expiration date of the drug at room temperature. Quantitative analysis of substance potassium 2-((4-amino-5-(morfolinometyl)-4H-1,2,4-triazole-3-yl)thio)acetate (PKR-173) showed that the loss of active ingredient in the process of "accelerated aging " method at 40 ° C after 180 days are not registered.

The study found that after the expiry of experimental storage (40 °C), corresponding to a two-year shelf life, that corresponds to TFS. It is necessary to store the preparation in a place protected from light from the possibility of oxidation, since the composition includes a divalent sulfur atom.

Thus, the expiration date of named substance at rated temperature (20 °C) can be stated for at least 2 years, which allows to specify the term in the project documentation..

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Substantiation of the development of a combined suspension with hydrophilic phenolic fraction of propolis for use in pediatrics

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Acute intestinal infections are one of the leading places in pediatrics infectious pathology. This is due in particular to the fact that environmental degradation adversely

affects the human immune system, and thus contributes to the development of viral diseases. Their widespread presence makes the treatment of this group of diseases relevant.

Among the various groups of human-acting viruses, coronaviruses, which are capable of causing both respiratory and intestinal diseases in children, are particularly common lately: gastroenteritis, enterocolitis, enteritis, etc.

Most intestinal coronavirus infections occur in the form of mixed diseases because they are caused by the association of viruses with microorganism and other viral infections (rotavirus, adenovirus, influenza virus). Therefore, it is necessary to use a complex drugs for their therapy.

In this aspect, a perspective substance for the creation of effective etiotropic drugs is a natural biologically active substance of propolis - the propolis phenolic hydrophilic preparation of (PPHP).

It was firstly obtained by academician Olexander Tykhonov on the basis of propolis-raw by fractional-extraction method, followed by drying in a vacuum oven. The absence of waxes, resins, satisfactory technological properties and standard nature in the obtained substance open wide possibilities of application and allow to achieve accuracy of dosage in the preparation of various dosage forms.

Chemical studies have shown that the qualitative composition of this substance is represented by phenolcarbonic acids (ferulic, caffeic, *n*-coumaric acids, scopoletin, umbelliferone, esculetin), oxycoumarins and flavones, flavonols (traces). Along with phenolic compounds, PHCP contains a complex of polysaccharides (20 %), in particular: D-galacturonic acid, D-galactose, D-glucose, L-arabinose, D-xylose, L-rhamnose.

The high content of substances in the hydrophilic phenolic fraction of propolis related to phenolcarbonic acids and oxycoumarins (87.34 % in total) has become a key in the development of methods for the quantitative determination of these biologically active substances in order to standardize. Olexander Tikhonov first developed the chromato-spectrophotometric method, which was the basis for the developed of VFS 42-2024-90, and later FS 42U-34 / 42-112-96 "Propolis phenolic hydrophilic preparation".

In addition, PPHP includes amino acids: lysine, threonine, serine, proline, glycine, alanine, cystine, valine, methionine, isoleucine, leucine, tyrosine, phenylalanine, aspartic and glutaminic acids. Spectral analysis revealed the presence of mineral substances (potassium, calcium, phosphorus, sodium, magnesium, sulphur, chlorine) in PPHP, as well as numerous micro- and ultramicroelements (aluminium, vanadium, iron, manganese, zinc, copper, silicon, fluorine).

This substance exhibits antimicrobial, anti-inflammatory, antiviral and reparative action, increases the immunological reactivity of the body. With a wide range of biological properties and different mechanism of action, PPHP is practically harmless to the body, which is especially important while used in pediatrics. The solubility of PPHP in water provides the production of various liquid dosage forms, in particular suspensions.

The main pathological changes in the body of patients with acute intestinal infections are related to the action of toxins. That is why enterosorption, as one of the types of sorption methods of detoxification, plays an important role in the complex treatment of such diseases.

The advantage of oral sorption drugs is the specific delivery of them to the relevant departments of the gastrointestinal tract, prolonging the action of drugs while reducing their dose against the background of detoxifying properties of the sorbent. In this case, the sorbent protects the immobilized compounds from inactivation during the passage through various sections of the gastrointestinal tract.

Indications for enterosorption are all pathological conditions, the development and maintenance of which is the oral ingestion of infectious agents and toxic substances, violation of the passage of intestinal contents on the intestine, inflammatory changes of the intestinal wall with impaired permeability and parietal digestion, impaired biliary and pancreatic disorders.

Particular attention is paid to the sorbent - highly dispersed silica - silicon dioxide. Significant advantages of this drug include its non-toxicity, developed surface and high adsorption capacity against water, proteins, toxins and microorganisms.

In the development of dosage forms for children, special attention is paid to ease of usage, minimal injury to the child's psyche, pleasant taste and at the same time the maximum therapeutic effect with minimal side effects.

Therefore, the most suitable for use in pediatrics are liquid dosage forms, including syrups, suspensions, solutions, drops, etc. Such popularity of liquid dosage forms is explained in addition to biopharmaceutical aspects related to the uniformity and speed of absorption of medicinal substances, their distribution and excretion, convenience, ease of application and accuracy of dosing.

It is known that the quality of dosage forms for children is provided not only by the properties of the active pharmaceutical ingredients, but also by the quality and quantity of excipients, namely stabilizers, flavors, thickeners, preservatives, etc.

The purpose of our work was substantiation of the development of a combined oral suspension based on the substance PPHP and enterosorbents for application in pediatrics.