# DYSREGULATED IMMUNE SYSTEM IN MDA5-POSITIVE DERMATOMYOSITIS PATIENTS <br> <br> Shih-Hsin Chang, Ju-Pi Li and Joung-Liang Lan <br> <br> Shih-Hsin Chang, Ju-Pi Li and Joung-Liang Lan <br> China Medical University Hospital, Taiwan 

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ermatomyositis, a subgroup of idiopathic inflammatory myopathy, is characterized by inflammation of muscles and skin. In Asian cohorts, the presence of anti-melanoma differentiation-associated gene-5 (MDA5) autoantibody in dermatomyositis patients is often associated with rapidly progressive interstitial lung disease (RPILD). Here we examined the immune system of MDA5-positive dermatomyositis patients ( $\mathrm{n}=9$ ) and compared with healthy controls ( $\mathrm{n}=10$ ). The percentages of Th17 and Treg cells in the peripheral bloods from MDA5-positive dermatomyositis patients were higher than those from healthy controls. Furthermore, circulating proinflammatory levels of IFNy, IL-17, TNFa, IL-6, CCL18, and IP-10 from MDA5-positive dermatomyositis patients were significant increase compared with healthy controls. These data suggest that MDA5-positive dermatomyositis patients had the dysregulated immune system and the exacerbated inflammation response. In addition, plasma surfactant protein D and Krebs von den Lungen-6 levels in MDA5-positive dermatomyositis patients were markedly higher than those in healthy controls, supporting that the presence of anti-MDA5 autoantibody in dermatomyositis patients usually had lung fibrosis phenomena.

## Biography

Ju-Pi Li has completed her PhD from National Tsing Hua University and Postdoctoral studies from Immunology Research Center, National Health Research Institutes in Taiwan. She is an Assistant Research Fellow of China Medical University Hospital. She has published about 20 papers in reputed journals.

