

Biotech startup Mynvax offers 'warm vaccine' for COVID-19

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A thermostable or 'warm vaccine' is critical for remote or resource-limited locations



Biotech startup Mynvax, incubated at the Indian Institute of Science (IISc) in Bengaluru, has developed heat-tolerant COVID-19 vaccine formulations.

Published in the peer-reviewed *ACS Infectious Diseases* journal, researchers showed the vaccine formulations triggered a strong immune response in mice, protected hamsters from the virus, and remained stable at 37°C up to a month and at 100°C for up to 90 minutes.

Most vaccines require refrigeration to remain effective, like Oxford-AstraZeneca which must be kept between 2-8°C and Pfizer which requires specialised cold storage at -70°C.

Scientists at the Australian Centre for Disease Preparedness in Geelong contributed to the study by assessing vaccinated mice sera (blood samples) for efficacy against key coronavirus variants, including the Delta variant currently spreading globally including in Sydney.

Dr. S.S. Vasan, project leader and co-author, said the Mynvax-vaccinated mice sera show a strong response to all variants of the live virus.

"Our data shows that all formulations of Mynvax tested result in antibodies capable of consistent and effective neutralisation of the Alpha, Beta, Gamma and Delta SARS-CoV-2 variants of concern," Dr Vasan said.

Australia's evaluation of the different Mynvax formulations will support selection of the most suitable candidate for planned human clinical trials in India later this year.

Founded in 2017 by Dr Raghavan Varadarajan, Professor at IISc, Bangalore, and Dr Gautham Nadig, an alumnus of the institute, Mynvax has recently signed definitive agreements to raise \$4.2 million in its Series A funding round led by Accel, for bringing this vaccine to market