

Rajiv Gandhi Centre Biotechnology to develop humanised monoclonal antibodies to treat COVID-19

After government eases norms for COVID-19 research in India, Dr. Radhakrishna Pillai, Director of DBT's autonomous institute, the Rajiv Gandhi Centre Biotechnology (RGCB), Thiruvananthapuram, has said that easing norms will made enable them to expedite the research process.

Dr Pillai said that the memorandum will also boost the potential drug development for COVID-19. His team has applied for permission from RGCB's ethics committee to collect blood samples from recovered patients, and use immune cells from these samples to develop a type of treatment called humanised monoclonal antibodies.

The monoclonal antibodies are antibodies that recognise only specific proteins, called antigens, on the surface of specific bacteria or viruses. To deploy them as treatment, scientists take monoclonal antibodies produced by mice and change their protein sequences to resemble those of humans. These humanised monoclonal antibodies have a lower chance of being rejected by the patient's body as well as can be mass produced in mouse cell lines. According to Dr. Pillai, the RGCB had a technology transfer agreement with the Oklahoma Medical Research Foundation to develop such humanised monoclonal antibodies.

The National labs have been defined in the memo as institutions under the Department of Science and Technology (DST), DBT, the Council for Scientific and Industrial Research (CSIR), the Department of Atomic Energy (DAE) and the Defence Research and Development Organisation (DRDO). Researchers at

many of these institutions had commenced SARS-CoV-2-related research soon after the first few cases were detected in India in February 2020.

Source: <https://science.thewire.in/the-sciences/covid-19-research-empowered-committee-dst-dbt-niv-testing-kits-hcq-rt-pcr-gisaid/>