Response to: Correspondence on "European League Against Rheumatism (EULAR)/American College of Rheumatology (ACR) SLE classification criteria item performance" by Aringer *et al*

In their letter,¹ Drs Bossuyt and Meroni have used an elegant and creative approach to make use of the data on antinuclear antibodies (ANAs) of the European League Against Rheumatism (EULAR)/American College of Rheumatology (ACR) classification criteria project for systemic lupus erythematosus (SLE).² They point out that the individual ANA titre has implications for the likelihood ratio (LR) of a diagnosis of SLE. This interpretation concludes that the LR for 1:160 is just below 1 (0.94) and drops to clearly below 1 with lower titres, that is, 0.17 at 1:80, 0.08 at 1:40 and 0.02 if negative. This means that lower titre ANA actually decreases the pretest probability of SLE, important information for diagnostic considerations.

These findings also reiterate important differences between classification and diagnosis. For the EULAR/ACR SLE classification criteria,^{3,4} the criterion, ANA of $\geq 1:80$ ever, is used as a dichotomous entry criterion. This means that individuals who are always ANA negative are not considered for SLE classification. This is based on the low likelihood of SLE being truly ANA negative, in line with the actual performance in the EULAR/ACR SLE criteria cohort.⁵ For ANA-positive patients, however, the low titre was chosen to not lose sensitivity. Specificity in the range of the other specific items⁵ cannot be reached by ANA, even under the best of circumstances.

Diagnosis is not the same as classification but looks at the individual patient rather than combing a cohort for study purposes. What Drs Bossuyt and Meroni now point out with their analysis is that low-titre ANAs by themselves are not a sufficient argument for SLE. While ANAs of at least 1:80 are sufficient for classifying SLE, low-titre ANA by itself, without relevant clinical arguments, is not a sufficient reason to suspect SLE. We think that this is a helpful message by Drs Bossuyt and Meroni.

Sincerely,

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