

## The rapid test method to detect SARS-CoV-2 by extraction elimination in PCR assay

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**Background:** Currently, the widely method of SARS-CoV-2 detection are used in clinical diagnostics. Real-Time PCR (RT-PCR) is a common molecular and accuracy method to detect the presence of viral RNA in patient's samples. Extraction in is a consuming stage in RT-PCR, so, this study aimed to evaluated to RT- PCR for detection of SARS-CoV-2 with shortened extraction method.

**Materials and Methods:** In this study 95°C for 5 minutes and centrifuge in 10000 rpm for 7 minutes was used to RNA extraction in nasopharyngeal swab of COVID-19 in suspension patients. RT-Real-Time PCR was done with commercial kit. The RNA was extracted by RNA extraction kit was used as a gold standard method for RT-PCR.

**Results:** The results of this study showed that RNA extraction with temperature have acceptable results in RT-PCR as well as the RNA kit extraction in samples with CT less than 30. But samples with CT more than 30 did not have suitable results compared to gold standard method.

**Conclusion:** Rapid RNA extraction can prepare suitable RNA for RT-PCR in samples with high load of virus for example patients in acute phase of the disease and can prepare the PCR result faster.

### Biography

Leila Azimi, PhD of medical bacteriology and faculty member of Shahid Beheshti University of Medical Sciences, Tehran, Iran. She is expert in molecular microbiology and they do Real- Time PCR test for COVID-19 in Mofid Children Hospital. It is my pleasure to participate in this scientific and valuable conference.