

Japan develops saliva test to detect COVID-19 in 30-min

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The detection kit can assist in containing the second wave of COVID-19 in Japan by screening international travellers at the airport itself



Nihon University and Tokyo Medical University are developing a novel RT-PCR method for detection of SARS-CoV2 virus. Unlike other RT-PCR tests, this method gives accurate results in just 30 minutes without the help of specialized equipment and staff.

Nihon University professor Masayasu Kuwahara and his team developing this test to further seek approval from Japan's health ministry. The new test uses saliva samples heated at 95 C for two minutes, then placed in a reagent that changes color depending on the results in 20 to 25 minutes. It is based on the signal amplification by the ternary initiation complexes, or SATIC, method discovered by Kuwahara's team.

The test is much quicker and needs no specialized equipment because it does not require amplifying genetic material like the PCR test. The research group has examined 100 samples and found a level of precision similar to PCR test. Results are more accurate than those antigen test currently in use.

Japanese pharmaceutical company [Shionogi](#) will sign a licensing agreement in June 2020 for mass-producing this proposed coronavirus test that provides faster results without requiring special equipment or technicians.

This test will assist Japan in screening every international traveller at the airport once the travel restrictions are relaxed. Government is aiming to screen a large volume of screening to avoid the percentage of risk at imported cases. This quick test will also assist Japan to considerably avoid the second wave of COVID-19 and to continue boosting its economy.

The research is funded by the state-backed Japan Agency for Medical Research and Development and other organizations. Nihon University and Tokyo Medical University jointly applied for a patent in May.