

CEPI's investments in next-generation, broadly protective coronavirus vaccines



13 vaccine candidates
- 10 active



Up to US\$230 million invested to date

Recognising the urgent threat posed by coronaviruses, in March 2021 CEPI launched a call for proposals to develop broadly protective SARS-CoV-2 vaccines and broadly protective Betacoronavirus vaccines. CEPI is the global leader in funding all-in-one coronavirus vaccine research, with total investments to date of up to US\$230 million to progress 13 vaccine candidates up to preclinical or clinical proof of concept. All of the awardees have committed to enabling global equitable access to the vaccines under development should they prove successful.

Broadly Protective SARS-CoV-2 Portfolio

Vaccine candidates with potential to provide broad protection against existing variants of SARS-CoV-2 and future variants of the virus that have not yet emerged.

Affinivax, Inc (USA) [Polysaccharide] Funding discontinued

Bharat Biotech International Ltd (India), University of Sydney (Australia), ExcellGene SA (Switzerland) [Protein]

- CEPI is investing up to US\$19.3m to an international multidisciplinary consortium to advance the development of an adjuvanted protein subunit vaccine.
- CEPI is funding immunogen design, preclinical studies, manufacturing process development and a Phase 1 clinical trial.
- Goal is to establish preclinical and clinical proof of concept.

BioNet (Thailand/ France) [mRNA]

- CEPI is investing up to US\$16.9m to BioNet and consortium members from South Korea's IVI and universities in the USA (California Davis, North Carolina State & Pennsylvania) and Thailand (Chulalongkorn) to expand BioNet's vaccine programme based on mRNA technology.
- CEPI funding will support preclinical studies, Phase I and Phase II clinical trials, production of necessary clinical trial material, and process and analytical development.
- Goal is to establish preclinical and clinical proof of concept.

MigVax, Ltd (Israel) [Protein]

- CEPI is investing up to US\$4.3m to support the initial development of an orally administered subunit vaccine tablet.
- CEPI is funding antigen and candidate selection, vaccine formulation, manufacturing process development, and preclinical testing.
- Goal is to establish preclinical proof of concept.

University of Saskatchewan's Vaccine and Infectious Disease Organization (VIDO) (Canada) [Protein]

- CEPI is investing up to US\$5m to support the initial development of a new vaccine based on VIDO's novel protein subunit technology.
- CEPI is funding antigen and candidate selection, vaccine formulation, manufacturing process development, and preclinical testing.
- Goal is to establish preclinical proof of concept.

Broadly Protective *Betacoronavirus* Portfolio

Vaccine candidates with potential to provide broad protection against existing and future variants of SARS-CoV-2 and other Betacoronaviruses, including as-yet-undiscovered coronaviruses that could transfer into the human population in the future.

CPI (UK), Caltech (USA), University of Oxford (UK), Ingensa Ltd (UK) [Protein]

- CEPI is investing up to US\$30m to a consortium of research and technological institutions to support the development of a novel protein nanoparticle vaccine.
- CEPI funding will support the design of the vaccine, regulatory activities, preclinical testing and Phase 1 trials.
- Goal is to establish preclinical and clinical proof of concept.

Codiak BioSciences (USA) [Protein] Funding discontinued

DIOSynVax (UK) [mRNA] Funding discontinued

NEC Group (Japan/ Norway) [mRNA]

- CEPI is investing up to US\$4.8m to NEC OncoImmunity AS (NOI), a Norway-based subsidiary of NEC Corporation (Japan) to support the initial development of a vaccine based on mRNA technology.
- Consortium includes European Vaccine Initiative (EVI) and Oslo University Hospital.
- With CEPI support, NEC will use an innovative artificial intelligence-driven approach to identify novel vaccine antigens with broad reactivity against betacoronaviruses.
- Lead antigens will be selected iteratively and validated in preclinical studies.

Panacea Biotec (India)/ Translational Health Science and Technology Institute (THSTI) (India) [Protein]

- CEPI is investing up to US\$12.5m to support the development of multi-epitope, nanoparticle-based vaccine candidates.
- CEPI funding will support the design and selection of the lead antigen through preclinical testing, and initial clinical development through Phase I/II studies, and advance the manufacturing process.
- Goal is to establish preclinical and clinical proof of concept.

SK bioscience (South Korea) [Protein]

- CEPI is investing up to US\$50m to support the development of a vaccine candidate based on SK bioscience's nanoparticle vaccine platform to elicit immune responses that could protect against variants of both SARS-CoV, SARS-CoV-2, and other sarbecoviruses.
- CEPI funding will support immunogen design, preclinical studies, Phase I/II clinical trials, production of necessary clinical trial material, and process and analytical development.
- Goal is to establish preclinical and clinical proof of concept.

Intravacc (Netherlands) [Protein]

- CEPI is investing up to US\$4.8m to advance the development of a broadly protective Betacoronavirus subunit vaccine candidate (Avacc 101), based on the Intravacc's Outer Membrane Vesicle (OMV) platform, which can be delivered intranasally.
- Funding will support preclinical development and testing of Avacc 101

VBI Vaccines (USA/ Canada) [enveloped virus-like particle (eVLP)]

- CEPI is investing up to US\$33m to advance the development of multivalent coronavirus vaccines that could be deployed against COVID-19 and future coronavirus threats.
- Partnership is an expansion of a previously launched collaboration to develop a vaccine candidate targeting the Beta COVID-19 variant.
- CEPI funding will support the optimization of the eVLP platform, including manufacturing scale-up.