Autoantibody phenotyping of antinuclear antibody-negative systemic lupus erythematosus patients

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Dear Editor,

I have read Li et al.’s interesting article on their antinuclear antibody (ANA)-negative cohort of systemic lupus erythematosus (SLE) patients. I have a few comments to make on their study.

Firstly, it was interesting to see the profound thrombocytopenia in the ANA-negative SLE cohort. This cohort may, indeed, be related (or equivalent) to the recently-identified ANA-positive immune thrombocytopenia (ITP) subset which has a higher chance of association with or progression to SLE and other connective tissue diseases over the ANA-negative ITP.2 In this study, ITP patients were deemed as ANA-positive, if they had a HEP-2 titer of >1:100.2 Therefore, it would be worthwhile to see what proportion of Li et al.’s study’s ANA-negative patients actually had a positive ANA titer at 1:100 assuming that they also screened all patients at this titer. There is no doubt that the generous definition of ANA-negative at a cut-off of 1:320 would have introduced some selection bias.

Additionally, it would have been desirable to see the specific ANA profiles of these patients. The ANA indirect immunofluorescence (IIF) is a screening assay and the presence of specific ANAs-particularly those associated with SLE-in the presence of a negative ANA IIF makes this diagnostically helpful. Modern immunoassays detecting specific ANAs are usually quite sensitive analytically. For instance, about 6% of ANA-negative SLE patients have anti-Sm detected—an immunologic criterion of the SLE International Collaborating Clinics (SLICC) criteria. Anti-Ro60 and anti-Ro52 autoantibodies have also been associated with ITP and SLE/ITP, and about 10% of patients with a low-level anti-Ro60 IgG may be negative on ANA IIF (screened 1:80) even with the sensitive HEP-2000 IIF substrate (ImmunoConcepts) with hyper-expressed Ro60 antigen.4 Thus, the detection of specific autoantibodies may assist with diagnosis and potentially subtyping of SLE.

In conclusion, additional details and immunophenotyping of the ANA-negative cohort may prove useful in understanding these patients clinically.

Conflict of Interest: The author declared no conflicts of interest with respect to the authorship and/or publication of this article.

Funding: AL is supported by an NHMRC Postgraduate Scholarship and the John & Anne Leece prize.

REFERENCES
patients and how to identify?. Arch Rheumatol 2022;37:626-34.