

OptiGene Press Release 2 April 2020

COVID-19 - Swab-to-result in less than 20 minutes

- UK company OptiGene has developed a simple molecular diagnostic test for COVID-19 that provides results within 20 minutes
- There is no shortage of chemical reagents and the test could be rapidly deployed around the UK to significantly increase capacity to diagnose the COVID-19 virus
- Nearly 300 patient samples can be processed in an hour on a single instrument

OptiGene, a UK diagnostics solutions company, has developed a simple diagnostic test for the coronavirus COVID-19 that takes less time to complete than any equivalent method currently in use. This specific and extremely sensitive test can operate directly from nasal and throat swabs to produce results in less than 20 minutes. Unlike the PCR (polymerase chain reaction) test that has already been deployed for diagnosing the virus, the OptiGene procedure uses isothermal LAMP technology that does not require expensive and time-consuming RNA extraction and is inherently much faster than PCR.

This test has been developed in the UK and all of the reagents are manufactured here, making it widely accessible. Dr Veronica Fowler and her colleague, Dr Bryony Armson, have been working in their spare time to validate the assay with Stephen Kidd, Clinical Scientist in the Microbiology Department at Basingstoke Hospital, Hampshire Hospitals NHS Foundation Trust, with full support of senior management. The new test is proving to be as sensitive as the PCR 'gold-standard' and is being run on the Genie® series of instruments, developed and manufactured by OptiSense Limited in Horsham, West Sussex. This range of diagnostic devices is sold under the OptiGene brand and includes both portable battery-powered devices as well as the larger high-throughput model, Genie® HT.



Genie® HT

OptiGene's LAMP COVID-19 test has now passed validation and is ready to be utilised. The company plans to discuss the assay, the diagnostic system and its application with Public Health England in the next 24 hours. This test could be rapidly deployed around the UK and other British territories to significantly increase the UK's capacity to diagnose COVID-19.