Correspondence on 'Re-examining remission definitions in rheumatoid arthritis: considering the 28-joint disease activity score, C reactive protein level and patient global assessment'

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We read with great interest the editorial by Felson *et al* on definitions of remission in rheumatoid arthritis (RA).[1] It gives a comprehensive and historical overview of the development of remission criteria and provides a well-founded critique of remission criteria based on the 28-joint Disease Activity Score (DAS28). DAS28 has been primarily developed and validated for evaluations at the group level, that is, for measuring effects in clinical trials. However, in almost forgotten earlier times, when patient remission was rarely achieved, there was a need for a single index, expressing disease activity of the individual patient, and the only instrument available was the DAS44.[2] When biologicals become available, in many countries of Europe, use of DAS28 as single index of disease activity was also stimulated by health authorities and insurance companies, requiring DAS28 proof of active RA and documented previous treatment failure (or contraindication) of conventional synthetic disease-modifying antirheumatic drugs (DMARDs), before allowing reimbursement of an (expensive) biological drug. Since then, remission has proved to be an achievable goal, and for clinical trials and for individual patients, DAS28 cut-offs have been used for this purpose, especially in Europe, although their limitations for evaluations at the individual patient level have indeed been recognised.[3]

Moreover, we agree with Felson *et al* that patient global assessment (PGA) is a valuable assessment. However, we feel compelled to clarify the misunderstanding that seems to persist regarding our relatively simple proposal. We do not suggest merely eliminating PGA from the definitions of remission; we suggest that a second target, based on valid and discriminative patient-reported measures of disease impact, is adopted, in parallel, but separated from the existing target for (inflammatory) disease activity, which, we believe, could be refined by the exclusion of PGA. Although Felson *et al* have cited our paper,[4] they did not depict our proposal for this 'Dual Target Strategy' and its conceptual framework, summarised in the conclusions of that paper. Following our proposal, the patient's perspective would become more valued, rather than being ignored.

We disagree with the interpretation of the evidence provided by Felson *et al* to support the concept that PGA should be kept as a component of the American College of Rheumatology/European Alliance of Associations for Rheumatology (ACR/EULAR) definitions of remission. Although PGA and measures of clinical disease activity are correlated at high levels of disease activity, contributing to the ability of PGA to distinguish active treatment from placebo in the context of clinical trials, they are only poorly, if at all, correlated at low levels of disease activity,[5 6] precisely when the practising clinician needs to make difficult decisions regarding escalating or maintaining immunosuppressive/immunomodulatory therapy. Thus, while the inclusion of PGA may facilitate the distinction between treatments in clinical trials, we are concerned regarding the implications of including PGA as an element of composite definitions of remission used to tailor immunosuppressive/immunomodulatory therapy in clinical practice and the potential risk of overtreatment that this entails. As many as 45%–61% of all patients with RA (in clinical trials[4] and cohort studies,[7] respectively) who are otherwise in remission fail to meet the Boolean definition of remission, solely because of a too high PGA Score. These patients, in so-called 'PGA-near-remission', are exposed to the risk of overtreatment, because their disease cannot be improved by additional immunosuppression/immunomodulation. However, they still endure significant impact of non-disease activity manifestations and outcomes of the disease,[8] which were recently touched on in the EULAR points to consider for the management of difficult-to-treat RA.[9] The use of the ACR/EULAR remission definitions in clinical practice was explicitly predicted in the original 2011 report[10] and has been extensively adopted as part of the Treat-to-Target strategy. Thus, the implications of these definitions are more extensive than those for clinical trials only.

The assertion that PGA reflects subclinical inflammation is, in our view, unsupported by evidence. We, and in fact, some of the authors of the editorial themselves, have shown no correlation between PGA and joint damage accrual.[11] We have also demonstrated that for patients who are in PGA-near-remission, there is no evidence of inflammation in other joints or synovial structures, through extensive ultrasonography assessment.[12] It is difficult to envisage what room is left for the consideration in the editorial that '…the patient global assessment reflects components of disease activity that are otherwise not captured, …as inflammation in joints not included in a 28-joint count, such as the feet and ankles'. This is, therefore, not the reason 'why high patient global assessment scores, even when 28-joint counts are low, identify patients at high risk of later functional loss'.[1] This may be simply and better explained by the fact that function is a major determinant of PGA, irrespective of (inflammatory) disease activity, as repeatedly reported.[5 6 8 13] These publications are the basis of our 'Dual Target Strategy' proposal, which we hypothesise, may result in more accurate and comprehensive definitions of remission. We proposed the 'Dual Target' to comprise (1) biologic remission, which will be sharper and more sensitive to help guide immunosuppressive/immunomodulatory therapy in individual patients in clinical practice, and (2) patient remission, addressing also all other important aspects of non-disease activity manifestations, outcomes of the disease and medication adverse effects (disease impact); thus, it is more informative than the current one-item PGA. Surely, this approach highlights the importance of patients' perspective as it ensures that clinicians address both the disease activity and the disease impact aspects accordingly.

In summary, we agree with many of the points made in the editorial by Felson *et al*, but we feel that it distorts our proposal by omitting to mention the patient remission aspect, which is what makes it a 'Dual Target': a holistic strategy that empowers patients and promotes health by allowing patients to gain greater control over decisions and actions affecting their health, a WHO recommendation, since the Ottawa conference in 1986.

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