Comment on "Systematic retrospective study on 64 patients anti-Mi2 dermatomyositis: A classic skin rash with a necrotizing myositis and high risk of malignancy"

To the Editor: We read with great interest the study by Monseau et al[1] on the clinical characteristics of patients with anti-Mi2 dermatomyositis (DM). The importance of DM-specific autoantibodies (Abs) to delineate more homogeneous DM phenotypes is a conclusion that we share with our French, Canadian, and German colleagues. We would like to comment on the unexpected finding that patients with anti-Mi2 DM were found to have an increased risk of malignancies compared to the age- and sex-matched control individuals in the general French population.

Namely, although positive associations of malignancies with anti-TIF1γ DM and possibly anti-NXP2 DM have been described, the association of malignancies with anti-Mi2 DM has been unclear or described as negative.[2] A recent nationwide retrospective analysis of all Euroline myositis line-blot assays (Euroimmun, Lübeck, Germany) in 1 year in The Netherlands (n = 819) did not show an association between anti-Mi2 Abs and malignancies, whereas an association between anti-TIF1γ Abs was found.[3] In addition, a large prospective cohort study in Chinese patients (n = 627) did not find any malignancies among patients with anti-Mi2 DM, with a consequent lower malignancy rate compared to the general Chinese population.[4] On the other hand, the association of anti-Mi2 DM and malignancies is based on anecdotal evidence: a European multicenter case-control study[5] reported that 4 out of 48 patients with an idiopathic inflammatory myopathy (IIM) and anti-Mi2 Abs had concomitant malignancies. Furthermore, differences in malignancy rates were found among different patterns of Ab reactivity to fragments of the Mi-2β autoantigen, although these differences in malignancy rates were not found to be statistically significant.

Discrepancies between earlier reports and the study by Monseau et al[1] might be explained by differences in study designs and studied populations. First, the nationwide retrospective analysis in The Netherlands used different criteria for the presence of an IIM, and malignancies were likely underreported because of the retrospective nature of the study.[3] Moreover, the prospective nature of the Chinese prospective cohort study may have resulted in comparatively lower malignancy rates, aside from possible differences in malignancy rates due to differences in the studied ethnicities.[4] Also, the European multicenter case-control study used different criteria for the presence of IIM and also included patients with polymyositis and inclusion body myositis.[5] Furthermore, it is unclear whether differences in patterns of Ab reactivity to fragments of the Mi-2β autoantigen may have added to the differences in malignancy rates, because the study by Monseau et al did not describe the method of Ab detection. Thus, although we welcome the novel insights in our current understanding of anti-Mi2 DM provided by the study of Monseau et al. we stress the importance of a future multicenter prospective cohort study or meta-analysis to confirm these preliminary findings.

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Funding sources: None.

Conflicts of interest: J. Lim reports financial support from Sanquin for attending a conference, outside the submitted work. A.J. van der Kooi reports grants from CSL Behring and non-financial support (IVIg free of charge) from CSL Behring, outside the submitted work. J. Raaphorst has nothing to disclose.

IRB approval status: Not applicable.

Reprints not available from the authors.

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https://doi.org/10.1016/j.jaad.2020.06.1032