

Covid-19 Vaccine

Problem

The majority of current vaccines use Spike protein or inactivated virus. Notably, the levels of neutralizing antibodies against Spike protein in the vaccines distributed in Brazil, after the first dose, are low and requiring four doses. Furthermore, the emergence of viral variants led to a decrease in vaccine efficacy, as they present mutations in the Spike protein. Another important factor is that current formulations are mostly based on adenovirus or recombinant RNA, which are more expensive technologies and less effective at 4 degrees Celsius.

Solution

Vaccine developed is an association of RBD portion of the SARS-CoV-2 Spike protein with nucleocapsid protein (N), most abundant protein of SARS-CoV-2. Nucleocapsid protein is highly conserved in SARS-CoV-2 variants and enriched in T lymphocyte epitopes. The specificity of these two proteins caused an increase in the antigen-specific antibody and T lymphocyte response, generating a more efficient and effective vaccine against different virus variants. Furthermore, it showed superior protection both in the first dose and booster dose and as it is a recombinant protein, this formulation is declared to be highly stable at 4 degrees Celsius.

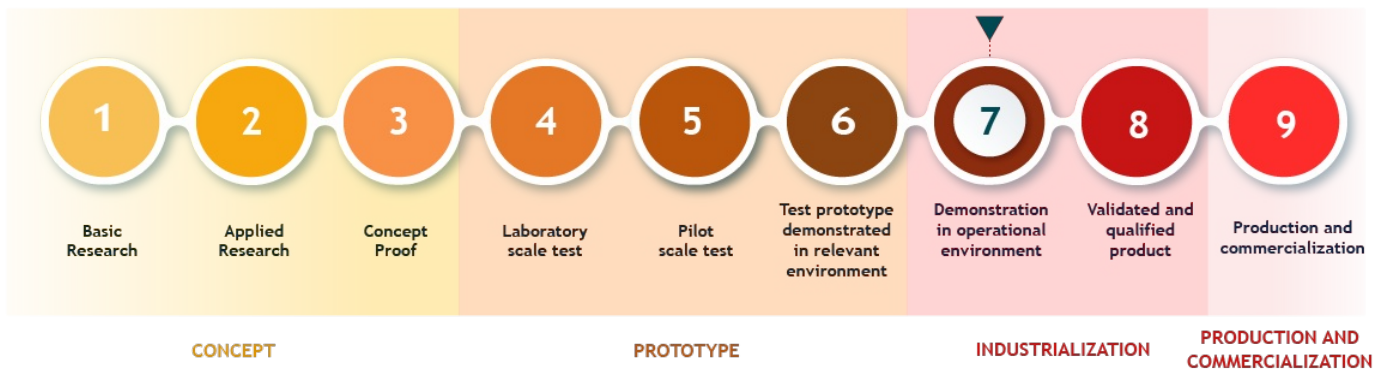
Differential

Effectiveness against virus variants

Greater protection

High stability

Development stage



What we are searching for

Technology licensing for production and commercialization or partnership to carry out phase III of clinical trials.

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Inventors

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Intellectual Property

Type
Invention Patent



Description
Patent required in Brazil, PCT, Uruguay, Argentina and Paraguay

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