Response to: 'Correspondence on 'Tapering towards DMARD-free remission in rheumatoid arthritis' by Garcia *et al*

We appreciate the interest of García and Abud-Mendoza in our article on tapering towards disease-modifying antirheumatic drug (DMARD)-free remission (DFR), and we would like to respond to the points that were brought up.[1 2]

Garciá and Abud-Mendoza[1] proposed two ways to reduce the amount of flares during tapering of medication, namely (1) the (continuous) use of low-dose glucocorticoids (GCs) and (2) the use of ultrasound to detect subclinical synovitis before a flare occurs. Although the (continuous) use of low-dose GCs might help in tapering DMARDs, including biologicals, to lower dosages without experiencing a flare, it does not alter the DFR rates because, in our opinion, patients are only in DFR if they do not use any DMARD, including GCs. However, we believe that DFR is not a suitable treatment goal because only 15% of patients with rheumatoid arthritis (RA) reached this goal and, therefore, tapering strategies should be targeted at finding the lowest possible DMARD dosages without changing the disease activity state. Aforementioned reasoning reraises the question what the best tapering order is, which should be addressed for a clinical (i.e., long-term side effects and change at flare), patient (ie, preference) as well as a societal perspective (i.e., healthcare and productivity costs).

Garciá and Abud-Mendoza[1] also propose the use of ultrasound to reduce the amount of flares during tapering. During tapering of treatment, patients might develop subclinical synovitis, without the occurrence of a flare, which might be an indication to stop tapering or intensify treatment. Several studies have already shown that subclinical synovitis is associated with tapering failures, however, the implementation in daily practice is still unclear.[3 4] Practical issues remain, such as whether we should perform an ultrasound at each possible tapering moment and/or which joints should be assessed. Within the Taperingstrategies in Rheumatoid Arthritis (TARA) trial, we also made ultrasounds at each visit in the first year of follow-up, and we found that only one-third of the patients with RA with a well-controlled disease were also in ultrasound remission at baseline.[5] So, future research is needed to further explore the usefulness of ultrasound, in daily practice, and especially in predicting disease flares during tapering of treatment.

Finally, García and Abud-Mendoza[1] asked for a subanalyses of the TARA trial in which DFR rates are compared between both tapering strategies, namely, gradually tapering the conventional synthetic DMARD (csDMARD) followed by the TNF-inhibitor or vice versa, in patient with RAs using one csDMARD at baseline. No differences were found in the baseline characteristics, and also no difference was found in the ability to reach DFR taking only patients into account using mono-csDMARD therapy at baseline (p=0.65, table 1). Moreover, we previously analysed whether patients with multiple csDMARDs were more likely to complete the tapering protocol, and also found no differences (β=−0.70, p=0.08, table 1).[2]

To conclude, we agree with Garciá and Abud-Mendoza[1] that current tapering strategies are far from perfect, because of high flare rates and low DFR rates. An individualised tapering strategy is, therefore, preferred. In our opinion, the first step would be to predict a flare before its occurrence using a broad range of outcomes such as clinical outcomes, patient-reported outcomes, biomarkers and imaging.

Table 1 Baseline characteristics and outcomes after 2 years stratified for tapering strategy and the use of one or multiple csDMARDs at baseline

	Tapering csDMARD first (n=94)		Tapering TNF-inhibitor first (n=95)	
	1 csDMARD (n=64)	>1 csDMARD (n=30)	1 csDMARD (n=57)	>1 csDMARD (n=38)
Baseline characteristics				
Age, mean (SD)	56.9 (14.1)	53.9 (14.2)	57.9 (11.1)	56.2 (10.0)
Female, n (%)	47 (73.4)	19 (65.5)	34 (59.7)	24 (63.2)
Symptom duration, mean (SD)	6.54 (3.04)	6.35 (4.31)	7.69 (4.80)	6.05 (3.47)
RF, n (%)	33 (55.9)	16 (59.3)	36 (67.9)	20 (57.1)
ACPA, n (%)	41 (69.5)	20 (76.9)	41 (77.4)	24 (70.6)
DAS44, mean (SD)	1.11 (0.52)	1.00 (0.64)	1.07 (0.54)	0.81 (0.42)
Boolean remission, n (%)	23 (35.9)	8 (26.7)	22 (38.6)	13 (34.2)
Outcomes after 2 years				
Cumulative flare rate, n(%)	39 (60.9)	18 (60.0)	41 (71.9)	18 (47.4)
Completed tapering protocol, n (%)	17 (26.6)	12 (40.0)	10 (17.5)	10 (26.3)
DMARD free remission, n(%)	17 (26.6)	2 (6.7)	10 (17.5)	0 (0)

ACPA, anticitrillunated protein antibody; csDMARD, conventional synthetic disease-modifying antirheumatic drug; DAS44, disease activity score based on 44 joints; RF, rheumatoid factor; TNF, tumour necrosis factor.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not required.

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