

Specialists of the Institute of Chemical Biology and Fundamental Medicine SB RAS discovered a virus capable of fighting dangerous bacteria causing pneumonia, meningitis and sepsis. Bacteriophage KLEBP₂₆₅ isolated from sputum of patients, destroys the protective shell of microorganisms, making them vulnerable to treatment.

Scientists conducted a series of experiments during which bacteriophage successfully attacked pathogens. The virus attaches to the cage, pierces its shell and introduces its DNA, which leads to the death of microorganism. Mice tests showed one hundred percent effectiveness – all infected animals that received therapy survived, while all individuals died in the control group.

Opening is of particular importance in conditions of growing stability of bacteria to antibiotics. Bacteriophages, unlike drugs, do not harm the body and are completely excreted by the liver.

Now researchers are preparing for clinical trials.