

## Response to: 'Remission or low disease activity as a target in systemic lupus erythematosus' by Ugarte-Gil *et al*

We appreciated the comments by Ugarte-Gil and co-authors<sup>1</sup> on our report dealing with lupus low disease activity state (LLDAS) in Caucasian patients.<sup>2</sup>

We agree that Caucasian patients with systemic lupus erythematosus (SLE) have a better prognosis compared with non-Caucasian ones, but, in our opinion, race does not fully elucidate the different results in terms of prevalence of low disease activity and remission obtained in the studies by Zen *et al*<sup>2</sup> and Ugarte-Gil *et al*.<sup>3</sup>

The different design of the studies is more relevant than race in explaining the divergent results. Indeed, the Grupo Latino Americano De Estudio del Lupus (GLADEL) study<sup>3</sup> analysed an inception cohort of patients shortly after the disease onset (median disease duration 0.3 years), and the authors assessed remission and low disease activity status (LDAS) during the first years of follow-up. By contrast, we analysed a non-inception cohort of patients with SLE with a mean disease duration of 11 years.<sup>2</sup> It is well known that SLE is more active in the first years after diagnosis: the relapsing–remitting profile decreases and the long quiescent profile increases over the disease course as shown by Györi *et al*.<sup>4</sup> Thus, the inclusion of patients with a different disease duration could account for the different proportion of low disease activity and remission observed in the two cohorts. Notably, we did not exclude patients with a recent diagnosis of SLE, thus our cohort is representative of what can be observed in a 'real-life' lupus clinic.

The GLADEL study design looks like that of the Wilhelm's study,<sup>5</sup> where the first remission period achieved by patients in the John Hopkins Lupus Cohort was considered, which could be responsible for the low prevalence of remission found in this study, as we recently underlined in a letter to the editor of *Annals of Rheumatic Diseases*.<sup>6</sup>

In addition, the different duration of the follow-up in our study compared with that of Ugarte-Gil *et al* (7 years vs a median of 2.6 years, respectively) could have contributed to the higher frequency of low disease activity and remission observed in our cohort, since the longer the observation time, the higher the probability of detecting the occurrence of low disease activity or remission.

We also considered the longest period of remission or LLDAS achieved during the follow-up by each patient,<sup>2,7</sup> and not the sum of intervals spent in remission or LDAS in the entire cohort, as in the GLADEL study.<sup>3</sup>

We would like to highlight that our results<sup>2,7,8</sup> are really in keeping with the findings of other recent studies on remission and LLDAS in different ethnic groups, which used a study design similar to ours. Mok *et al*<sup>9</sup> found prolonged remissions in 35.3% of Chinese patients with a disease duration of  $\geq 7$  years. Similarly, Tsang-A-Sjoe *et al*<sup>10</sup> observed a prolonged remission in 32.5% and a LLDAS lasting  $\geq 50\%$  of observational time in 64.5% of patients in a multiethnic cohort followed up for a median time of 5 years.

Since the GLADEL cohort includes patients followed for more than 10 years, the analysis of the prevalence of remission and LLDAS (or LDAS) in any single patient during the whole follow-up would be of great interest.

Ugarte-Gil *et al*<sup>3</sup> considered a very large cohort of patients, which allows the independent evaluation of the impact of

remission and LDAS on damage and found that both statuses were protective. Unfortunately, our cohort is smaller than the GLADEL cohort, preventing a separate analysis of patients in LLDAS but not in remission.<sup>2</sup> However, it has to be pointed out that even in our multivariate analysis, LLDAS was an independent protective factor against new damage. Only when the remission status was added in the model, LLDAS did not show any additional protective effect against damage progression over remission.

Thus, in our opinion, remission remains the optimal target in the management of SLE; when remission cannot be achieved, low disease activity could be considered an acceptable alternative target.

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