Risk of systemic lupus erythematosus in patients with idiopathic thrombocytopenic purpura: a need for a more accurate control group?

We read with great interest the recent paper by Zhu et al1 which studied the risk of developing systemic lupus erythematosus (SLE) in a population of patients with idiopathic thrombocytopenic purpura (ITP).

In their paper, Zhu et al performed a population-based retrospective cohort study in which they analysed the risk of SLE in a cohort of patients newly diagnosed with ITP between 2000 and 2013. Controls were selected at a 1:2 ratio through propensity score matching using the greedy algorithm. Zhu et al found an incidence rate of 62.0 per 100 000 person-months (95% CI 44.3 to 86.8) in the ITP group and of 2.10 per 100 000 person-months (95% CI 1.44 to 3.06) in the non-ITP group, with an average follow-up time of 80 months. The adjusted HR of incidental SLE in the ITP group was 25.1 (95% CI 13.7 to 46.0). Given that ITP is an immune-mediated disease, a control group consisting in patients with other autoimmune diseases (autoimmune haemolytic anaemia, Evans syndrome, thyroiditis…) might have been more accurate in order to compare the risk of developing SLE with other autoimmune diseases instead of using a standard control group, which could have artificially overestimated the risk of SLE.

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