



THE EMBASSY OF THE  
REPUBLIC OF BELARUS  
IN THE SOCIALIST  
REPUBLIC OF VIETNAM

№ 02-15/213

BỘ Y TẾ	
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N	Chuyển:

Посольство Республики Беларусь в Социалистической Республике Вьетнам свидетельствует свое уважение Министерству здравоохранения Социалистической Республики Вьетнам и имеет честь сообщить следующее.

Научно-практический центр «Лотиос» Министерства Здравоохранения Республики Беларусь выражает заинтересованность в сотрудничестве с научно-исследовательскими организациями и компаниями Вьетнама в сфере разработки и производства лекарственных средств, фармацевтических субстанций, ветеринарных препаратов, биологически активных добавок к пище.

Центр обращается к уважаемому Министерству с просьбой о помоши в поиске партнеров для организации сотрудничества в указанной сфере.

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Посольство Республики Беларусь в Социалистической Республике Вьетнам пользуется настоящим случаем, чтобы возобновить Министерству здравоохранения Социалистической Республики Вьетнам уверения в своем весьма высоком уважении.

Приложение: на 4 л. в 1 экз.



Ханой, 15 марта 2023 года

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ  
СОЦИАЛИСТИЧЕСКОЙ РЕСПУБЛИКИ ВЬЕТНАМ

Ханой

507727

**OFFER  
OF REPUBLIC UNITARY ENTERPRISE  
«SCIENTIFIC AND PRACTICAL CENTER LOTIOS»  
FOR COOPERATION**

**The field of practical application service**

Development and manufacturing of drugs, pharmaceutical substances, veterinary drugs, dietary supplement.

Analysis of drugs, veterinary drugs.

Registration of drugs, pharmaceutical substances, veterinary drugs, dietary supplement in Belarus.

**Description of service.**

Development of drug composition and manufacturing technique.

Performance of a full cycle of preclinical researching of drugs, substances and health products in vivo and in vitro.

Development of manufacturing and quality control documents.

Development and validation of quality control procedures of drugs and substances.

Development and metrological certification of measurement procedures.

Monitoring of clinical trials.

**Meeting the requirements of International and European standards, certificated by international quality approving documents.**

There are national acknowledgement certificates of compliance of STB ISO 9001-2015, STB ISO 17025.

There is certificate of accreditation as scientific enterprise, approving competency in performance of scientific, experimental-design and experimental-technological researching.

**Main advantages in comparing with foreign analogues.**

A price is reasonable. Rendering of service is performed in according with current standards of the Republic of Belarus and Eurasian Economic Union.

**Reference price for service**

The price is conventional. The price is formed by taking into account the volume of work, cost of reagents. VAT is 20%.

**Form of cooperation**

Implementation of joint research projects on pharmaceutical development of medicines, study of their biomedical properties, development and validation of quality control methods.

Suggestions for certain medicines are attached.

Sources of funding: funds of a foreign partner, the republican budget.

**Potential partners**

Production companies, research centers engaged in pharmaceutical development and biomedical research of medicines for human and animals.

**Information about enterprise.**

Republic Unitary Enterprise «Scientific and Practical Center LOTIOS»

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**Informational materials on medicines offered by the state enterprise  
"SPC LOTHIOS" for joint development with foreign partners**

**Balanced polyionic infusion solution for the correction of disorders of water-electrolyte homeostasis in pathological processes of various origins, including critical conditions accompanied by metabolic acidosis**

**Brief announcement**

Traditionally, in medical practice, a saline solution (0.9% sodium chloride) is used as a basic remedy for maintenance and replacement infusion therapy, a liter of which contains 154 mmol of sodium and the same amount of mmol of chlorine, which is one and a half times higher than the norm for blood plasma (for chloride ion).

Meanwhile, in recent years, clinicians have drawn attention to the fact that large volumes of 0.9% sodium chloride solution administered reliably cause hyperchloremia, potentiating the development of metabolic acidosis.

Clinically confirmed negative effects of hyperchloremia are: an increase in the frequency of renal dysfunction requiring renal replacement therapy (due to increased intracapsular pressure and arteriole tone); impaired immunity with an increase in the number of infectious complications due to the pro-inflammatory effects of hyperchloremia (dose-dependent increase in the expression of cytokines TNF- $\alpha$ , IL- 6, IL-10); impaired hemostasis with an increase in the number of blood transfusions; slowing the patient's recovery and, in general, an increase in mortality by 1.6-1.8 times compared to the use of balanced (primarily chloride – ion) infusion solutions.

