

Pitfalls found in SARS CoV-2 specific test performance

Genekam Biotechnology AG, Germany has developed a number of real time PCR kits to detect the coronaviruses and other viral targets. FR475 is one of the first kit developed to detect SARS CoV-2 (Wuhan strain) in Jan, 2020.

One of the important methods to detect the SARS CoV-2 is polymerase chain reaction (PCR). There are a number of real time PCR tests, which are recommended from World health organization (WHO). Usually, the WHO recommended test should give correct results. During the comparison between WHO test for N gene and ready to use PCR kit FR475 of Genekam Biotechnology AG, it was found that WHO test gave false positive in the negative samples and correct positive results in positive samples. As this method is used from many laboratories as in-house method and many commercial companies around the world have developed their kits based on WHO tests. The results of this research work are showing that there should be around 30% false positive results as well as there are problems of reproducibility of the results, hence there is a need that the laboratories run the tests to show that these in-house or commercial assays are free from these pitfalls. This study also may indicate why we have so many symptomless cases, hence this must be investigated.

The questions will be now how many tests are false positive in the world? People paid a lot of money for a real time PCR test for coronaviruses and they may not be getting the accurate results. Such inaccurate results may have forced many people to go for stress conditions like self-isolation and may lose the wages.

Here is the link of our research, which can be read and the laboratories along with commercial companies should run their tests to exclude the possibilities that these are not giving false positive results in this way one can build the trust among the users and end pandemic outbreak quickly. One can use FR475 Kit from Genekam to make the comparison.

[Pitfalls found in SARS CoV-2 specific test performance during the comparison between WHO recommended method and a commercial test \(figshare.com\)](#)