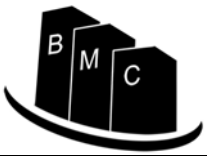

Russia, Moscow

Summary

1. **Volume of investments required – $ 150 thousand.**
2. **Production** – immunobiological peptide preparation for prophylaxis and treatment of listeriosis (listeriosis is a human and animal infectious disease which is characterized with septic effects, central nervous system and reproduction organs affection). Particular interest in listeriosis occurred in the end of 80ths of the XX century, after several human alimentary listeriosis epidemics had taken place caused by milk, cheese, meat and sauerkraut products. Lethal outcome ran up to 33% (USA, Canada, Mexico, Switzerland, UK). The developed medical preparation fully protects against listeriosis infection.
3. **Trade marks** – none.

Company profile

Date of establishment – December 1999. During the company lifetime the following medical preparations were developed: molecular vaccine for prophylaxis of brucellosis (specific activities were shown on experimental animals), molecular therapeutic vaccine for Hepatitis B prophylaxis and treatment (specific activities were shown on cell culture and experimental animals), and molecular vaccine for prophylaxis of listeriosis (at the state of registration as a veterinarian vaccine).

Signs of public recognition – 2 patents acquired: Molecular vaccine for prophylaxis of brucellosis (patent № 2285538 dated 25.12.03); Molecular bivalent vaccine for prophylaxis of brucellosis and viral diarrhea (patent № 2285539, dated 13.02.04).

Number of employees – 3 persons.

Team

Stavitskiy Sergey – Director General, 47 y.o., PhD. He leads, in collaboration with "Rosagrobioprom" structures, working on improvement of consumer properties of the molecular vaccine for prophylaxis of domestic animals brucellosis. In collaboration with the All Russia Control Institute of Veterinary Immune Preparations (Russian Academy of Agricultural Science) immunogenic properties of the molecular vaccines for prophylaxis of listeriosis were verified.

Noskov Anatoliy – Manager of Science Programs, 53 y.o., PhD, MD. During more than 25 years he has been working out vaccines against socially significant infections. Under his control and his direct participation all company's researches are carried out.

Negriy Natalya – Biological Tests Manager, 57 y.o. Organizes and conducts initial biological safety tests of developed preparations (medications, chemicals).

Products characteristics

The developed peptide preparation for listeriosis prophylaxis and treatment can be used on both humans and animals. The preparation has a durable action for 3–7 years. Besides, using the vaccine repeatedly can help in chronic treatment of listeriosis. Peptide vaccine's main advantages are: extremely small dozes required for immunization, precise virus targeted attack, known chemical composition which allows to avoid post-vaccinating side effects, durable action which allows creating remedy for chronicle viral infections.

The developed preparation belongs to a new breed of so-called "targeted" vaccines and medications for viral and some of bacterial infections treatment, including treatment of infections posing particular threat to animals and humans.

At present in several countries live weakened vaccines are used for prophylaxis of listeriosis. For the most part of the world it is considered that there is no effective remedy for prophylaxis of listeriosis. Advantages of the developed preparation in comparison with existing preparations are: high efficiency (more then 85%), well-known chemical composition (synthetic peptide and protein carrier), availability of doze balance (from several hundreds of nanograms to several hundreds of micrograms), different ways of application (subcutaneous, intranasal, and transcutaneous), absence of live microorganisms and deoxyribonucleic acid excluding any infection of vaccinated organism. Subsequent patent covering is planned after finding support/collaboration for further development.

Current state

Pre-clinic trials on animals of the developed preparation were conducted discovering its high efficiency (85% of animals were protected against the infection). Experiments on treatment of listeriosis with peptide preparation combined with antibiotics are planned.

Development strategy

Use of funds

1.	R&D	13.3%
2.	Marketing	30%

3. Acquisition of current assets 36.7%
4. Other 20%

Prospective outcome of investment

As a result of the investments, production of the vaccine will be established and therapeutic vaccine for domestic and agricultural animal's listeriosis prophylaxis and treatment will be brought into the Russian veterinarian medications market. The developed preparation and the method of its production will be covered with patents.

Marketing & Markets

The company is planning to promote the developed preparation on Russian and foreign high potential markets.

Every year Kazakhstan buys and uses for vaccination of agricultural animals up to 1 million dozes of live vaccine of AUF strain. Amount of vaccinated animals grows 20% every year.

The listeriosis issue is of current importance in the USA. In 1996 HHC/CDC launched the PulseNet program on controlling alimentary diseases, within its frames the control after the listeriosis episodes is being carried out. Improvement of diagnostics has raised the detection of listeriosis episodes in 10 times. At present PulseNet is applied in the almost whole world, increasing the market of listeriosis prophylaxis and treatment preparations greatly. Since the USA and EU impose strong restrictions on usage of live vaccines, the developed preparation is an ideal solution for the markets of these countries.

Our valuation of the market of veterinarian medications for listeriosis treatment is the following: the world population of small cattle is 1.1–1.3 billion. If a potential market for the preparation is estimated at 10% – it is 110 mln head of cattle. Taking into consideration that only 5% of small cattle population will be vaccinated with the developed preparation – turnover will be about 5.5 mln dozes a year, plus 6.5 mln dozes a year for cattle vaccination. By year 2012 it's possible to get to 20% of that (about 2.5 mln dozes).

The whole world veterinarian vaccine market's capacity is about $ 960 mln per year. Russian and Kazakhstan markets are about $ 30 mln per year. The planned share of market by 2012 is 3–5%, totaling at $ 1–1.5 mln.

Promotion of the product amongst the Commonwealth of Independent States markets is planned to be done in collaboration with "Rosagrobioprom" (interim agreement on co-operation is achieved). Entering into the world market is planned in collaboration with CDC (a preliminary discussion has taken place). Approximate estimation of possible effect from use of the developed preparation can be done based upon the following data: in the United States up to 2500 people are infected every year, about 500 of them die. In 2006, the Department of Health in Ohio informed that up to 37 cases of listeriosis infection were registered in this state each year (in their opinion, this number was twice bigger in fact), and estimated the state costs to fight against this disease at $ 74 mln a year. In accordance with this information, the total USA costs in this area make up to $ 2.5 bln a year.

Interaction with investor

For collaboration with investor a new company will be created, were the investor will hold 15% share. Input of the "Biomedical Center" Ltd. will be the rights to use patent and technology for producing preparation. We are planning increase of the company's cost at 10 times a minimum by 2012. In further steps of development of the company (making preparation for treatment of human listeriosis), investor will have preemptive rights for follow-on investments and corresponding increase of its share in the company. Cost of the investor's share on the moment of exit will be determined by the market situation, but we plan the investor's share increase of a minimum 5–10 times by 2012, which will be determined by improved popularity of the preparations on the market and a potential growth of the market itself.