



OUR PROJECT:  
IMPROVEMENT OF DIAGNOSTICS OF  
BRUCELLOSIS

NEW METHODOLOGY – TRIADA OF ABNUREL  
REACTIONS

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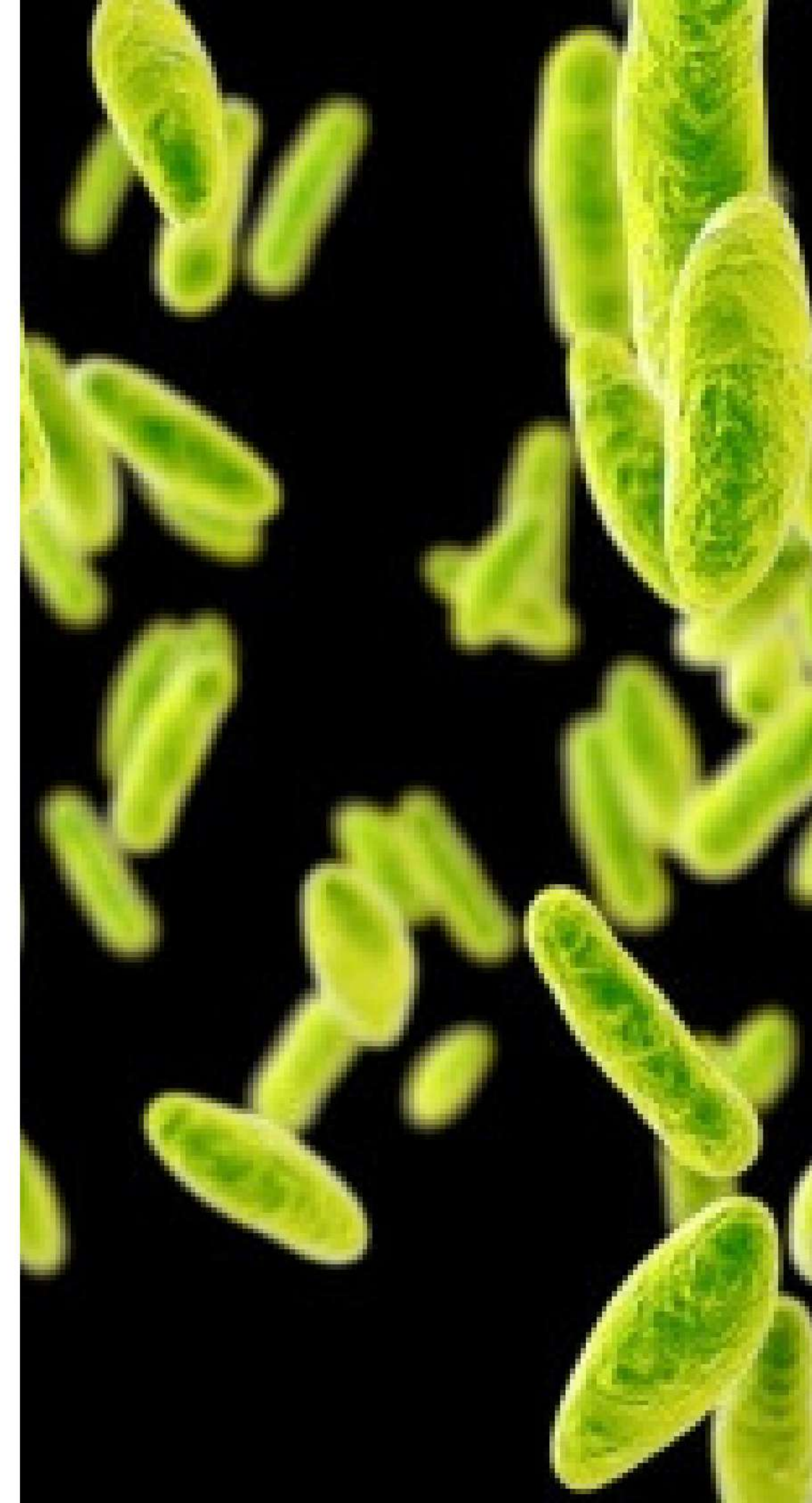
(complex assessment of bacteriological, serological and biological methods)



# BRUCELLOSIS

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Brucellosis is a chronic infectious disease of animals and humans. It appears in the form of abortions and retention of the afterbirth in many animals as well as in the form of orchids, the birth of unviable youngster and infertility. Due to the social danger, brucellosis is included in the list of quarantine diseases. This disease is common in many countries of the world - in Africa, Central, and South America, in some countries of Asia and Europe, including the CIS (Ukraine, Russia, Kazakhstan). Brucellosis has not been registered in the Republic of Belarus since 1982. Economic damage arises due to a shortage in supply of offspring (abortions can be recorded in 60% of animals), rawness, decrease in productivity, and large expenditures are spent on conducting quarantine measures. A disease in humans can lead to disability (more often due to joint damage) and even death.







