

## To the question of determining remission in rheumatoid arthritis. 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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### Letter

The publication Felson D et al [1] aroused great interest. The authors remind (referring to their work, published unchanged in two different journals) that ACR and EULAR have approved two definitions of remission of rheumatoid arthritis [2, 3]. The first was Boolean-based definition: at any time point, patient must satisfy all of the following: Tender joint count  $\leq$  1; Swollen joint count  $\leq$  1; C reactive protein  $\leq$  1 mg/dl; Patient global assessment  $\leq$  1 (on a 0–10 scale): Considering all of the ways your arthritis has affected you, how do you feel your arthritis is today? ; For tender and swollen joint counts, use of a 28-joint count may miss actively involved joints, especially in the feet and ankles, and it is preferable to include feet and ankles also when evaluating remission.

The second was Index-based definition: At any time point, patient must have a Simplified Disease Activity Index score of  $\leq$  3.3 (the simple sum of the tender joint count (using 28 joints), swollen joint count (using 28 joints), patient global assessment (0–10 scale), physician global assessment (0–10 scale), and C-reactive protein level (mg/dl). Natural questions arise as to why, for Boolean-based definition, the inclusion of the feet and ankles is also provided for in assessing remission and why this is not provided for the Simplified Disease Activity Index Score? Why the feet and ankles can not be included in the frequently used DAS28-CRP determination of rheumatoid arthritis remission?

At the same time [1], erroneously indicating the cited source about the Simplified Disease Activity Index (SDAI) [4]. Originally, the creators of SDAI Smolen JS et al found that SDAI values  $<$  20 correspond to low, from 20 to 40 - moderate and

40 - high activity [4]. Only two years later, they proposed new borderline values of this index, proving that  $SDAI > 26$  corresponds to high,  $11 < SDAI \leq 26$  - moderate,  $3.3 \leq SDAI \leq 11$  - low RA activity, and  $SDAI \leq 3.3$  – remission [5]. The creators of SDAI attributed this discrepancy to the fact that different doctors can interpret the manifestations of the disease in different ways. This is true, since the physician global assessment is not regulated. Different doctors may consider different parameters, depending on personal experience. This also applies to patient global assessment because this indicator largely depends on the intensity of pain, the severity of functional disorders, psychological characteristics, quality of life, level of education. Determination of indicators of tender and swollen joint counts is largely subjective, since it depends on the opinion of the doctor and the patient. Also for tender and swollen joint counts, use of a 28-joint count may miss actively involved joints, especially in the feet and ankles, and it is preferable to include feet and ankles also when evaluating remission [2, 3]. Thus, the definition of remission in rheumatoid arthritis requires serious objectification.

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## References

1. Felson D, Laccaille D, LaValley MP, et al. *Ann Rheum Dis* Epub ahead of print: [please include Day Month Year]. [DOI:10.1136/annrheumdis-2021-221653].
2. Felson DT, Smolen JS, Wells G, et al. American College of Rheumatology/European League against rheumatism provisional definition of remission in rheumatoid arthritis for clinical trials. *Arthritis Rheum.* 2011; 63:573-86.
3. Felson DT, Smolen JS, Wells G, et al. American College of Rheumatology/European League against rheumatism provisional definition of remission in rheumatoid arthritis for clinical trials. *Ann Rheum Dis.* 2011; 70:404-13.
4. Smolen JS, Breedveld FC, Schiff MH, et al. A simplified disease activity index for rheumatoid arthritis for use in clinical practice. *Rheumatology.* 2003; 42:244-57.
5. Aletaha D, Ward MM, Machold KP, Nell VP, Stamm T, Smolen JS. Remission and active disease in rheumatoid arthritis: defining criteria for disease activity states. *Arthritis Rheum.* 2005 Sep; 52(9):2625-36. [DOI: 10.1002/art.21235].