

## DEVELOPMENT OF COMPOSITION OF ADAPTOGENIC ACTION TABLETS

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**Introduction.** The immune system is one of the toughest in the human body. It's function - the protection of the organism against the effects of various foreign agents (bacterial, viral, parasitic, vegetal and animal). The immune system also suppresses its own tissues and cells that have experienced pathological changes. It involves infective, inflammatory, allergic, autoimmune and other processes. Immune-boosting drugs are a class of synthetic, biotechnological and natural substances that can affect the functioning of the immune system as a whole and its individual units and thereby change, the nature and direction of the immune response. Immunostimulants are currently used to treat diseases of various etiology, pathological conditions and to prevent them. Developing drugs with this pharmacological activity is the pressing task of modern pharmacy.

**The aim of the research.** Development of scientific composition of immunostimulatory action tablets.

**Materials and methods.** The object of the study is tablets, dry extract of *Echinacea purpurea* and Succinic acid, excipients: Kollidon VA 64, MCC 102, Croscarmellose sodium, Lactose monohydrate, Magnesium stearate. The subject of the research is conducting physico-chemical and technological tests of API, tableting mass and tablets.

The following test methods were used in the work: organoleptic (appearance); physical and chemical (moisture content, geometric size of tablets); technological (optical microscopy, sieve analysis, fluidity, angle of natural slope; bulk density and density after shrinkage; resistance to crushing, compressibility, disintegration); mathematical (statistical processing of results).

**Results and conclusions.** Was the final analysis of the literature regarding the prospects for the creation of solid drugs of immunostimulant action and immune disorders, being studied range of drugs of immunomodulatory action.

The physico-chemical and technological properties of the active ingredients are investigated. It is known that the active components do not have the necessary parameters to receive the tablets – low fluidity, high hygroscopicity that requires the introduction of excipients.

The influence of excipients on the specification indicators on the weight of tablets and the quality indicators of the combined tablets received is examined.

In order to protect the developed tablets against unwanted environmental factors we were offered the cover of Opadry II 85G film tablets.

The resulting data allow the development of the composition of a new drug. Based on the research conducted the rational technology of manufacture of tablets with dry extract of *Echinacea purpurea* and succinic acid was justified and the technological scheme of their receipt is proposed.