In most clinical situations in anesthesiology and intensive care, it is necessary to use crystalloid solutions containing a smaller amount of chlorides than a saline solution of sodium chloride.

Due to the above circumstances, isotonic sodium chloride solution is currently not recommended for use in the UK and a number of other countries.

**Injectable form of an antianemic drug of complex action****Brief announcement**

Due to the significant role of biometals in the processes of erythropoiesis, there is an obvious need for adequate correction of iron deficiency in the body, which can be most effectively achieved by its combined administration with trace elements and some compounds that simultaneously provide favorable conditions for active inclusion in bone marrow hematopoiesis and tissue respiration, as well as contribute to the strengthening of hematopoietic function of the bone marrow due to increased formation of endogenous erythropoietin.

According to the method of administration, iron-containing drugs are divided into oral and parenteral. Parenteral ferrotherapy of iron-deficient conditions is recommended in cases where oral administration is ineffective, which may be due to peptic ulcer of the stomach and duodenum, impaired intestinal absorption in enteritis, enterocolitis, resection of large areas of the small intestine.

A distinctive feature of the proposed dosage form is the possibility of providing it with a combined hematopoietic (erythrostimulating) and antihypoxic (metabolic) effect on the damage of tissue respiration, which is provided by the presence of Krebs cycle intermediates (succinic/fumaric acid salts) in the composition of the drug, which contribute to the restoration (activation) of oxidative phosphorylation processes in the cells and tissues of the body and, in general, achieve a combined antianemic effect.

Specialists of the state enterprise "Scientific and Practical Center LOTIOS" have a significant scientific background for the development of medicines of this group and the necessary material and technical base.

## **Injectable form of a drug based on testosterone esters, which has an androgenic effect**

### Brief announcement

Currently, the development of a drug for testosterone replacement therapy in men with insufficient function of the sex glands is relevant for the following indications: male hypogonadism, spermatogenesis disorders, delayed puberty, etc. In women, drugs of this class are used exclusively for the treatment of diseases associated with hyperestrogenism.

At the same time, testosterone in the form of API is rapidly destroyed in the body, which leads to hormonal surges and the need for frequent injections. The solution of the problem is presented by using combinations of different esters of this hormone in dosage form, which modulate the release of the active substance in the body. For example, testosterone in the form of esters such as propionate or acetate is rapidly metabolized and eliminated from the body. At the same time, the pharmacotherapeutic properties of testosterone-enanthate or testosterone-cypionate (or their combinations) are manifested more slowly, but more prolonged. Thus, it is the various combinations of testosterone esters that allow us to achieve a therapeutically effective profile of the concentration of API in the blood, reducing the number of injections.

Currently, the state enterprise "Scientific and Practical Center LOTIOS" has a groundwork for the standardization of pharmaceutical substances of testosterone esters, the development of quality control methods, as well as the development of laboratory technology for obtaining a drug based on them, which can be scaled up.

Đại sứ quán Cộng hòa Belarus tại nước Cộng hòa xã hội chủ nghĩa Việt Nam xin kính chào Bộ Y tế nước Cộng hòa xã hội chủ nghĩa Việt Nam và xin trân trọng thông báo như sau.

Trung tâm khoa học và thực hành Lotios trực thuộc Bộ Y tế Cộng hòa Belarus bày tỏ mong muốn hợp tác với các tổ chức, công ty nghiên cứu tại Việt Nam trong việc phát triển và sản xuất thuốc, dược chất, thuốc thú y, thực phẩm chức năng có hoạt tính sinh học.

Trung tâm kính đề nghị Quý Bộ hỗ trợ trong việc tìm kiếm đối tác trong lĩnh vực nêu trên.

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Nhân dịp này, Đại sứ quán Cộng hòa Belarus tại nước Cộng hòa xã hội chủ nghĩa Việt Nam xin gửi tới Bộ Y tế nước Cộng hòa xã hội chủ nghĩa Việt Nam lời chào trân trọng.

Tài liệu gửi kèm: 1 bản gồm 4 trang

Hà nội, ngày 15 tháng 03 năm 2023

**BỘ Y TẾ NƯỚC  
CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM**

**Hà Nội**