Correspondence on 'Long-term outcome of a randomised controlled trial comparing tacrolimus with mycophenolate mofetil as induction therapy for active lupus nephritis'

I read with great interest the recently published long-term outcome of a randomised controlled trial comparing tacrolimus with mycophenolate mofetil as induction therapy for active lupus nephritis.¹ Emerging evidence showed the efficacy of calcineurin inhibitors (CNIs) in patients with lupus nephritis, including ciclosporin A, tacrolimus and voclosporin.¹⁻⁵ However, I am concerned about the risks of thrombotic microangiopathy (TMA) and posterior reversible encephalopathy syndrome (PRES) when CNIs were given for patients with systemic lupus erythematosus (SLE) with concomitant antiphospholipid syndrome (APS). The anticardiolipin or lupus anticoagulant was present in 48 out of 150 patients (28%) in the study by Mok *et al*,³ which was not reported in other studies.^{2,4,5} There were about 17.6% patients with TMA in a cohort of 341 patients with stable lupus nephritis, who had the poorest renal outcome.⁶ The use of CNIs in patients with SLE/APS should be prudent because both CNI and APS are risk factors for the occurrence of TMA,⁷ especially for whom with the presence of histological features of TMA. PRES is contributed by endothelial cell dysfunction. SLE/APS, renal impairment and CNIs are known risk factors for PRES.⁸ There were 4 out of 177 cases reported PRES in the voclosporin group regardless of the dosage, whereas none in the placebo group from the Aurinia Urinary Protein Reduction Active - Lupus With Voclosporin (AURA-LV) study.⁴ I also noted one case developed epilepsy in the group of multitarget therapy, but none in the group of cyclophosphamide from the study by Liu *et al*.² The use of CNIs in patients with SLE/APS may confer a higher risk of PRES. In summary, the risks of TMA and PRES should not be neglected when CNIs are used for patient with SLE/APS. The authors should be encouraged to report the outcomes of CNIs use in patients with SLE and APS, which would shed light on the management of these patients.

Chuanhui Xu

Correspondence to Dr Chuanhui Xu, Department of Rheumatology, Allergy and Immunology, Tan Tock Seng Hospital, Singapore 308433, Singapore; xuchuanhui2008@gmail.com

Contributors CX conceptualise and write up the manuscript.

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 not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.

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To cite Xu C. *Ann Rheum Dis* Epub ahead of print: [please include Day Month Year]. doi:10.1136/annrheumdis-2020-219056

Received 7 September 2020

Accepted 9 September 2020

► <http://dx.doi.org/10.1136/annrheumdis-2020-219056>

Ann Rheum Dis 2020;0:1. doi:10.1136/annrheumdis-2020-219056

ORCID iD

Chuanhui Xu <http://orcid.org/0000-0002-3222-7168>

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