# PROJECT CONCEPT

Improving the control system of the epizootic process of brucellosis still remains as the most important problem for veterinary science and practice. The basis for a successful struggle against brucellosis is early diagnostics. However, the features of the course of brucellosis infection, despite the variety of means used, and diagnostic methods, do not allow identifying all animals ill with brucellosis during a single study. Traditionally used diagnostic methods do not allow for rapid differentiation of *Brucella* at the level of species and strains which makes it difficult to carry out an epizootological and epidemiological analysis and rational use of means of specific preventive measures of brucellosis.



# PRODUCT DESCRIPTION

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In the fight against the disease, one of the important tasks is to make the correct diagnosis, identify the sick animal in time, remove it from the farm and neutralize the place. Currently, the state is implementing a number of measures to eliminate brucellosis, increase the number of preventive measures, and scientific researches are being conducted. Taking into consideration the urgency of the issue, specialists of VET-SAVIOR LLC have discovered and patented a unique method for the differential diagnostics of brucellosis called the ABNUREL Triada using a nutrient solution (AF1, AF2, and AF3) which has no analogs in the world, proved by the International Searching Authority. According to the Search Query Report, the invention meets the criteria of "Novelty", "Industrial applicability", "Inventive level", the distinctive features are unknown and not obvious from the level of techniques, ensure the accuracy and reliability of identifying epizootically dangerous animals in respect to brucellosis.





# WORLD ORGANIZATION FOR ANIMAL HEALTH (OIE)

The organization was established at the international conference in Paris on January 25, 1924. The agreement on the creation of the organization was signed by 28 countries. Nowadays, the OIE includes 178 member countries.

The functions performed by the OIE are as follows:

- development and publication of international standards, rules, and regulations to ensure the protection of animal health
- informing the world community about the epizootic situation in the countries, infectious diseases and outbreaks of especially dangerous infections in animals
- development of international cooperation in the prevention of the appearance of epizootic diseases and their elimination
- providing technical assistance to member countries that need support in combating animal diseases, taking measures to eliminate them, including diseases transmitted to humans
- publication of the latest statistical data, increasing the awareness of stakeholders on veterinary
- legal support of trade with animals and animal products
- improving the structure and regulatory framework of national veterinary services.

In October 2017, in Astana, a meeting was held with representatives of the OIE in Kazakhstan, since the OIE is the leading international organization that plays a key role in protecting animal health, developing regulatory documents that regulate international cooperation on issues related to veterinary. "VET-SAVIOR" LLC applied for obtaining an identification number for further inclusion of the unique method of the ABNUREL Triada in the OIE registry. After inclusion in the OIE registry, the Triada Method of ABNUREL reaction will be recommended and applied in all OIE member countries (178 member countries).



# EPIZOOTIC SITUATION ON BRUCELLOSIS IN THE WORLD



The countries of Central Asia and Eastern Europe have one of the highest global indicators on the incidence of brucellosis disease in humans. The seven republics of the former Soviet Union are in the list of 25 countries with the highest amount of incidence of brucellosis disease in humans, and brucellosis is an endemic disease in all countries of the two subregions where national authorities (bodies) have been fighting against the disease for many years.

In some countries, the economic damage caused by brucellosis to human and animals has not been sufficiently studied.

It was gratifying to country representatives to hear that states receive aid from international donors, development institutions such as the World Bank, the European Union, and FAO, and/or have bilateral assistance programs; receive active support in the implementation of their national programs on the fight against brucellosis.

The unique diagnostics of the triada of the ABNUREL reaction will play an important and useful role in the fight against and elimination of brucellosis. Today, we, armed with scientific knowledge and obtained high patented results, can reduce the issue of fighting against brucellosis to the algorithm: identification - destruction - summing up which helps to improve the current conditions of maintenance and development of cattle breeding around the world.



# CONCLUSION

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The likely prognosis of the occurrence and spread of the disease for the following years will depend on a number of reasons:

- Measures on the fight against this infection should be directed to breaking the epizootic chain, the main links of which are the source of infection, i.e. sick animals.
- Identify positively reacting animals to be slaughtered.
- Establish a strict accounting system (identification of livestock).
- Conduct a system of general organizational, economic, veterinary and sanitary measures.
- Control over the movement of animals from the zone of a high degree of infection to the zone with the lowest degree of infection. Moving animals should be carried out only with the knowledge of the veterinary service.
- Identify the source of the infection in order to eliminate it, to use for this period not only classical methods (RBP, RSK, IFA) and at the same time to apply improved methods for the diagnostics of brucellosis, such as the ABNUREL Triada.
- The prepared methodical guidelines can be used in the diagnostics of all species of animals sensitive to brucellosis, as well as people with zoonanthroponosis diseases.

The obtained indicators define the project “Production and pouring of the nutrient solution for the subsequent diagnostics of brucellosis using the unique technology of the ABNUREL Triada reaction as a cost-effective and with a correct comparison of the predicted costs and the economic and social effect of the project. Investing funds in the indicated project is not only profitable economic reasonability but also a solution to a global, highly relevant problem.