# TECHNOLOGICAL RESEARCH OF CINNARIZINE

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**Introduction.** The half-life T1 \ 2 for Cinnarizine is equal to about 3-4 hours, depending on the quality of raw materials, age and condition of the patient. So important is the creation of prolonged dosage form

**Purpose.** For prolongation was decided to create a mixture of auxiliary substances that would help extend the half-life of Cinnarizine up to 12 hours and reduce the frequency of taking dosage form to once per day. The purpose was to study the properties of Cinnarizine for creating a solid dosage form of prolonged action.

**Materials and methods of research.** The obtained results. Was conducted microscopic analysis of cinnarizine powder, crystals have rod-shaped elongated shape. Form factor is 0.28. By type of crystalline system of Cinnarizine substance can be attributed to monoclinic system. The particle size is 0.5-3 micrometer, indicating about fine powder, opportunities for a good seal. The obtained data allow us to conclude about the possibility of using direct compression in case of rational choice of auxiliary substances.

One of the important characteristics of mass for tableting are the figures of bulk density that can be used to predict the rheological properties and compressibility. These are just two of the many parameters which are important in the overall process of tableting, which in turn requires powder compaction in hard solid form with the correct mechanical strength, porosity and dissolution characteristics. Together with an indicator of fluidity, we determined the natural angle of slope (α). The angle gives an idea about the nature of powders fluidity and characterizes the balance of all forces which are acting on the particles of powder. It is a comprehensive indicator that depends on the shape and particle size, density and moisture content of the material, the value of the total surface of the particles. Therefore, to reduce the error determination of these two indicators, the substance was dried to constant moisture content.

**Conclusion.** Thus based on conducted microscopic researches we can conclude about the expediency of application of direct compression. Defining technological parameters showed necessity of introducing the auxiliary substances to improve fluidity and indicators of bulk mass. Low value of hygroscopicity indicators allows to state about inexpediency of injection of wet regulators and coating tablet shell.