

**GOVERNMENT OF INDIA  
MINISTRY OF HEALTH AND FAMILY WELFARE  
DEPARTMENT OF HEALTH RESEARCH**

**RAJYA SABHA  
UNSTARRED QUESTION NO. 1538  
TO BE ANSWERED ON 20<sup>TH</sup> DECEMBER, 2022**

**RESEARCH REGARDING THE CAUSE AND CURE FOR COVID-19**

**1538 SHRI ANEEL PRASAD HEGDE:**

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether the Ministry has done any research to find the cause and cure for COVID-19 during the last two years;
- (b) if so, whether the Ministry will share the findings of the research; and
- (c) whether any efforts have been made to produce vaccines for the newer strains of COVID-19, if so, the details thereof?

**ANSWER**

**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE  
(DR. BHARATI PRAVIN PAWAR)**

(a) to (c): The cause of COVID-19 is infection by the virus SARS-CoV-2. Indian Council of Medical Research (ICMR)-National Institute of Virology (NIV), Pune was the 5<sup>th</sup> in the world to isolate the SARS-CoV-2 virus from a sample of COVID-19 infected patient in India. Further, virus propagation studies and electron microscopy of the virus strain was also done by NIV. For the management of COVID-19, the following completed studies have been conducted or coordinated by ICMR:

1. Convalescent plasma in the management of moderate COVID-19 (PLACID)–The randomized controlled trial conducted on 464 participants concluded that convalescent plasma along with the best standard of care caused no difference in 28-day mortality or prevented progression to severe disease among patients with moderate COVID-19 when compared to the best standard of care alone.
2. WHO SOLIDARITY trial: India was one of the participating centres of this multi-country study. The key conclusions were that Remdesivir, Hydroxychloroquine, Lopinavir and Interferon appeared to have little or no effect on hospitalized COVID-19, as evaluated in terms of overall mortality, initiation of ventilation and duration of hospital stay.

Four strains of Omicron have been transferred (BA.1, BA.2, BA.4 and BA.5) by ICMR-NIV, Pune to Bharat Biotech International Ltd. for making Omicron specific vaccine for pre-clinical development.

4 COVID-19 vaccines supported under Mission COVID Suraksha, implemented under Atmanirbhar Bharat 3.0 by the Department of Biotechnology (DBT), received Emergency Use Authorization (EUA). These are DNA Vaccine, ZyCoV-D; Protein subunit vaccine, CORBEVAX™; mRNA vaccine, GEMCOVAC™-19; Intranasal COVID-19 Vaccine, iNCOVACC. Pegylated Interferon alpha-2b i.e., 'Virafin', supported by DBT-BIRAC for Phase II Clinical trials, received emergency approval from Drugs Controller General of India (DCGI) for treatment of moderate COVID-19 infection in adults. DBT supported five COVID-19 biorepositories across India, for storage of COVID-19 biospecimens which are a valuable research resource to understand disease pathogenesis and early predictors of disease severity.

The Autonomous Institutes of DBT conducted research studies to understand the role of SARS-CoV-2 variants in infection; role of vaccines in prevention of COVID-19; and tested the ayurvedic formulations for prevention and treatment of COVID-19.

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