

First-in-human vaccine trial for deadly Nipah virus launched

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The University of Oxford has launched a new clinical trial to test a vaccine to protect people against deadly Nipah virus.

This is the first-in-human trial of the ChAdOx1 NipahB <u>vaccine</u>, being developed by researchers at the University of Oxford's Pandemic



Sciences Institute. The trial will consist of 51 people aged 18 to 55, which will be led by the Oxford Vaccine Group.

Nipah virus is a devastating disease that can be fatal in around 75% of cases. Outbreaks have occurred in countries in South-East Asia, including Singapore, Malaysia, Bangladesh and India, with a recent outbreak in Kerala, India in September 2023. Nipah virus is carried by fruit bats and may also be transmitted by contact with infected animals (such as pigs) or from person-to-person via close contact.

The virus, which is recognized by the World Health Organization as a priority disease requiring urgent research, belongs to the same family of paramyxoviruses as more well-known pathogens like measles. Despite the first outbreaks of Nipah virus occurring 25 years ago in Malaysia and Singapore, there are currently no approved vaccines or treatments.

Professor Brian Angus, the trial's Principal Investigator and Professor and Reader in Infectious Diseases at the Center for Clinical Tropical Medicine and Global Health in the University of Oxford's Nuffield Department of Medicine said, "Nipah virus was first identified in 1998, and yet 25 years on the global health community still has no approved vaccines or treatments for this devastating disease.

"Due to the <u>high mortality rate</u> and the nature of Nipah virus transmission, the disease is identified as a priority pandemic pathogen. This vaccine trial is an important milestone in identifying a solution that could prevent local outbreaks occurring, while also helping the world prepare for a future global pandemic."

Dr. In-Kyu Yoon, acting executive director of vaccine research & development at CEPI, funders of the trial and one of the leading global funders of Nipah virus research, said, "Nipah has epidemic potential, with its fruit bat hosts found in areas home to over two billion people.



This trial is a step forward in efforts to build a suite of tools to protect against this killer virus. Knowledge gained could also inform development of other Paramyxovirus countermeasures."

The University of Oxford has produced the vaccine against Nipah virus using the ChAdOx1 platform, the same viral vector vaccine platform that was used for the Oxford/AstraZeneca COVID-19 vaccine, and that has saved an estimated 6 million lives worldwide.

The project will run over the next 18 months, with further trials expected to follow in a Nipah-affected country.

The <u>vaccine trial</u> is a key part of the Pandemic Sciences Institute's Henipavirus Program, which is working with partners in endemic countries to develop practical tools that will ensure the world is better prepared for future outbreaks. This includes providing world-leading <u>biomedical research</u> and developing ethical frameworks to minimize stigma from the disease.

Provided by University of Oxford

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