# LABORATORY MARKERS OF ALLERGIC AND TOXICO-ALLERGIC REACTIONS TO MEDICATIONS IN PATIENTS WITH PULMONARY TUBERCULOSIS

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***Abstract.*** The purpose of the study was to determine the laboratory markers of allergic reactions (AR) and toxic-allergic adverse reactions (TAR) to medications in patients with active pulmonary tuberculosis (TB) to predict their development.
***Methods and materials***. There are the results of examination of 68 patients with TB, average age (38.2 ± 1.8) years, who were divided into 4 groups depending on the presence of adverse reactions to medications. 1A group included 12 patients with clinical signs of allergy (A) and non-elevated indicators of liver function in the blood; 2nd group included 16 people with signs of allergy with the increased liver function indicators that developed during treatment (TAR); 3T group included 25 people with the only elevated liver function indicators (toxic (T) reactions); 4BP group included 15 patients without adverse reactions to medications. All patients were examined with standard clinical, radiological, laboratory, biochemical, microbiological, and immunological methods with subsequent computer statistical processing using ranked data series.
***Conclusions***. There were determined the laboratory markers (lymphocyte coefficient — LC and lymphocyte-hepatic coefficient — LHC) of AR and TAR in patients with TB. Decrease in LC (calculated for CD3+, CD8+) below 1 unit and in LC (for CD4+ or CD19+) below 0.5 unit confirmed an allergic reaction in patients with clinical manifestations of allergy. The absence of LC decrease made it possible to diagnose TAR at the presence of allergy clinical signs in patient. The growth of LC for CD 16+56+ above 1.0 unit was the evidence of toxic reactions. Decrease in LHK (calculated for CD3+, CD4+, CD8+ or CD19+) below 2.5 units is possible to use as a TAR marker.

***Key words:*** laboratory markers, adverse drug reactions, allergic reactions, toxic-allergic reactions, pulmonary tuberculosis.