

Completed - Scientific and technical program O.0820 «Development of new phytopreparations and their pharmacological and clinical studies»

In 2019 International research and production holding “Phytochemistry” JSC under the contract with Ministry of Education and Science of RK implements a scientific and technical program O.0820 “Development of new phytopreparations and their pharmacological and clinical studies” (2018-2020 y.) in the priority area “Science of Live and Health”.

Co-Implementing Organization of this program are 8 centers for scientific research, universities, pharmaceutical enterprises and clinics of Kazakhstan.

PINOSTROBIN	HARMINE HYDROCHLORIDE	ARGLABIN	SAUSALIN	MATRIPIN-DENT	GROSHEIMIN	OXYPIN
As a results of performed experimental work, regulations were developed for obtaining of pinostrobin from dense extract of <i>Populus balsamifera</i> buds without the use of column chromatography	As a results of performed experimental work, regulations were developed for obtaining of harmine from <i>Peganum harmala</i>	Production of experimental batches of medicinal forms of the drug for preclinical and clinical studies was organized.	Production of experimental batches of medicinal forms of the drug for preclinical and clinical studies was organized.	Production of experimental batches of medicinal forms of the drug for preclinical and clinical studies was organized.	As a results of performed experimental work, regulations were developed for obtaining of grosheimin from <i>Chartolepis intermedia</i>	Production of experimental batches of medicinal forms of the drug for preclinical and clinical studies was organized.
Organized production of experimental batches of medicinal substances from <i>Peganum harmala</i> , in particular, substances, based on alkaloid harmine for preclinical studies, were obtained.	Together with the Scientific Center for Anti-Infectious Drugs MIIR (Almaty) a study of the dissolution test (<i>in vitro</i> kinetics) of “Harmine hydrochloride capsules”	For clinical studies, production was organized and 21647 ampoules of the drug “Arglabin lyophilized” were transferred to the clinical bases	For clinical studies, production was organized and 224 packs (11,200 tablets) of the drug “Sausalin” were transferred to the clinical bases	Preclinical studies of the safety of the preparation “Matripin-Dent” are being conducted. It was established that the stomatological gel “Matripin-Dent”, according to the international “System of Classification of Hazards and Labeling of Chemical Products (GHS)” (UN, New York – Geneva, 2005), belongs to class V - practically non-toxic substances.	Organized production of experimental batches of medicinal substances from <i>Chartolepis intermedia</i> , in particular, substances, based on sesquiterpene lactone grosheimin for preclinical studies, were obtained.	



Development of regulations for the obtaining of the substance



Clinical/preclinical studies



Production of experimental batches of medicinal forms



Publications / Patents



Other

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PINOSTROBIN	HARMINE HYDROCHLORIDE	ARGLABIN	SAUSALIN	MATRIPIN-DENT	GROSHEIMIN
A technology is being developed for the production of a new drug based on the flavonoid pinostrobin	For the validation of the "Dissolution test", the equipment qualification plan and protocols, the validation plan "Validation of the harmine hydrochloride capsule dissolution test" were developed and approved. The method of harmine hydrochloride quantification was validated.	On clinical bases of the West Kazakhstan Medical University, the Oncology Center of Nur-Sultan, the Karaganda Regional Oncologic Dispensary, the Medical University of Karaganda, under the methodological guidelines of the Kazakh Research Institute of Oncology and Radiology of the Ministry of Health of the RK, clinical studies of original drug "Arglabin" are being conducted on 240 patients with breast cancer in increased dose according to the Protocol, approved by the order of the Ministry of Health of the Republic of Kazakhstan No. 269 dated 08.27.2018.	On the basis of the City Infectious Diseases Hospital of city Nur-Sultan, clinical studies are being conducted on a new drug, Sausalin, on patients diagnosed with "Chronic opisthorchiasis" (119 patients), and on the basis of the Karaganda Infectious Diseases Hospital, this drug is being studied on patients diagnosed with "Giardiasis" (250 patients).	Documentation has been developed for registration of the "Matripin-Dent" stomatological product as a perfume and cosmetic product in accordance with the TR CU 009/2011.	Приняты к публикации научные статьи: в журнал News of the National Academy of Sciences of the Republic of Kazakhstan, Series of chemistry and technology (2019, №3) статья N.G. Titova, S.T. Shamilova, A.N. Zhabayeva, S.M. Adekenov «Terpenoids of Matricaria chamomilla L. from different places of growth».
	In journal "Annals of Experimental and Clinical Neurology" (2019, №4), article of Adekenov S.M., Kapitsa I.G., Voronin T.A., Anaev A., Zhanymkhanova P.Zh., Abaimov D.A., Sariev A.K. "Study of anti-parkinsonian activity of Harmine hydrochloride on various models of Parkinson's disease	Published report of Adekenov S.M. "New drug "Arglabin" in oncology. Pharmacological and clinical studies "in the collection of scientific papers of the 4th Russian Conference on Medical Chemistry with international participation of MedChem Russia 2019, June 9-14, Yekaterinburg.	Published a scientific article Adekenov S.M. «Study of antiopisthorchiasis activity of sesquiterpene lactones and their derivatives» // Fitoterapia.-2019.-Vol.133.-P.200-211. Scientific articles accepted for publication in International Journal of Applied and Fundamental Research (Medicine section), article of Begaydarova R.Kh., Adekenov S.M., Yukhnevich K.A., Alshynbekova G.K., Nasakaeva G.E., Dyusembayeva A.E., Zolotarev O.A. "Comparative aspects of giardiasis treatment's schemes"		According to the results of the implementation of the main tasks and stages of the Program, a patent of the Republic of Kazakhstan No. 33040 Adekenov S.M., Dairov A.K., Kishkentaev A.S., Baibulova A.K. Atazhanova G.A. "13-Anabasinyl-1,10 β-epoxy-5,7α, 6β (N) –Guai-3,4-an-6,12-olide, which has anthelmintic activity."

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