AI will help in the development of vaccines at the Kurchatov Institute

Kurchatov Institute uses artificial intelligence (AI) technologies to develop vaccines against dangerous diseases. Among the current projects are drugs to combat Deng's fever, new coronavirus strains, lime disease and African pigs of pigs.

Traditional methods for creating vaccines require long -term experiments and significant financial costs. The use of AI allows you to calculate the structure of vaccine cartridges, reducing time for preliminary research. Machine learning algorithms analyze the data of structural biology and predict effective molecules configurations.

Three vaccines against the African swine plague have already passed the calculation stage. The calculations are completed for the drug against Lyme's disease. All developments will undergo standard synthesis and clinical trial procedures in accordance with regulatory requirements.

The Institute also expands research in non-infectious diseases. With the help of AI, it is planned to study Alzheimer's disease – look for biomarkers for early diagnosis and develop new methods of therapy. Additional projects include the fight against herpes, cytomegalovirus and Epstein-Barr virus.