



Quest Diagnostics and Thermo Electron Launch First Commercial Gene-based Medical Test Using a Biochip

April 17, 2003

Collaboration to Produce Additional Biochips for Various Diseases

TETERBORO, N.J. and WALTHAM, Mass., April 17 /PRNewswire-FirstCall/ -- Quest Diagnostics Incorporated (NYSE: DGX) and Thermo Electron Corporation (NYSE: TMO) announced that their collaboration has resulted in an automated, biochip-based laboratory test for the detection of cystic fibrosis (CF) gene mutations during prenatal screening. The new biochip array can be used for multiplex testing, which allows multiple DNA targets to be detected simultaneously in a high-production commercial laboratory setting. Thermo Electron is a leading worldwide provider of advanced analytical technologies, including laboratory instruments, consumables, and software, and Quest Diagnostics is the nation's leading provider of gene-based medical testing.

The new biochip, called the CF Portrait(TM), is being used at Quest Diagnostics Nichols Institute in San Juan Capistrano, California, to perform cystic fibrosis carrier screening, which identifies parents who are at risk of having children with the disease. The CF Portrait process is expected to be used for all such screening at Nichols Institute by July 1, 2003. CF screening is now recommended by the American College of Obstetrics and Gynecology and the American College of Medical Genetics for all Caucasian couples contemplating parenthood, according to guidelines the organizations published in late 2001.

The CF Portrait biochip is designed and manufactured by Thermo Electron's Thermo BioStar unit, part of the company's Clinical Diagnostics division, and uses its proprietary Optical ImmunoAssay (OIA(R)) technology to fully automate the detection of nucleic acid hybridization. The biochip is used in conjunction with Quest Diagnostics' DNA extraction and amplification methods, allowing improved turnaround time for physicians and their patients, as well as tighter quality control for this critical prenatal test. Quest Diagnostics has exclusive rights to incorporate the CF Portrait biochip into its laboratory-developed testing methods, and its Nichols Institute Diagnostics subsidiary has exclusive rights to further develop the biochip as part of a testing system for laboratories worldwide. Additional terms of the agreement were not disclosed.

"We are pleased that our unique collaboration with Quest Diagnostics has produced this advance in biochip technology," said Marc Casper, president of Thermo's Life and Laboratory Sciences sector. "This joint effort has enabled us to rapidly develop and validate the biochip as a key component in cystic fibrosis testing at Quest Diagnostics' laboratories. We look forward to expanding our strategic relationship to develop additional genetic targets for biochips beyond cystic fibrosis, and currently have two other multiplex assays under development."

Charles Strom, M.D., Ph.D., medical director of genetics at Quest Diagnostics Nichols Institute, said, "Through the collaboration with Thermo Electron and incorporation of the biochip technology into a laboratory-developed test, we are able to offer physicians improved turnaround time for cystic fibrosis carrier screening and greater consistency and quality control, which is particularly important in light of the dramatic increase in demand for this test."

The CF Portrait biochip uses proprietary thin-film technology to place assay probes on a coated silicon wafer. The wafer is cut into chips, each with 64 activated spots used for detection and quality control. The chips are placed at the bottom of a microtiter plate with 96 wells. In Quest Diagnostics' laboratory, genetic material is extracted from patient samples and amplified using polymerase chain reaction (PCR) technology. A robotic device then injects the amplified genetic material into the wells, where hybridization of the patient's DNA, using both normal and mutant probes, generates a signal seen as purple spots on the gold background of the chip. The plate then proceeds to Thermo Electron's proprietary NucleoSight(TM) imaging station for data acquisition, analysis, and report generation.

About Thermo Electron

Leading the world in high-tech instruments, Thermo Electron Corporation helps life science, laboratory, and industrial customers advance scientific knowledge, enable drug discovery, improve manufacturing processes, and protect people and the environment with instruments, scientific equipment, and sample-in/knowledge-out solutions. Based in Waltham, Massachusetts, Thermo Electron has revenues of more than \$2 billion, and employs approximately 11,000 people in 30 countries worldwide. For more information, visit www.thermo.com.

About Quest Diagnostics

Quest Diagnostics Incorporated is the nation's leading provider of diagnostic testing, information and services, providing insights that enable healthcare professionals to make decisions that improve health. The company offers the broadest access to diagnostic testing services in the United States through its national network of laboratories and patient service centers, and provides interpretive consultation through its extensive medical and scientific staff. Quest Diagnostics is the leading provider of esoteric testing, including gene-based medical testing, and also empowers healthcare organizations and clinicians with state-of-the-art connectivity solutions that improve patient care. Additional company information is available at: www.questdiagnostics.com.

The statements in this press release which are not historical facts or information may be forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause actual results and outcomes to be materially different. Certain of these risks and uncertainties may include, but are not limited to, unanticipated expenditures, changing relationships with customers, suppliers and strategic partners, conditions of the economy and other factors described in the Quest Diagnostics Incorporated 2002 Form 10-K and subsequent filings.

SOURCE Quest Diagnostics Incorporated; Thermo Electron Corporation

/CONTACT: Laure Park (Investors), +1-201-393-5030, or Gary Samuels (Media), +1-201-393-5700, both of Quest Diagnostics; or Tim Corcoran, V.P., Investor Relations and Communications of Thermo Electron, +1-781-622-1306/
/Web site: <http://www.questdiagnostics.com> <http://www.thermo.com> /

(DGX TMO)

CO: Quest Diagnostics Incorporated; Thermo Electron Corporation

ST: New Jersey, Massachusetts, California

IN: MTC HEA BIO CPR

SU: JVN

WR -- NYTH120 -- 2924 04/17/2003 17:23 EDT <http://www.prnewswire.com>