



Quest Diagnostics and Stanford University Researchers Identify New Mutation of Antiviral-Resistant HIV

December 12, 2000

TETERBORO, N.J., Dec. 12 /PRNewswire/ -- Quest Diagnostics Incorporated (NYSE: DGX), the nation's leading provider of gene-based medical testing, information and services, announced that its researchers, in collaboration with the Center for AIDS Research at Stanford University School of Medicine, have identified a new mutation of HIV-1 that is associated with reduced susceptibility to reverse transcriptase inhibitors, a class of antiviral drugs. Identification of this new mutation gives physicians additional information that allows them to better target effective treatment of HIV-1 in their patients. The findings, which were published recently in the Journal of Virology, are being utilized by Quest Diagnostics to report laboratory results for its HIV-1 Genotyping test.

Hasnah Hamdan, Ph.D., Research and Development Manager at Quest Diagnostics' Nichols Institute, co-authored the publication with Mark A. Winters and colleagues at Stanford's Center for AIDS Research, which is directed by Thomas C. Merigan, M.D., George E. and Lucy Becker Professor of Medicine at Stanford University School of Medicine. Dr. Merigan is also an Academic Associate of Quest Diagnostics.

"Quest Diagnostics has been the leader in HIV resistance testing since 1997, and has made significant contributions to patient care and scientific discovery along with our partners at Stanford University," said Surya N. Mohapatra, Ph.D., President and Chief Operating Officer of Quest Diagnostics.

Quest Diagnostics co-developed HIV resistance testing with Dr. Merigan's team at Stanford in 1997 and became the first national reference laboratory to offer the test. Quest Diagnostics has accumulated a large database of HIV-1 sequence information, which has been instrumental in identifying these new mutations and will continue to be valuable for identification of other new mutations in HIV-1 as they become prevalent.

The publication reports on genotypic, phenotypic, and modeling studies of the amino acids deletion in the beta 3-beta 4 region of the Human Immunodeficiency Virus Type 1 reverse transcriptase (RT) gene that is associated with resistance to nucleoside reverse transcriptase inhibitors. The findings, which are available in the November, 2000, issue of the Journal of Virology, indicate that the deletion in the RT gene causes reduction in susceptibility to between four and eight RT inhibitors frequently used in HIV-1 therapy.

Previously this team of Quest Diagnostics and Stanford researchers had reported a 6-basepair insertion in the reverse transcriptase gene of HIV-1, which confers resistance to multiple nucleoside inhibitors. The report was published in the November, 1998, edition of the Journal of Clinical Investigation. More recently, the Stanford team, using Quest Diagnostics' HIV database and specimens, has identified an insertion in the protease gene of HIV-1 strains from patients failing antiretroviral therapy. That study was published in May, 2000, as an abstract in the journal Antiviral Therapy (2000:5, Supplement 3).

Quest Diagnostics' gene-based testing focuses on infectious disease, oncology and hereditary conditions, and helps physicians target individual treatment regimes, monitor resistance to therapies and predict predisposition to various genetic conditions. Quest Diagnostics is a leading innovator in genomics testing, both through its research and development center and esoteric testing laboratory, the world-renowned Nichols Institute, as well as through alliances with leading academic and commercial researchers.

About Quest Diagnostics

Quest Diagnostics is the nation's leading provider of diagnostic testing, information and services with annualized revenues of more than \$3 billion. The testing performed on human specimens helps doctors diagnose, treat and monitor disease; enables employers to detect workplace drug abuse; and supports pharmaceutical and biotechnology companies in clinical trials of new therapeutics worldwide. Quest Informatics analyzes laboratory and other medical data to help health care providers improve the care of patients. Additional company information can be found on the Internet at: <http://www.questdiagnostics.com>. SOURCE Quest Diagnostics Incorporated

CONTACT: Media - Gary Samuels, 201-393-5700, or Investors - Cathy