Vaccine against Chikungunya in making

New Delhi, August 26 (India Science Wire): A new weapon against the debilitating infection of Chikungunya could soon be in the offing. A multi-country Phase II/III clinical trial of a vaccine led by the International Vaccine Institute (IVI) in partnership with Bharat Biotech International Ltd (BBIL) began in Costa Rica on Tuesday. It is funded by the Coalition for Epidemic Preparedness Innovations (CEPI) with support from the Ind-CEPI mission of the Department of Biotechnology (DBT), India.

IVI is advancing the clinical development of the vaccine named BBV87 through Phase II/III randomized, controlled trial to evaluate the safety and immunogenicity of a 2-dose regimen in healthy adults at nine clinical trial sites across five countries with endemic Chikungunya.

The Global Chikungunya vaccine Clinical Development Programme (GCCDP) seeks to develop and manufacture an affordable Chikungunya vaccine to achieve WHO prequalification to enable its distribution in low- and middle-income countries, consistent with CEPI’s core commitment to equitable access, affordability, and sustainability.

As needed, CEPI or Bharat Biotech International Ltd may propose a third-party for manufacturing of a stockpile of the investigational product to be used for further clinical trials in outbreak conditions to advance vaccine development, or under an emergency use authorization in emergencies, based on national or international guidance (such as by the WHO).

Dr. Krishna Ella, Chairman and Managing Director of Bharat Biotech, said: “The vaccine candidate is an ingenious, well-researched vaccine. The human trial has begun an important trial phase in furthering the evaluation of safety and immunogenicity.”

Dr. Sushant Sahastrabuddhe, acting Associate Director General at IVI and Principal Investigator of GCCDP, said: “The start of this trial in Costa Rica is a significant milestone in the effort to make available a safe, effective, and affordable Chikungunya vaccine for the one billion people around the world at risk of Chikungunya virus infection.”

The launch of the trial furthers CEPI’s US dollars 3.5 billion plan, launched in March 2021, to tackle future epidemics and pandemics. CEPI first partnered with IVI and BBIL in June 2020, providing up to US dollars 14.1 million for vaccine manufacturing and clinical development of the BBV87 vaccine candidate.

The funding is supported by the European Union’s (EU’s) Horizon 2020 programme. The consortium was also supported with a grant of up to US dollar 2.0 million from the Indian Government’s Ind-CEPI initiative to fund the set-up of GMP manufacturing facilities for the vaccine in India and subsequent manufacture of clinical trial materials.
“It is very encouraging to witness the commencement of Phase II/III study of BBV87 in Costa Rica. This milestone is a first step towards developing a promising vaccine candidate against Chikungunya, an exhausting disease,” said Dr. Renu Swarup, Secretary, DBT.

BBV87 vaccine is an inactivated whole virion vaccine based on a strain derived from an East, Central, South African (ECSA) genotype. Inactivated virions technology has a safety profile that potentially makes this vaccine accessible to special populations, such as the immunocompromised and pregnant women, that some other technologies cannot reach.

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