Indian Council of Medical Research (ICMR)

& National Institute of Virology (NIV), Pune develops and validates the indigenous IgG ELISA test "COVID KAVACH ELISA" for antibody detection for COVID-19

The scientists at ICMR-NIV, Pune have developed and validated the completely indigenous IgG ELISA test for antibody detection for SARS-CoV-2. On external validation, the IgG test kit produced by ICMR-NIV, Pune has been found to have sensitivity and specificity of 98.7% and 100% respectively.

ELISA test has the advantage of processing 90 samples together in a single run of two-and-a-half hours. Moreover, ELISA based testing is easily possible even at district level as the ELISA kit has inactivated virus. There are also minimal biosafety and biosecurity requirements as compared to the real-time RT-PCR test. This test has an advantage of having much higher sensitivity and specificity as compared to the several rapid test kits.

While real time RT-PCR is the frontline test for clinical diagnosis of SARS-CoV-2, robust antibody tests are critical for surveillance to understand the proportion of population exposed to infection.

After development in lab at ICMR-NIV, Pune, based on the potential of companies namely, SPAN, J MITRA, Zydus-Cadila and Cipla were offered to take up the production. Except Zydus-Cadila, 3 others refused to accept the offer. Zydus-Cadila accepted to produce the ELISA. This has been named as 'COVID KAVACH ELISA'.

ICMR has signed a 'non-exclusive agreement' with Zydus Cadila, which means ICMR continue to have the right to offer to any other company (ies), which comes forward to take up the production of ELISA.

NIV. Pune has validated the first batch of ELISA kits produced by Zydus Cadila and similar sensitivity and specificity was found. ICMR is in the process of carrying out a National Surveillance Study with 24,000 individuals.

Now, ICMR has also been approached by Cipla Pvt. Ltd. and NextGen Life Sciences for providing non-exclusive license for "COVID KAVACH ELISA", which is under process.
