A new boost to a vaccine against Chikungunya

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New Delhi, June 3 (India Science Wire): The fight against Chikungunya disease has got a major boost with CEPI, the global Coalition for Epidemic Preparedness Innovations, and its Indian arm Ind-CEPI, announcing a new partnering agreement with a consortium comprising Hyderabad-based Bharat Biotech (BBIL) and the International Vaccine Institute (IVI) to promote the development of a vaccine against the disease.

CEPI will fund the consortium with up to US $14.1 million for vaccine manufacturing and clinical development of a two-dose live-inactivated vaccine candidate of Bharat Biotech named BBV87. The grant is supported by the European Union's (EU's) Horizon 2020 programme through an existing framework partnership agreement with CEPI.

Its Indian arm, Ind-CEPI, in turn, will provide a grant of up to US $2.0 million to fund the set-up of GMP manufacturing facilities for the vaccine in India, and the subsequent manufacture of clinical trial materials.

Besides, the partnering agreement will finance a multi-centre Phase 2/3 adaptive clinical trial to be conducted by IVI in Colombia, Panama, and Thailand, which will provide data on the safety and immunogenicity of the vaccine candidate.

The partnership will build on Bharat Biotech's experience of developing and supplying affordable vaccines and WHO prequalification procedures to ensure affordable access to the vaccine in countries where Chikungunya is endemic, in line with CEPI's core commitment to equitable access.

The investment is part of CEPI's third call for proposals which was launched in January 2019. Since the launch of this call, over US $80 million of CEPI core funding has been committed to three Chikungunya vaccine candidates and two Rift Valley Fever vaccine candidates.

BBV87 vaccine candidate

A Bharat Biotech press release noted that the vaccine candidate is an inactivated whole virion vaccine based on a strain derived from an East, Central, South African (ECSA) genotype and has completed standard pre-clinical studies. "It elicited an optimum immune response in phase 1 clinical trials in India. Inactivated virions technology has a safety profile which potentially makes this vaccine accessible to special populations, such as the immunocompromised and pregnant women, that some other technologies cannot reach", it added.

Dr Richard Hatchett, CEO of CEPI, said, “Chikungunya continues to be a threat to public health in countries around the globe. Through this partnership with Bharat Biotech and IVI we will accelerate the clinical development of the Chikungunya vaccine candidate, with the aim of producing a vaccine and making it accessible to those most affected by the disease.”

Dr. Renu Swarup, Secretary, Department of Biotechnology (DBT) and Chairperson, Biotechnology Industry Research Assistance Council (BIRAC), said, “The development of an effective Chikungunya vaccine will be a game changer in the global health sector. Under the Ind-CEPI mission, the Department of Biotechnology, Government of India, will support Bharat Biotech for this collaborative project, the first initiative of this mission, to expedite the development of Chikungunya vaccine.”

Dr. Krishna Ella, Chairman and Managing Director of Bharat Biotech, said, “We are immensely proud to be part of this esteemed alliance to bring to the world a safe and effective solution against the debilitating Chikungunya infection. At Bharat Biotech, we have always been at the forefront of innovation while developing vaccines for neglected diseases such as Typhoid and re-emerging epidemics such as Zika, H1N1 and Japanese Encephalitis.”

Dr Jerome Kim, Director General of IVI, said, “In line with IVI’s mission to develop vaccines against diseases that primarily impact low- and middle-income countries, our partnership with Bharat Biotech and CEPI seeks to develop and produce a safe, effective, and affordable vaccine that protects people from the debilitating effects of Chikungunya and enables them to live productive lives.”

Dr Sushant Sahastrabuddhe, Principal Investigator and Director of the Global Chikungunya vaccine Clinical Development (GCCDP) consortium, said, “Through these late-phase clinical trials under GCCDP, we’re looking forward to generating additional safety and immunogenicity data from three endemic countries to support use of this vaccine in outbreaks and routine immunization in endemic countries.” (India Science Wire)

Keywords: live-inactivated vaccine, European Union, immunisation, clinical trial, immunocompromised, epidemic