

# Single cell multi omics analysis identifies two distinct phenotypes of newly onset microscopic polyangiitis

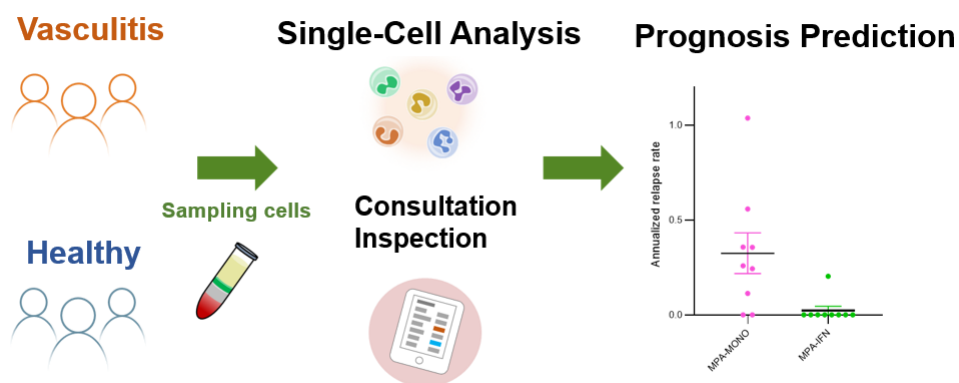
Keywords: autoimmune diseases, intractable immune diseases, vasculitis, single cell analysis, prognosis prediction, personalized medicine

## Points

- The researchers performed single-cell analysis of immune cells from the patients with incurable vasculitis.
- There are significant differences in the symptoms and prognosis of vasculitis due to the gene expression in monocytes.
- It would be possible to predict the prognosis of patients with new onset vasculitis.

The immunological basis of the clinical heterogeneity in autoimmune vasculitis remains poorly understood. The research group of Masayuki Nishide, Kei Nishimura, and Atsushi Kumanogoh (Graduate School of Medicine, Osaka University/Immunopathology, IFRc) conducted single cell transcriptome analyses on peripheral blood mononuclear cells (PBMCs) from newly onset patients with microscopic polyangiitis (MPA).

They identified the immunological phenotypes of MPA, and provide clinical insights for personalized treatment and accurate prognostic prediction.



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