

# INNOVATIONS IN COVID-19

Bridging opportunities  
at Oswaldo Cruz Institute

## RAPID DETECTION OF SARS-COV-2 RNA IN NASAL AND OROPHARYNGEAL SECRETION (CODE 2020.021)

### COORDINATOR

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### RESEARCH AREA

Diagnostic

### DEVELOPMENT STAGE

Level 2 - TRL - Technology concept and/or application formulated. MRL - Manufacturing concepts identified

### PROPOSITION / APPLICATION

Laboratory diagnosis of COVID-19 is based on the detection of viral RNA using RT-qPCR, a gold standard method for diagnosis during the acute phase of the disease. However, its disadvantages lies in its high cost, the waiting time for the result, which varies between 48-72 hours and the need for specialized labour and infrastructure

### INNOVATION

The present invention is a fast and of low-cost alternative for the detection of viral RNA, as it does not require expensive equipment or patented reagents. It is a simple technique, capable of being performed by a professional with a technical level of training, provided that it is on the bench of a clinical laboratory. The result of the aforementioned diagnosis can be obtained on the same day and uses the patient's body fluids, without using the reverse transcriptase reaction and the amplification of the cDNA by the polymerase chain reaction. This aspect eliminates the waiting time in the result and the high cost of diagnosis, problems considered strategic for monitoring the number of cases of COVID-19 in the country

### OPPORTUNITY

Development of rapid and low-cost diagnostics to be made available to the population

### CONTACT

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