



# Regarding the double-negative T cells in patients with systemic sclerosis

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Dear Editor,

We read Zhang's paper [1] with great interest in a recent issue of *Clinical Rheumatology*. In this study, they construct a molecular immune map of patients with systemic sclerosis (SSc) by mass flow cytometry and compare the number and molecular expression of double-negative T (DNT) cell subsets between patients and healthy controls (HC). They found that the number of total CCR5 + CD28 + DNT cells was significantly decreased in 17 SSc patients when compared with 9 HC. Moreover, they found that this DNT cell subset played a protective role in the pathogenesis of SSc. However, despite definite results, we raise some concerns about the result of this study.

A very important confounder may be ignored when they depict the results of DNT cell subsets between SSc patients and HC, that is, the commonly used drugs for the treatment of SSc patients. Take glucocorticoid for example, lymphocyte or platelet counts were all greatly influenced by the glucocorticoid, let alone other immunosuppressant drugs for the SSc patients. However, the drug use history or their statistical significance on these DNT cell subsets in Zhang's study was not listed or analyzed. Thus, as laboratory technicians, we want to highlight that the commonly used glucocorticoid or other immunosuppressive drugs may result in decreased DNT cells in these SSc patients.

Thus, to minimize the drug influence on the statistical results, the drug use history or their statistical significance should be included or analyzed in this study, while we noted there were even 14 diffuse SSc patients in this study.

Lastly, we congratulate Zhang et al.'s impressive work despite these comments.

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## Declarations

**Ethical approval** Not applicable for this letter.

**Consent to participate** All authors reviewed this manuscript and agreed to submit this manuscript.

**Disclosures** None.

## Reference

1. Zhang D, Alip M, Chen H, Wu D, Zhu H, Han Y et al (2024) Immune profiling analysis of double-negative T cells in patients with systemic sclerosis. *Clin Rheumatol* 43:1623–1634

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