

What is OmiSure?

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In news– Recently, The Indian Council of Medical Research (ICMR) has approved 'OmiSure', a testing kit for detecting the Omicron variant of the SARS-CoV-2 coronavirus.

About OmiSure-

- It is a COVID test kit **manufactured by Tata Medical and Diagnostics**.
- It can detect the Omicron variant of SARS-CoV2 in nasopharyngeal/oropharyngeal specimens during the RT-PCR tests.
- The kit also has **another gene RNA-dependent RNA polymerase (RDRP) which can detect other variants too**.
- It is compatible with all standard Real-Time PCR Machines.
- Currently, Omicron patients are detected only after genome sequencing, but this test can help eliminate that step and detection can be done during the testing.
- The test run time of this kit is 85 minutes.
- The result turnaround time, including sample collection and RNA extraction, is 130 minutes.
- It is the **first test globally to employ a combination of two S-gene viral targets to reliably identify Omicron – one based on S-gene dropout** or S-gene target failure (SGTF) and the other based on S-gene mutation amplification (SGMA).
- All current tests available globally employ either SGTF or SGMA.
- S Gene failure is indicative of Omicron, and if the other gene, **SGMA, is positive, it is absolutely sure of Omicron presence**.