

Study suggests saliva test for COVID-19 as effective as NPS test

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A new study shows that the less-invasive saliva test for COVID-19 gives just as accurate results as those of the nasopharyngeal specimen (NPS).

A research team at the Department of Laboratory Medicine at Kangwon National University School of Medicine in South Korea, led by Professor In-bum Suh, carried out the PCR test for COVID-19 on 90 hospitalised individuals with suspected COVID-19, both with saliva and nasopharyngeal methods. In order to collect sufficient specimen, samples were collected from study participants, who were required to refrain from any activities including eating, drinking, and smoking, for 30 minutes after they got up in the morning.

For the study, the research team had used Seegene's flagship COVID-19 tests, 'Allplex™ SARS-CoV-2 Assay' and 'Allplex™ SARS-CoV-2/FluA/FluB/RSV Assay, both of which had been CE-IVD marked. While 'Allplex™ SARS-CoV-2 Assay' targets 4 different genes of COVID-19, 'Allplex™ SARS-CoV-2/FluA/FluB/RSV Assay' is known to detect and differentiate 8 target genes including COVID-19, influenza and RSV common cold.

As a result, both 'Allplex™ SARS-CoV-2 Assay' and 'Allplex™ SARS-CoV-2/FluA/FluB/RSV Assay' proved the saliva and nasopharyngeal test's percentage agreement for detecting COVID-19 was over 98.8 per cent. That means Seegene's COVID-19 diagnostic test gives equally accurate and effective test results for COVID-19 when testing saliva and nasopharyngeal specimen.

Professor Suh, added that the study has "clearly proven that saliva tests are just as accurate and effective as nasopharyngeal tests in precisely diagnosing COVID-19."

The research team also conducted a separate study on extraction-free application, one without the nucleic acid extraction step, and found the percentage agreement between Seegene's extraction-free saliva test and extraction-free nasopharyngeal swab test to be over 96 per cent.

The implication of the study will be introduced during the 28th International Molecular Medicine Tri-Conference. The three-day conference will be held online due to COVID-19 pandemic starting February 16th.