

Press release

Title: GBPD060 is an effective single-dose mRNA vaccine against SARS-CoV-2, published in the pre-eminent peer-reviewed medical journal 'Vaccine'.

Content: GBPD060 is the first effective single-dose vaccine based on mRNA technology that has shown strong protection in human cells and animal models against SARS-CoV-2 virus with a single dose. Competing with the global race, Globe Biotech Limited, a pioneer biotech company in Bangladesh, has developed this vaccine. The proposed commercial names for GBPD060 vaccine are BANCOCVID® and BANGAVAX®.

Despite facing a lot of challenges (arrangement of raw materials, adaptation to new technologies, lack of research funds etc.), as working in a developing country, a young group of scientists lead by Dr. Kakon Nag and Dr. Naznin Sultana has designed and developed this single-dose vaccine.

Preclinical study revealed that GBPD060 is non-toxic and safe for administration in *in vivo*. The unique design, technology and formulation have generated effective pharmacological response. The vaccine has produced high-level of specific neutralizing antibody titer at day-14, which was detected even at day-7 of post-immunization. Sufficient population of memory cells were found till day-91 of immunization and expecting onward, which suggested that the vaccine has long-lasting virus neutralization capacity. The data demonstrated that the vaccine would be safe and may provide stable immunity against SARS-CoV-2 in the human.

This vaccine will be economical compared to other mRNA vaccines, and therefore, will be easily accessible for low- and middle-income countries. Thereby, nearly 5 billion of human lives will get the opportunity to have 'mRNA vaccine', which is the safest and most efficacious vaccine technology in the world. Since it is a single-dose vaccine, therefore the purchase would be cost-effective and the vaccination time would be faster of traditional vaccines.

"An mRNA-based vaccine candidate against SARS-CoV-2 elicits stable immune response with single dose" by Kakon Nag et al., DOI: <http://dx.doi.org/10.1016/j.vaccine.2021.05.035>. It will be published in Vaccine, Volume 39 (2021) published by Elsevier. "Copies of this paper are available to credentialed journalists upon request; please contact Elsevier's Newsroom at newsroom@elsevier.com or +31 20 485 2719".

About Vaccine

Vaccine is the pre-eminent journal for those interested in vaccines and vaccination. It is the official journal of The Edward Jenner Society and The Japanese Society for Vaccinology and is published by Elsevier www.elsevier.com/locate/vaccine