

CEPI backs Korea to develop ‘variant-proof’ vaccine candidate

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CEPI expands partnership with SK bioscience to develop a ‘variant-proof’ vaccine



Norway-based CEPI, the Coalition for Epidemic Preparedness Innovations, and South Korean firm SK bioscience (SK) have announced an expanded partnership to develop a ‘variant-proof’ vaccine candidate against sarbecoviruses—the group of viruses containing SARS-CoV and SARS-CoV-2.

CEPI will provide up to \$50 million to support the development of a vaccine candidate based on SK’s nanoparticle vaccine platform to elicit immune responses that could protect against variants of both SARS-CoV, SARS-CoV-2, and other sarbecoviruses.

The funding will support immunogen design, preclinical studies, Phase I/II clinical trials, production of necessary clinical trial material, and process and analytical development.

The vaccine candidate is a recombinant-protein based on a two-component self-assembling nanoparticle platform developed at the Institute for Protein Design (IPD) at the University of Washington, as was SK’s vaccine candidate against COVID-19 (GBP510).

The vaccine candidate displays receptor-binding domains (RBDs) of multiple sarbecoviruses. The RBD is the portion of the Spike protein that enables the virus to bind to and infect human cells.

Potential advantages of this vaccine candidate include broad protection against SARS-CoV, SARS-CoV-2 variants and additional novel sarbecoviruses; scalability; and thermostability. The nanoparticle platform could also be used to develop vaccines against future unknown pathogens, referred to as Disease X.