

47-2020-10893 | High-Throughput Sequencing Methods to Test Samples  
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The currently used test for SARS-CoV2 virus uses molecular methods for detecting the presence of viral RNA sequences in subject samples. This is the approved gold standard in the field. The current application of this test requires several cumbersome steps that are labor intensive and require non-trivial reagents (which are becoming a global bottleneck). It is clear that during the next stage of managing the COVID19 pandemic, large scale testing will be needed.

We are developing an approach that harness high-throughput sequencing methods to test samples. The working guidelines are to adhere to current collection protocols and clinical test definitions and standards. We replace labor intensive molecular steps with alternative ones that are based on our expertise in high-throughput genomics.

Briefly, the approach will allow one technician to process thousands samples per day using a simple protocol. Thousands of samples (10,000 or more) will be read by a single sequencing run, with straightforward calling of results using simple bioinformatic tools.

Benefits:

- Use the same set of probes as current gold standard tests
- Readout directly comparable to current tests and can adhere to the same standards
- High-throughput (thousands of samples)
- Automation friendly (can be readily automated)

Low cost in terms of reagents and readout

Patent Status

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