



Dear colleagues,

It is our pleasure to share our progress achieved during the development of the project PAM-9 "Radio- and Chemoprotector, Adjuvant of Radiation/Chemotherapy".

The studies of this molecule began in 1998. Our team of talented chemists and physicians went a long way of chemical, analytical, technological and preclinical studies of the pharmaceutical substance and the finished dosage form. We are proud that the leading Russian scientific centers, namely the Federal State Budgetary Institution "Medical Radiological Research Center" (FSBI MRRC) and FSBI "Russian Cardiology Research and Production Complex" (FSBI "RCRPC") of the Russian Ministry of Health, agreed to act as our partners. The **permission to conduct phase 1 clinical trials** was finally received in December 2013.

The phase 1 clinical trial is carried out in partnership with the State-financed Health Institution of Yaroslavl Region "Clinical Hospital № 3" (principal investigator is Sergey Noskov, MD, Doctor of Medicine, professor) and the National Agency for Clinical Pharmacology and Pharmacy (NACPP Ltd). The clinical study started with screening, as a result of which 24 volunteers were selected. The drug dosing has been performed. The phase 1 clinical trials will end in March 2014.

In addition to protective effect against the toxic side effects of radiation and chemotherapy, during the preclinical studies the researchers attested the drug's ability to enhance the efficacy of chemotherapeutics and ionizing radiation by approximately 40-50%.

Being applied in small doses the drug showed the ability to enhance the repair processes of the regional stem cells, stimulating thus the reproductive system. The drug's effects on reproductive system were studied within the PAM-8 project. The intake of PAM-8 led to the following effects: testis tissue regeneration, stimulation of spermatogenesis and enhancement of female reproductive potential. PAM-8 could thereby be recommended for the treatment of male and female infertility. We are grateful to our preclinical trials partners, namely FSBI MRRC, FSBI The Institute of Bioorganic Chemistry of the Russian Academy of Sciences and the State Foundation Institute of Pharmacology named after V.V. Zakusov of the Russian Academy of Medical Sciences.

In order to gain the permission to conduct the clinical trials, the PAM-8 drug registration dossier is planned to be filed to the Ministry of Health in March 2014.

The beginning of 2014 was also marked by an active preparation of the registration dossier for "A Novel Compound with Antiviral Activity Against Influenza and Other Acute Respiratory Infection Viruses (PAM-1)".

The preclinical trials are ongoing for the following projects: An Antitumoural Compound (PAM-14), Metabolic Syndrome Treatment and Prevention Drug (PAM-10), Oxygen Carrier for Hemorrhagic Anemia Treatment (PAM-3), Antiarrhythmic Drug (PAM-4), Drug for Cholesterol Level Decrease and Prevention of Type 2 Diabetes (PAM-7), etc.

We will be happy for the chance of presenting the detailed information about these projects in our next letter.

Sincerely yours,

Rakhimjan Roziyev, MD, Ph.D.