Response to: 'High risk of systemic lupus erythematosus development in patients with ITP: antiphospholipid syndrome is also a concern?' by Inanc *et al*

We thank Inanc *et al*[1] for their comments on our article entitled 'Risk of systemic lupus erythematosus (SLE) in patients with idiopathic thrombocytopenic purpura (ITP): a population-based cohort study'. In our article, we concluded that ITP is strongly associated with incidental SLE.[2]

We agree with Inanc *et al*[1] that antiphospholipid syndrome (APS) is an important effect modifier in ITP and SLE. We also acknowledge that Inanc *et al*[1] addressed the difference of APS (2.77% in the ITP group vs 0.02% in the non-ITP controls) in table 1 of our article.[2] Actually, ITP, APS and SLE sometimes overlapped in clinical practice. As in table 1, there are more baseline comorbidities in the ITP group, including thrombotic event, cardiovascular disease and ITP. Hence, we did propensity score to match these differences rather than exclude these comorbidities in patient selection as in figure 1. The reason for this is that once you exclude these effect modifiers, then you cannot study their effects. Thus, we prefer matching and stratified analysis on important effect modifiers, rather than exclusion.[3]

As Inanc *et al*[1] mentioned, many claim-based or patient-reported databases have concerns of validity and uncertainty. Unfortunately, the National Taiwan Insurance Research Database (NHIRD) did not provide laboratory data, such as antinuclear antibody (ANA) and APS profiles. Although this is a limitation, the NHIRD had been validated and appreciated in many high impact publications.[4 5] In our study, we had tried to minimise this information bias by adding sensitivity tests and also stratifies analysis on important confounders, such as thrombosis cardiovascular disease and some infections and life style-related diseases to reduce the bias from comorbidities, including APS. These had been discussed in-depth in Discussion section of our article.

Table 1 The crude and age and sex adjusted incidence rate of SLE in general individuals, ITP, Hashimoto's disease, Graves' disease and AIHA population

Group	Person-months	SLE event	Crude incidence rate*	Age and sex adjusted incidence rate*
General control (n=14 303)	1 273 883	26	2.04	2.04
Graves' disease (n=7345)	650 005	23	3.54	3.30
Hashimoto's thyroiditis (n=1513)	118 482	12	10.13	15.01
AIHA (n=121)	6827	7	102.54	39.43
ITP (n=697)	53 382	28	52.45	52.60

Age and sex adjusted incidence rate, the weighting of standardisation was the age and sex distribution in general control.
*Rate, per 100 000 person-months.
ITP, idiopathic thrombocytopenic purpura; SLE, systemic lupus erythematosus.

We agree that APS clinical features and laboratory profiles and ANA are important baseline evaluation for every patient with ITP. It is also indeed our study purpose and conclusion. Furthermore, even though baseline ANA and aPL were negative, we suggest that patients with ITP should still be monitored yearly for clinical and serological lupus or APS. We hope this clinical application will improve the quality of our daily practice.

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