METHODS OF STATISTICAL ANALYSIS
IN PHARMACEUTICAL RESEARCH

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Introduction. The wide application of statistical methods of analysis and statistical data models is due to the dynamic development of the scientific and technical directions of pharmacy. Important areas based on statistical analysis include: tasks of identification and input control of medicinal raw materials; Methods for testing the quality of medicines; Methods of establishing the patterns and technology of manufacturing medicines; Studying the compatibility of dosage forms; Process of validation of analytical instruments and techniques.

Purpose of the study. To consider the possibility of using statistical methods and models in pharmaceutical research, taking into account modern validation requirements.

Conclusions. Statistical methods of monitoring and processing of measurement results, have sufficient capabilities and a high level of reliability. Methods of validation in pharmaceutical research is the process of experimental confirmation that the quality control technique provides the necessary and sufficient information about the object under investigation and is suitable for solving specific problems. For the validation of methods, statistical methods based on correlation, regression analyzes are used. In the course of experimental studies, statistical values that describe a sample of observations are estimated and measure both the mean value of the distribution of observations and the variance of observations around a given mean.

The use of statistical methods in the validation process of laboratory analytical equipment and methods of quality control of medicines will allow to detect and significantly reduce systematic mistakes, establish a limit for detection and quantitative determination of the analyze.