

## **Quest Diagnostics and CDC Expand Public Health Collaboration to Improve Hepatitis Diagnosis and Treatment**

Multi-year fee-based contract for Quest's test data and analytics expertise aims to reveal insights from national testing trends to promote guideline-based care and better outcomes for 4.4 million Americans with viral hepatitis

MADISON, NJ and ATLANTA GA -- January 27, 2015 – Quest Diagnostics (NYSE: DGX), the world's leading provider of diagnostic information services, today announced that it will collaborate with the Centers for Disease Control and Prevention (CDC) to identify trends in screening, diagnosis and treatment for four strains of viral hepatitis in the United States, based on insights revealed by analysis of Quest's national testing database. Under terms of the multi-year contract, Quest Diagnostics will provide CDC researchers with analytics expertise and access to the company's national Quest Diagnostics Health Trends™ database of de-identified clinical testing hepatitis data. The agreement is the first fee-based contract for hepatitis-related research awarded by CDC to a diagnostic information services provider.

The goal of the collaboration is to generate diagnostic-based insights that will improve the ability of public health authorities to develop and monitor medical guidelines designed to reduce disease prevalence and enhance outcomes through earlier diagnosis and treatment of hepatitis.

"The innovative collaboration with Quest Diagnostics will allow us to use data analytics to better monitor the implementation of CDC's testing guidelines and progress toward reducing deaths from hepatitis," said John W. Ward, M.D., director of CDC's Division of Viral Hepatitis. "Increased testing is critical to ensure that those who are infected with hepatitis receive life-saving care and treatment."

"Our partnership with CDC reflects the growing value of data analytics in health care to improve decision making, both for population health and in a clinical setting," said Rick L. Pesano, MD, PhD, vice president, research and development, and medical director, infectious diseases, for Quest Diagnostics. "Transforming data into insights to measure and predict behaviors and outcomes will be increasingly important as the nation's healthcare system moves to fill gaps in guideline-based care."

Quest Diagnostics is a leader in hepatitis diagnostic information services with services that include genotyping, risk stratifying and viral load testing to aid diagnosis, treatment and monitoring. Medical and bioinformatics experts from Quest Diagnostics and CDC's Division of Viral Hepatitis will analyze de-identified test results from the Quest Diagnostics Health Trends™ national database for hepatitis A, B, C and E viral infection in American adults age 18 years and over. Analysis will include results of screening and confirmatory diagnostic tests as well as treatment-guiding genotyping and viral load tests by gender, age group, geography and type of physician. The teams will jointly develop study designs and protocols based on Quest's proprietary data-mining techniques to identify patterns in prevalence and clinical management of patients.

The new agreement supplants a non-fee-based agreement formed by CDC and Quest Diagnostics in July 2013. Under that prior agreement, the organizations jointly analyzed de-identified hepatitis C testing data in the Quest Diagnostics Health Trends database for individuals born between 1945 and 1965. In 2012, CDC issued recommendations for one-time lab screening for hepatitis C for these "Baby Boomers," who are five times more likely than other adults to be infected with hepatitis C. Approximately 4.4 million Americans are infected with hepatitis B or hepatitis C, but most do not know it. Untreated, chronic hepatitis can cause liver cancer and death.

A primary objective of the expanded agreement is to identify and monitor trends in hepatitis B and C viral infection in pregnant women and to characterize these patients by demographics and type of physician. About 40% of untreated newborns infected with hepatitis B in utero will develop chronic hepatitis, and one in four of these will die from liver disease. CDC guidelines call for pregnant women to be screened with a lab test for hepatitis B, but only recommend hepatitis C screening when other risks are present. In recent years, CDC's Division of Viral Hepatitis has partnered with Quest Diagnostics and others to add pregnancy status to hepatitis B lab test orders to improve surveillance of infected mothers.

"The right screening and medical interventions can prevent the tragedy of lifelong hepatitis-related liver disease in children born to infected mothers," said Dr. Pesano. "We're proud to work with CDC to assess trends in hepatitis B screening in pregnant women in order to identify gaps in screening and treatment, because it will yield insights that will help health professionals take actions to save people's lives."

Quest Diagnostics maintains the largest private clinical database of diagnostic testing information in the United States, Quest Diagnostics Health Trends™, based on more than 20 billion de-identified test results. The company's scientists, in collaboration with top health institutions, analyze and publish studies based on this data in peer reviewed publications and as a public service in order to identify trends in disease and wellness.

In a 2010 report, the Institute of Medicine underscored a lack of awareness among the public and medical providers about the health dangers of hepatitis. The IOM also called upon public and private organizations to partner to increase data collection on infection, treatment and outcomes of hepatitis B and C, and to educate at-risk populations, healthcare providers and the general public about hepatitis to promote vaccination and prevention strategies and encourage screening and testing.