Gennova Advances Pathbreaking AI-Enhanced saRNA Vaccine for one of the deadliest known viruses in collaboration with CEPI

- Gennova Biopharmaceuticals Ltd. expands collaboration with CEPI, securing up to US$13.38 million to accelerate the development of a vaccine against Nipah virus using the self-amplifying mRNA technology.

- Gennova will also work with Houston Methodist Research Institute to apply cutting-edge AI technology to identify potential Nipah vaccine targets.

- Preclinical and phase 1 vaccine tests will be done by Gennova in India, where multiple Nipah outbreaks have been reported over the past 20 years. As many as 75 percent of those infected die.

Pune, March 31, 2025: Gennova Biopharmaceuticals Ltd., a pioneering biotechnology company, and a subsidiary of Emcure Pharmaceuticals Ltd. (BSE:544210, NSE: EMCURE), 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 the Coalition for Epidemic Preparedness Innovations (CEPI), with funding of up to US$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.

“With no vaccines or specific therapeutics approved for human use against Nipah, CEPI is leading the charge to protect the world against this deadly virus committing over US$100 million to its Nipah programmes and advancing the first ever Nipah vaccine candidates into Phase 1 studies and through to completion”, said **Dr Kent Kester, Executive Director of Vaccine Research and Development at CEPI.** “Gennova’s work will not only help establish the suitability of the saRNA platform for use against Nipah but also its suitability as part of a wider group of RNA technologies that could enable rapid responses to future Disease X threats, potentially within 100 days of identification.”

mRNA vaccines use the body's own machinery to make antigenic protein rather than injecting the antigen directly into the body. saRNA vaccines work by giving the body instructions to replicate mRNA needed to create the desired antigen, potentially enhancing the immune response with lower doses compared to existing mRNA vaccines.

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.

Dr. Sanjay Singh, CEO of Gennova Biopharmaceuticals Limited, shared optimism about the collaboration with CEPI and HMRI, viewing it as a significant advancement in the fight against the Nipah virus. “By harnessing the cutting-edge capabilities of our saRNA platform, we are committed to developing a revolutionary next-generation vaccine. This partnership not only sets a new standard for the rapid development of mRNA vaccines but also ensures equitable access and strengthens global health security”, said Singh.

CEPI is committed to enabling equitable access to the vaccines, products and innovations it supports. Through its agreement to enter into partnership with CEPI, Gennova has demonstrated its shared commitment to ensuring equitable access to its technology in line with CEPI’s Equitable Access Policy, notably committing to vaccines being available first to populations at risk when and where they are needed at an affordable price. This also includes the potential application of its technology to future vaccine development of interest to CEPI, including a commitment to technology transfer.

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About Gennova Biopharmaceuticals Ltd. Gennova Biopharmaceuticals Ltd., a subsidiary of Emcure, and headquartered in Pune, India, is a leading biotechnology company dedicated to the research, development, production, and commercialization of biotherapeutics and vaccines for life-threatening diseases. The company has pioneered India's first mRNA vaccine, GEMCOVAC®-19, and developed GEMCOVAC®-OM as an Omicron-specific booster dose. Both vaccines have received Emergency Use Authorization from India's Drug Controller General (DCGI). Gennova continues to drive innovation in biopharmaceuticals, expanding its portfolio across cardiovascular, neurology, nephrology, ophthalmology, and oncology segments.

About CEPI The Coalition for Epidemic Preparedness Innovations (CEPI) is a global partnership between public, private, philanthropic, and civil organizations. CEPI's mission is to accelerate vaccine development against epidemic and pandemic threats, ensuring accessibility for all. CEPI has supported over 50 vaccine candidates and platform technologies targeting high-risk pathogens, including its "100 Days Mission"—an ambitious goal to develop vaccines against new threats within just 100 days.

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