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Gennova Biopharma accelerates development of Nipah virus vaccines using mRNA technology

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Preclinical and phase 1 vaccine tests will be done by Gennova in India

Pune-based Gennova Biopharmaceuticals, a subsidiary of Emcure Pharmaceuticals, is advancing the development of a pathbreaking self-amplifying mRNA (saRNA) vaccine against the deadly Nipah virus.

This critical initiative is supported by an expanded partnership with Norway-based Coalition for Epidemic Preparedness Innovations (CEPI), with funding of up to $13.38 million.

Gennova will also team up with US-based Houston Methodist Research Institute (HMRI), also a CEPI partner, to use their cutting-edge AI technology to optimize the properties of proteins derived from the virus that could stimulate the immune system and serve as optimal vaccine targets for Gennova to investigate in the lab and in the clinic.

Nipah virus belongs to the Paramyxovirus family. It is one of the deadliest pathogens known to infect humans. So far, Nipah outbreaks have been confined to South and Southeast Asia, but the fruit-bat vector is found in large geographical areas across the globe covering a population of more than 2 billion people.

In August 2023, CEPI initially provided up to $3.6 million to support the optimisation of Gennova's saRNA-platform technology to develop vaccine candidates against unknown pathogenic threats, also referred to as Disease X. The initial tranche of funding was part of CEPI's programme to support novel RNA vaccine platform technologies for emerging and select endemic infectious diseases, which could offer substantial advantages over existing mRNA technologies, such as multivalency, improved immunogenicity, storage and stability, productivity, response time, and cost-of-goods.