

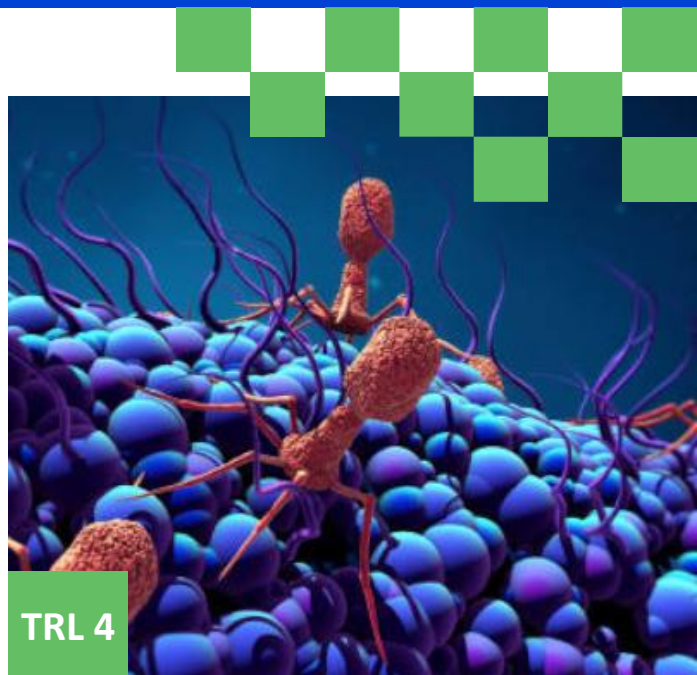
## Use of phages for prevention and control of Salmonella Enterica serovar infections in humans and animals

### About the invention

The phenomenon of increasing bacterial resistance to antibiotics is one of the most serious medical, epidemiological and even economic problems. January 28, 2022. The European Union has banned the routine use of antibiotics, in all forms, including prophylactic treatment of entire groups of animals. It has become illegal to use antibiotics to compensate for poor welfare and insufficient animal hygiene in breeding and rearing.

Scientists from the University of Gdansk and the Institute of Biochemistry and Biophysics of the Polish Academy of Science have found a solution to favor legislative changes in the EU, proposing a therapy using bacteriophages, called "phage therapy." This is a method based on the use of specific viruses that fight only bacterial cells – including those that have become antibiotic-resistant.

The product developed by the scientists, which fights Salmonella Enterica bacteria, can be administered both to animals (poultry, cattle, pigs) in industrial breeding as a preventive or curative measure, and as a bactericidal preparation in all food industries (to protect meat, cheese, eggs, fruits, vegetables, cheese, juices, production lines) and in medicine.



TRL 4

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### Implementation progress

**TRL 4** – Technology validated  
under laboratory conditions

### IP protection

The invention is protected by Polish  
patents: **Pat.241758, Pat.241810 i  
Pat.241811**

### Possible cooperation

- Licensing agreement
- Transfer of ownership
- Partnership in order to further research or commercialization