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### MEETING ABSTRACT

#### A2.34

##### **Evaluation of the effects of *Padus grayanae* Maxim.'s dry extract on the indices of peripheral blood and biochemical parameters of experimental animals as a stage of preclinical research**

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**Background:** *Padus grayanae* Maxim. (Rosaceae Juss.' family), which naturally grows in Japan, was planted in the laboratory of trees and shrubs, the botanical garden, the National Academy of Sciences of the Kyrgyz Republic. As it was established earlier, the aqueous and alcohol extracts obtained from the aerial parts of the plant possess immunomodulatory effects [1, 2].

**Objectives:** The main purpose of the study is to investigate the effect of *Padus grayanae* Maxim.'s dry extract on biochemical parameters and indices of peripheral blood as a chronic toxicity research.

**Methods:** The main object of the research, dry extract of the *Padus grayanae* Maxim., was obtained by freeze-drying [3] according to the requirements of the monograph of the 6th edition of the European Pharmacopoeia [4].

The research of the phytoextract toxicity as a chronic experiment was conducted in accordance with generally accepted good laboratory practices (GLP) using 80 white rats. The research substance was dissolved in water before the administration and then was introduced orally using a tube 1 time a day in doses of 300 mg/kg, 600 mg/kg and 900 mg/kg within 1 and 3 months.

**Results:** Conducted laboratory experiments did not reveal any toxic effects of the drug. It was determined that the introduction of the phytoextract for 1 and 3 months significantly increased the level of hemoglobin, erythrocytes and leucocytes in peripheral blood.

A significant decrease of glucose and cholesterol levels in peripheral blood of experimental animals was defined. Changes in other biochemical parameters detected during the introduction of the substance to rats, did not go beyond the physiological norms and recovered within one month after cancellation of its using to the level of control values.

**Conclusions:** As a result of chronic research, it was found that during intragastrical administration to rats in the dose range investigated, the dry extract of *Padus grayanae* Maxim. has no pathological effects on the main homeostatic constants. It shows to be safe.

**Keywords:** dry extract – *Padus grayanae* Maxim. – toxicity

#### References

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