



# Risk Markers for Adverse Events of Immunotherapy

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## Letter to the Editor

Therapeutic intervention in the functioning of the immune system, which is becoming more and more precise, especially in oncology, but also in other fields - related to immune system dysfunction - e.g., allergology, rheumatology - opens up a new chapter of medical problems. These are the adverse events of immunotherapy.

It seems to be essential to identify readily available markers indicating an increased risk of adverse events of immunotherapy, for the purpose of improving the individualization of treatment [1,2].

Such markers in individuals without any history of immunological problems could be - e.g., antinuclear antibodies, antithyroid antibodies, Antibodies to Zinc membrane Transporter 8 (ZnT8Ab), deficiencies in complement components, extremely low levels of serum IgE or changes detected during lymphocyte immunophenotyping.

The following markers could be the promising ones for the occurrence of immunological adverse events from immunotherapy: Antibodies to the Zinc membrane Transporter 8 (ZnT8Ab) and the extremely low levels of serum IgE.

The demonstrated variability of expression of the ZnT8 gene in leukocytes, in conjunction with the fact that antibodies to this protein occur in several percent of the adult population - may indicate an important role of the ZnT8 in the physiological and pathophysiological immune processes [3].

Similarly, the extremely low levels of serum IgE, especially the ultra-low levels of IgE (<0.1 U/l), may be a simple and easily accessible indicator of the risk of immunological adverse events of immunotherapy in the oncology and other areas of therapeutic interference with the immune system [4].

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