

# Review of: "Long Covid, the Gut, and Autoimmune Skin Diseases: A Novel Therapeutic Approach"

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**Potential competing interests:** No potential competing interests to declare.

The manuscript is a review of the potential links between autoimmune dermatological manifestations of Long Covid and gut dysbiosis. In all these conditions, increased levels of TNF- $\alpha$ , IL-1 $\beta$ , and IL-6 are detectable. The manuscript reports literature data indicating that an altered gut microbiome is detected in skin autoimmune diseases and that SARS-CoV-2 invades gut enterochromaffin cells, inducing an altered tryptophan metabolism linked to autoimmune disease. The authors suggest that a prebiotic (D-mannose)/probiotic (lactobacilli, bifidobacteria)/postbiotic (butyrate) approach may enhance or eliminate traditional immunotherapy targeted to the cytokines TNF- $\alpha$ , IL-1 $\beta$ , and IL-6. Although speculative, the manuscript may be of some interest for clinicians involved in this field, suggesting a new therapeutic approach for patients affected by Long Covid and autoimmune skin diseases.