Response to 'Antinuclear antibodies by indirect immunofluorescence and solid phase assays' by Bossuyt *et al*

We would like to thank Dr Bossuyt and colleagues[1] for their comments on our article on variability in testing for antinuclear antibodies (ANA).[2] This letter, along with previous correspondence,[3–9] highlights the many issues about ANA testing and the results obtained with different assay platforms. We agree that a combination of different assays can be a valuable approach to assess more completely the serological profile of patients with autoantibody-associated rheumatic disease (AARD). We would note, however, that, just as indirect immunofluorescence assays (IIF) can differ in performance characteristics, so too can solid phase assays (SPA). For SPA, differences can result from the composition of the antigens on the solid phase and the use of mixtures of purified proteins in contrast to a cell extract. It is important, therefore, that studies with SPA indicate antigens present as Bossuyt *et al* have done in their letter.

In our study that was published in *Annals of Rheumatic Diseases*, we focused on systemic lupus erythematosus (SLE), seeking to understand the high frequency of ANA negativity observed in screening of patients for clinical trials for new agents.[2] We have also been interested in the proposed use of ANA positivity as a criterion for the classification of patients with SLE.[10–12] Since the array of ANA expressed in SLE differs from that of other AARD, testing of a variety of IIF and SPA kits may be necessary to find a combination most applicable to this disease. ANA expression has been viewed as almost invariable in SLE although this conclusion is based on the assays used for these determinations and therefore may be worth revisiting. Future studies with SLE and other AARD will be necessary to define better serological findings over the course of disease, including the effects of therapy on various ANA.

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Handling editor Josef S Smolen

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Commissioned; internally peer reviewed.

DSP and DMS contributed equally.

To cite Pisetsky DS, Spencer DM, Lipsky PE, *et al*. *Ann Rheum Dis* 2020;**79**:e66.

Received 12 April 2019
Accepted 12 April 2019
Published Online First 10 May 2019

► http://dx.doi.org/10.1136/annrheumdis-2019-215443

Ann Rheum Dis 2020;**79**:e66. doi:10.1136/annrheumdis-2019-215479

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