

# Analysis to the clinical characteristics and prognosis of MDA5 positive patients with dermatomyositis

Yiying Yang<sup>1</sup>, Xiaoxia Zuo<sup>1</sup>, li Zhang<sup>2</sup>, Hui Luo<sup>1</sup>, and Sijia Liu<sup>1</sup>

<sup>1</sup>Xiangya Hospital Central South University

<sup>2</sup>Central South University Xiangya School of Medicine

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## Abstract

**Purpose:** To explore the relationship between anti-MDA5 antibody and clinical manifestations of dermatomyositis(DM) and to explain the correlation of prognosis as well. **Methods:** Retrospective analysis was performed at the Department of Rheumatology and Immunology in Xiangya Hospital, Central South University from April 2017 to February 2019. The clinical data were collected from 109 patients with DM, and then the patients were divided into anti-MDA5 antibody positive group and negative group according to the results of antibody detection, after which statistical analysis was carried out with SPSS 23.0 software. **Results:** Among the 109 DM patients, the ratio of male to female is 1:2.3, with 58 positive anti-MDA5 antibody and 51 negative anti-MDA5 antibody. There is no difference in gender and age between the two groups, and patients with positive anti-MDA5 have a shorter course. The incidence of clinical symptoms, including Gottron sign, skin ulcer, joint pain, joint swelling, nail erythema, dyspnea, and cough in patients with anti-MDA5-positive DM is significantly higher than those in the anti-MDA5-negative group. Anti-MDA5 antibodies are inversely associated with tumorigenesis. Patients with anti-MDA5-positive DM have less elevation of muscle enzymes and are prone to ILD and RPILD, while patients with anti-MDA5-positive DM have a high mortality rate and poor prognosis. **Conclusion:** Combined with RP-ILD, the prognosis of DM is poor. When patients have these clinical manifestations and positive MDA5, they must actively undergo lung imaging examination and be alert to RP-ILD.

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