

NanoString Launches First Simple and Precise Approach to Detect Hundreds of Genetic Copy Variants in a Single Multiplexed Reaction

WASHINGTON, D.C | November 2, 2010 - NanoString Technologies, Inc., a privately held life sciences company marketing a complete solution for detecting and counting large sets of target molecules in biological samples, today announced the launch of a novel solution for detecting genetic copy number variations (CNVs) associated with disease susceptibility, drug response and cancer progression.

The nCounter[®] Copy Number Variation CodeSets enable researchers to interrogate up to 800 regions of the human genome in a single multiplexed reaction with the least hands-on time of any CNV platform. The company launched the product at the 60th Annual Meeting of the American Society of Human Genetics (ASHG), taking place in Washington, D.C. this week.

Researchers previously had no simple, precise, and scalable technology for technically replicating CNV detection or validating CNV correlation with biological processes. The nCounter Copy Number Variation CodeSets, built on the same innovative digital technology underlying NanoString's gene expression and miRNA assays, enable researchers to perform the functional equivalent of 9,600 qPCR reactions (800 regions across 12 samples) with only 25 minutes of hands-on time.

"We are impressed with the initial data we generated using the nCounter CNV CodeSets," said Steven McCarroll, Ph.D., a professor in the Department of Genetics at Harvard Medical School, who assisted NanoString in validating the nCounter Copy Number Variation assays. "We expect the system's simplified workflow and high multiplexing capacity will allow us to rapidly validate results from large-scale CNV studies and provide a significant amount of high-quality, quantitative data. The data show a linear response to underlying copy number, with little if any saturation at higher copy numbers. The technical reproducibility in our preliminary studies has been excellent."

Unlike PCR or arrays, the nCounter Analysis System does not rely on analog signal output or amplification of target molecules. Instead, the system utilizes a digital quantification technology that offers superior reproducibility and generates highly accurate data with a linear response to increasing copy numbers. These advantages also make it possible for data generated from multiple sites or studies to be combined for further analysis, thus facilitating multisite studies or comparisons of old and new data sets.

"Next-generation DNA sequencing and array-based association studies are identifying large numbers of medically relevant CNVs," said Brad Gray, President and CEO of NanoString Technologies. "We believe the nCounter CNV CodeSets will become the new gold-standard for subsequently validating these targeted sets of CNVs, and for effectively running larger replication studies when increased statistical power is required."

NanoString scientist Gary Geiss, Ph.D. will discuss the multiplexed, single-assay validation of whole genome microarray copy number data at the ASHG poster session (#1812/T), on Thursday, November 4 at 6.00 p.m. ET. In addition, Dale Hedges, Ph.D. and Toumy Guettouche, Ph.D., both of the University of Miami, will be presenting a poster evaluating the use of the NanoString technology for detection of copy number variation (#1793/T). The company will also be demonstrating its nCounter Analysis System and new CNV CodeSets at its exposition booth (#1137).

More information is available at www.nanostring.com.

About NanoString Technologies, Inc.

NanoString Technologies is a privately held life sciences company marketing a complete solution for detecting and counting large sets of target molecules in biological samples. The company's nCounter[®] Analysis System is the first and only technology platform to deliver highly multiplexed, direct profiling of individual molecules in a single reaction without amplification. The nCounter Analysis System offers a cost-effective way to easily profile hundreds of gene transcripts, copy number variations, or miRNAs simultaneously with high sensitivity and precision. The company's technology enables a wide variety of basic research and translational medicine applications, including biomarker discovery and validation. NanoString is also developing the technology for use in molecular diagnostics.