## **ABSTRACT**

Charles University

Faculty of Pharmacy in Hradec Králové

Department of Biological and Medical Science

Candidate: Bc. Tereza Honsárková

Supervisor: prim. MUDr. Inrena Krčmová, CSc.

Title of diploma thesis: Bazotests and lymphocyte transformation tests linked to drug

intolerance

Basophil activation tests and lymphocyte transformation tests are methods that allow drug allergy diagnosis. The right diagnosis is crucial for treatment. Drug allergy is often associated with  $\beta$ -lactam antibiotics hypersensitivity and especially with penicillins.

The aim of this diploma thesis is to provide actual statistics based on selected patient medical reports. Those patients were completely clinically and laboratory examined. The main condition for data selection was the execution of skin tests for suspicion of drug allergy caused by penicillin-like antibiotics at the Institute of Clinical Immunology and Allergology of the Faculty Hospital Hradec Králové in 2017. Patients' anamnesis, skin tests and laboratory examination focused on basophil activation tests and lymphocyte transformation was composed.

Statistics of 25 patients shows beneficial informations. Delayed manifestations are the most prevalent (63 %) in patients which is interesting. However the patients with positive skin test on major determinant had acute drug allergy manifestation more often. The patients with positive skin test on minor determinants did not have acute drug allergy manifestation. More information about acute and delayed manifestations related to major and minor determinants would provide larger group of patients. Ascending skin tests with determinants are unfortunately very complicated.

Key words: basophil activation test, lymphocyte transformation test, drug allergy, penicillins