Validation of a consensus DNA sequence for vaccination against pandemic coronaviruses (PanCoVac)



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SUMMARY

The ongoing pandemic of coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and has led to more than 5,4 million deaths up to December 2021.

Currently, licensed vaccines encode the SARS-CoV-2 S-protein particularly aiming at induction of neutralizing antibodies. This may result in viral escape by mutant variants and short-lived protection against SARS-CoV-2. The team seeks to prevent future severe infections caused by novel SARS-CoV-2 mutant variants or by potentially future zoonosis. For this purpose, the team has generated a vaccine based on a compact sequence (PanCoVac) that is expected to confer immunity against a wide range of SARS-CoV-2 mutant viral strains as well as potential new coronaviruses.

PROJECT GOALS

- Validate PanCoVac in vitro and in vivo
- Validate PanCoVac's wide-spectrum efficacy
- File for patent

LONG-TERM GOALS

- · License to Pharma or startup foundation
- Perform phase I / II clinical trial

PREVIOUS SPARK FUNDING

• Track 1 2020

Track 2