Author’s response to reviews

Title: GALEGA OFFICINALIS EXTRACT REGULATE THE DIABETES MELLITUS RELATED VIOLATIONS OF PROLIFERATION, FUNCTIONS AND APOPTOSIS OF LEUKOCYTES

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Author’s response to reviews:

Dear reviewers,

The authors are sincerely grateful for the thorough work done in reviewing this article. Thank you for the analyzing the publication and offered the possibility to improve it. Notes to our article have been considered and were amended to the text of work.

Explanations on some amendments:

Review 1 (Elena Catap)

To manuscript was included information about specific bioactive compounds that have been isolated from the plant that have been screened for immunomodulatory activity (page 4 line 3-5).

The aim of the study was revised to reflect the specific objectives of the study and included the GC-MS analysis of the chloroform fraction of the plant extract (page 4 line 6-12).

The aerial parts (leaves, stems) of the plant were used and it was clarified in manuscript (page 4 line 16, 24).

The dried plant material was homogenized prior to infusion in ethanol, which were added to section “Preparation of Galega officinalis Extract and Compounds Identification” (page 4 line 25).

The percentage yield of the crude extract and the chloroform fraction were added (page 5 line 3-4, 7).
The number of animals per group is not uniform because all experiments were not conducted on one experimental set. For example, while performing fluorescent analysis of lymphocytes apoptosis by binding with annexin V there was 5 animals in each group, and in determination of cationic proteins content and of myeloperoxidase level there was 8 animals in each group.

By preliminary experiment it was determine the toxicity of G. officinalis (data not shown in article). After oral administration of extract at a dose of 5 g / kg, signs of intoxication in rats were not detected: the animals were active, reacted. For determination of toxicity the dose was chosen according to the methodological recommendations of the State Pharmacological Center of the Ministry of Health of Ukraine, when choosing doses for intragastric administration, it is the maximum dose (5 g / kg) for the fourth class of toxicity (low toxicity substances).

By our preliminary experiments it was also shown that dose (600 mg/kg) of extract is the lowest dose with prominent antidiabetic effect. And for our opinion studies of lower doses are inappropriate in view of lower sugar-lowering effect.

The source of material were added to each assay.

The tests used for tested for normality and homogeneity were added to section “Statistical Analysis of Results” (page 11 line 12-14).

The chromatogram was included in the results section.

Figures 1-3 were revise by removing all horizontal lines within the graph.

English grammar was checked and corrected with graduate philologist.

Review 2 (Rachana R)

The reference for the formula was added (page 9 line 13).

To the text of manuscript was added explanation of decrease of cationic proteins content under Administrations of Galega officinalis extract (page 20 line 24-25, page 21 line 1-4).

English grammar was checked and corrected with graduate philologist.

Yours faithfully, authors.