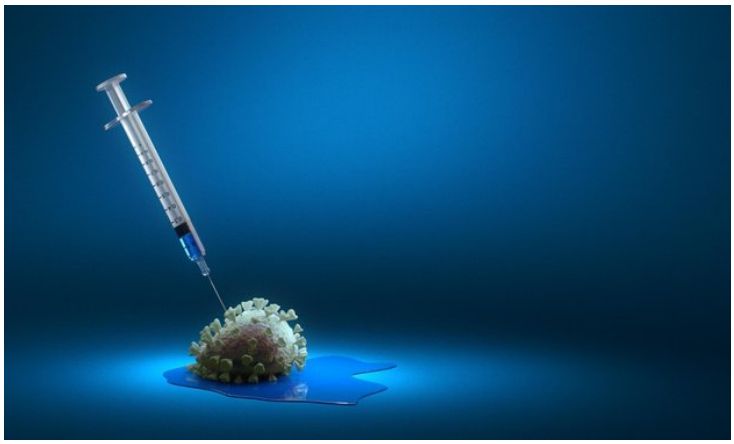
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CEPI reveals significance of blood markers in assessing vaccine efficacy

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Assists researchers establish reliable markers of immunity and evaluate high antibody levels requirements to neutralize Sars-CoV-2



The past few weeks have seen the regulatory approval of multiple safe and effective vaccines against Sars-CoV-2, the virus that causes COVID-19. However, as vaccines become more widely available the way that clinical trials of COVID-19 vaccines are conducted will change, and the work of CEPI's centralised laboratory network—which is working to standardise the evaluation of immunogenicity induced by COVID-19 vaccine candidates—will become increasingly important.

CEPI with its centralized lab network establishes reliable markers of immunity (also referred to as correlates of protection), which are critical if researchers are to assess the efficacy of COVID-19 vaccines without a placebo comparison.

Blood markers of vaccine efficacy

"CEPI set up its centralised lab network back in October to address this very challenge", explains Valentina Bernasconi, Preclinical and Immunology Scientist in CEPI's Vaccine R&D Team and Project Leader of the Centralised Laboratory Network. "Our network of labs—which is open to all COVID-19 developers—will help to harmonise evaluation of the immune responses generated by multiple COVID-19 vaccine candidates. This will help researchers establish reliable markers of immunity, like how high antibody levels need to be to neutralise Sars-CoV-2, which will help regulators assess the efficacy of various vaccine candidates in the absence of data from placebo-controlled trials."

Establishing these blood markers, in particular, could help researchers collect the data needed for regulatory review of next-wave vaccine candidates or existing vaccines that might be tweaked in response to the emergence of new virus variants.

Norway based Coalition for Epidemic Preparedness Innovations (CEPI) is working with regulators, researchers, and manufacturers around the world to determine what immunological data will be necessary for regulatory review of future COVID-19 vaccine candidates.