

# **STUDY OF COMPOSITION AND TECHNOLOGY OF HEPATOPROTECTIVE AND IMMUNOSTIMULATIVE ACTION DRUG**

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At present, most of the population suffers from diseases due to weak or weakened immunity. However, modern clinical medicine has proved that at liver diseases violation of one of its functions is observed, including protein generating (including immunoglobulin synthesis), which leads to disruption of humoral immunity circuit.

Therefore, the problem of creating a combined action drug of immunomodulating and hepatoprotective action is relevant for practical pharmacy.

The aim of research was to choose optimal dosage form and to develop a technology for hepatoprotective and immunostimulative action drug.

As ingredients used natural substances: vegetable sunflower protein and MX-factor substance which is a glycoprotein oligopeptide composite preparation.

During the experiment used the following technologies and research methods according SPU: for granulate - fractional composition, determination of the flowability parameters, angle of repose, bulk volume and bulk density; for capsules - average weight, disintegration time.

As the optimal dosage form we have chosen hard capsules because they are more attractive from a technological point of view than other dosage forms.

At reception of granules used vegetable Sunflower protein powder as a component of immunostimulating action and MX-factor as a moisturizer and components with immunomodulative and hepatoprotective effects. The resulting granules were tested for residual moisture that was 5.35%, and fractional composition (about 95% takes the fraction with particle size 100 microns). For further research used granules fraction with particle size 100 microns. Granular had sufficient fluidity - 9 s / 100 g, which has allowed to avoid the use of extra excipients.

Filling of number 4 size capsules with obtained granulate was performed using capsule machine.

Capsules after filling were weighted - average weight of filled capsule is 0.15 g, and the mass of the empty shell - 0.05 g. Thus, a capsule contains 0.1 g of active ingredient. Capsule disintegration time was, on average, 7 minutes, which meets the requirements of regulatory documents. Thus, in the course of research, proposed the composition and technology of immunomodulating and hepatoprotective action preparation in the form of hard capsules.