

IQVIA contributes towards COVID-19 vaccine development

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Q2 Solutions Collaborates with University of Texas Medical Branch to Help Accelerate Development of COVID-19 Vaccines



Q2 Solutions, a leading clinical trial laboratory services organization resulting from an IQVIA and Quest Diagnostics joint venture, has announced its collaboration with the University of Texas Medical Branch (UTMB) to develop a novel assay for COVID-19 (SARS-CoV-2) tests, an essential tool for rapid development of a Coronavirus vaccine. Once a viable assay is developed, Q2 Solutions labs will produce it for use in clinical trials to determine the effectiveness of a COVID-19 vaccine.

An assay is an analysis done to determine the biological or pharmacological potency of a drug. Compared with the conventional plaque-based neutralizing assay, UTMB's novel reporter COVID-19-based test may provide several potential advantages, including increased sensitivity and dramatic increase in assay throughput because the assay time is shifted from multiple days to a single day.

"We have successfully produced a reporter virus system engineered with either luciferase or fluorescent tags to enable quantitative determination of vaccine effectiveness," said Pei-Yong Shi, professor of Human Genetics at UTMB. "This test will enable Q2 Solutions to test sera from individuals participating in vaccine clinical trials to see whether the vaccine has induced antibodies that block infection of the virus and thereby answer critical questions in the vaccine development process."

Current COVID-19 diagnostic tests available through governments and commercial laboratories determine whether a person is infected by the virus. The UTMB research focuses on prevention through vaccine development by creating technology that helps determine the effectiveness of a vaccine candidate protecting a person from COVID-19. The planned approach is to develop a high-throughput method to measure neutralizing antibody concentrations, the gold standard method for determining vaccine effectiveness.

"We are pleased to support UTMB in this important research to develop the COVID-19 assay that, once available, may help accelerate vaccine development," said Kevin Jones, vice president and general manager, Bioanalytical, ADME, and Vaccine Laboratories for Q2 Solutions. "We are excited to take the assay developed from this research collaboration to production in our labs and enable vaccine developers to use it for large-scale human clinical trial testing to drive toward an effective COVID-

19 vaccine.”