

Research and Development of Covid-19 Vaccine

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INTRODUCTION

Researchers, physicians, scientists and chemists all over the world are working around the clock to develop a proper and effective vaccine that could fight against the SARS-COV-2 and covid-19 virus. From the expert analysis and survey the vaccine would reach the public sectors by 2021 [1].

Till date there were only two Covid vaccine approved by FDA Sputnik V - formerly known as Gam-COVID-Vac and developed by the Gamaleya Research Institute in Moscow - was approved by the Ministry of Health of the Russian Federation on 11 August [2].

The first generation covid-19 vaccine was expected to come by the end of 2020 or beginning of 2021. The vaccine was developed to provide immunity to the population and to reduce the spread of the infection or the virus. There are more than 5 vaccines which are developed and under the phase 3 clinical trials to test the safety, efficacy, quality and purity of vaccine. The WHO recommends that the vaccine need to show at least 50% risk reduction for causing infection and 95% efficacy in treating and curing the infected patient and 100% safety rate to be approved [3].

The challenges for good vaccine includes reduction in symptoms, risk factors, pathology, and also need to reduce the viral load in the respiratory tract and alveoli and other lung tissues and also need to neutralize the antibody count that helps in reducing the inflammation in lungs. The vaccine also needs to prevent the second grade infection [4].

Most of the phase 3 clinical trials were being failed due to improper dose adjustments and moreover there was no balances obtaining between the safety and efficacy rate of the developed vaccine. In the recent studies the design of new vaccine has been transfigured reverse technology which was popularized as reverse vaccinology where a proper vaccine is developed by identifying and analyzing the pathogen genome in Covid patient and studying and understanding the bioinformatics based on the data obtained the vaccine is developed [5].

CONCLUSION

We are grateful to the editors, reviewers and authors who have contributed to the success of our journal and the quality of the final published papers you read in our pages. Our reviewers, like our authors, come from everywhere the world-representing quite 40 countries-and all career stages. We believe we really have an inclusive journal, our reviewers and editors should reflect the broader biological community, and that we keep this guideline in mind in everything that we do. Our editors consider all sorts of diversity when inviting potential reviewers.

At this stage we are calling for submissions of articles, commentaries, and letters to the editor for the upcoming issues. We glance forward to receiving your exciting contribution. Finally, I would like to thank you, the contributors and readers for your interest in the journal and I encourage you to continue to send us your valuable feedback and ideas for further improvement of our journal.

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