Response to: 'Do 2019 European League against rheumatism/American College of Rheumatology classification criteria for systemic lupus erythematosus also indicate the disease activity?' by Teng *et al*

The letter by Dr Teng and colleagues[1] describes an interesting intellectual exercise. In showing that the scores of the European League Against Rheumatism (EULAR)/American College of Rheumatology (ACR) 2019 classification criteria for systemic lupus erythematosus (SLE)[2 3] correlate very well (r=0.81) with the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) in their SLE patient cohort, they have added disease activity to the concepts inter-related to the new SLE criteria. These relationships, which were discussed for SLE disease severity or 'ominousity' early in the criteria development process,[2 3] may have more overlap than we usually think based on theoretical concepts. In this way, the data by Dr Teng *et al*[1] add to the proof of face validity of the EULAR/ACR criteria.

While the tools to assess criteria versus disease activity may share certain domains and weight, there are relevant distinctions for capturing disease activity. In particular, sensitivity to change of individual domains and its relation to damage accrual appears to be crucial and requires different validation than classification.

However, the fact that the SLEDAI correlates with the EULAR/ACR criteria better than the revised systemic lupus activity measure (r=0.61) may also point to construct criteria the EULAR/ACR criteria share with the SLEDAI.[4] Both have weighted items, even though the weights are based on different reasoning. Both count each individual item in a categorical way. Both have limited themselves to a feasible number of items. Moreover, while not so obvious an overlap, a useful SLE activity score should have significant specificity for SLE.

For the EULAR/ACR 2019 classification criteria, it is also obvious that most of the criteria items are indeed associated with activity. This is true for all clinical items, which are only present in active disease, but also for low complements and for antibodies to double-stranded DNA (dsDNA). The arguable exceptions are anti-Sm antibodies and antiphospholipid antibodies, but anti-Sm antibodies without concomitant anti-dsDNA antibodies are relatively uncommon, and antiphospholipid antibodies carry a low weight in the new criteria system.[2 3] This makes the correlation understandably robust.

At the same time, and this is of importance, the SLEDAI is based on counting only currently active disease. In contrast, the classification criteria count items not only on a given day but also historically present.[2 3 5] For classification, it is sufficient to have had this organ manifestation once.[2 3 6 7] This is a major and important difference to the approach taken by Dr Teng and colleagues.[1] Their clever approach is revealing as an intellectual exercise, which we highly appreciate. However, it should not lead to the erroneous idea that this was a legitimate use of the EULAR/ACR classification criteria. Modifying important parameters, such as an item having been present to be sufficient for classification, would change outcomes.

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Contributors All four authors have drafted the response together and approved of the final version.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

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

Patient consent for publication Not required.

Provenance and peer review Commissioned; internally peer reviewed.

To cite Aringer M, Costenbader K, Dörner T, *et al*. *Ann Rheum Dis* 2022;**81**:e23.

Received 5 February 2020
Accepted 6 February 2020
Published Online First 2 March 2020

Linked

► http://dx.doi.org/10.1136/annrheumdis-2020-217017

Ann Rheum Dis 2022;**81**:e23. doi:10.1136/annrheumdis-2020-217105

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