



**Information and Networking Event  
Horizon Europe 2023 Calls  
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(DBT)**



**HORIZON-HLTH-2024-DISEASE-08-20: Pandemic  
preparedness and response: Host-pathogen interactions  
of infectious diseases with epidemic potential**  
Friday, 13 October 2023

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Country: India**

## **Serum Institute of India Pvt Ltd (SIPL)**

- Serum Institute of India Pvt. Ltd. (SIPL) is the world's largest vaccine manufacturer by number of doses produced and sold
- SIPL's WHO pre-qualified vaccine include Polio, Diphtheria, Tetanus, Pertussis, Hib, BCG, r-Hepatitis B, Rotavirus, Influenza, Measles, Mumps and Rubella vaccines.
- SIPL has an active R&D team with extensive scientific expertise in the field of basic research, viral vaccine manufacturing and conduct of clinical trials.
- SIPL has an extremely good success record in implementing collaborative project for the development and licensure of vaccines.

# **Cell-based live attenuated influenza vaccine (LAIV): Understanding immune repertoire and efficacy through human challenge studies**

**Under this project SIPL would like to-**

- Explore and understand the induction of mucosal, humoral and cellular immune response in human subjects on intranasal immunization with LAIV
- Study vaccine efficacy of the LAIV in human challenge studies.

## **LAIV**

- Safety and efficacy of LAIV is well established and a commercial egg-based LAIV is manufactured by SIPL.
- Availability of specific pathogen free eggs is a major limitation for egg based vaccine especially during pandemic when sudden demand for vaccine increases exponentially.
- Taking this into consideration SIPL has developed a cell-based LAIV.
- Safety and efficacy of this vaccine has been established in ferrets.

# **Consortium- Partners**

## **Looking for partners for the following**

- Conduct Phase 1 clinical trial of LAIV using candidate pandemic strains of H5 and/or H7 under controlled conditions to establish vaccine safety
- Conduct human challenge study using seasonal influenza strain(s) to establish vaccine efficacy
- Study mucosal, humoral and cellular immune response using various techniques with a aim to identify immunological markers of protection.

## **Profile of partners sought**

- Having capacity to conduct clinical trials under controlled conditions
- Laboratories with experience in conducting human challenge studies of influenza
- Laboratory with capacity to study various immunological parameters

## **Keywords**

- LAIV, mucosal, humoral and cellular immune response, Human challenge

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