*,¹ possibly reflecting a similar status in pharmacokinetics in different ethnic populations. However, the drug trough levels may vary with different detection methods, dosing and timing of the used drug or concomitant disease-modifying antirheumatic drugs²⁻⁴ and may be further complicated by the presence of antidrug antibodies.⁵

Although not yet addressed in the updated 2013 European League Against Rheumatism recommendation,⁶ the determination of drug trough levels would be a valuable guide for clinicians to optimise dosing of biologics according to a personalised treatment algorithm^{2, 3, 7} and avoid overtreatment for patients with RA receiving anti-TNF- α therapy.^{2, 3, 8} For example, Pouw *et al*³ have identified the therapeutic range of adalimumab trough levels at 5–8 $\mu\text{g/mL}$ for maximal clinical response, providing a useful reference for downtitration of adalimumab dose. However, the optimal cut-off trough levels of adalimumab and etanercept which can predict a good therapeutic response in patients with RA should still be validated in longitudinal and larger scale studies.

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