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NanoString Highlights Record Number of nCounter-Related Research Abstracts Showcasing Advances in Precision Oncology at the 53rd Annual Meeting of the American Society of Clinical Oncology (ASCO)

More than 35 Abstracts Demonstrate the Value of the nCounter Platform for Targeted Discovery, Biomarker Development and Diagnostic Applications in Cancer Research and Immuno-Oncology

NanoString's New Digital Spatial Profiling Technology Featured in Two Abstracts

SEATTLE, May 25, 2017 (GLOBE NEWSWIRE) -- NanoString Technologies, Inc. (NASDAQ:NSTG), a provider of life science tools for translational research and molecular diagnostic products, today announced the highlights of numerous advances in precision oncology and cancer immunotherapy using the nCounter® platform that will be presented at the 53rd Annual Meeting of the American Society of Clinical Oncology (ASCO).

"The breadth of nCounter-based research at this year's ASCO conference demonstrates the scientific momentum and significant commercial advances that we've made in our key markets, most notably immuno-oncology," said Brad Gray, president and chief executive officer of NanoString. "In addition, our new Digital Spatial Profiling technology continues to demonstrate its unique value in characterizing the tumor microenvironment to inform decisions in drug development programs."

More than 35 abstracts will be presented at the ASCO Annual Meeting, which is being held June 2nd through June 6th, 2017 in Chicago, Illinois. The research being presented spans a wide breadth of applications including Targeted Discovery, Biomarker Development and Clinical Practice across multiple oncology indications, including the following.

Targeted Discovery
Multidimensional spatial characterization of the tumor microenvironment (TME) in synchronous melanoma metastases (SMM) to yield insights into mixed responses to therapy in metastatic melanoma (MM) patients (pts). (Abstract # 9575)
NanoString's new Digital Spatial Profiling research platform was used for spatial characterization of 30 immune markers and signaling proteins in melanoma patient samples to understand correlations and determinants of response.

Molecular characterization of immune-related severe adverse events (irSAE). (Abstract #3076)
NanoString Digital Spatial Profiling was used to profile the immune cell population in tissue affected by immune checkpoint inhibitors-mediated inflammation. Similarities and differences between autoimmune disease and colon-irSAEs were identified at the gene expression and proteomic levels, as regions of inflammation showed higher CD68 and PD-L1 positivity in colon-irSAE specimens versus normal colon or Crohn's specimens, and reduced beta-catenin levels in both Crohn's and colon-irSAE specimens relative to normal controls.

Distinct gene expression, mutational profile and clinical outcomes of V600E and V600K/R BRAF-mutant metastatic melanoma (MM). (Abstract #9541)
Gene expression and mutational profiling were used to investigate potential mechanisms explaining the observation that V600K/R metastatic melanoma has inferior response and shorter survival with MAPKi than V600E.

Biomarker Development
Correlation of constitutive PD-1 resistance in HNC with GM-CSF expression and presence of myeloid derived suppressor cells (MDSCs). (Abstract #6049)
A 638-gene immune gene expression panel was used to explore why the majority of INF-G inflamed head and neck squamous cell carcinomas (HNC) tumors do not respond to PD-1 checkpoint blockade. Constitutive resistance to PD-1 checkpoint blockade in inflamed HNC associates with expression of GM-CSF and Myeloid Derived Suppressor Cell (MDSC) markers. Strategies to deplete MDSCs, such as chemotherapy, should be considered in combination or sequentially with anti-PD-1.

Cellular immune biomarkers to prognosticate for survival to adoptive T-cell therapy in advanced nasopharyngeal cancer. (Abstract #6047)
nCounter platform and reagents were used for longitudinal modular transcriptome analysis of PBMC from patients with stage 4c nasopharyngeal carcinoma who received first line chemo-immunotherapy with the aim of identifying signatures

associated with positive clinical outcomes.
Results from this study showed that 2-year survivors displayed significant decreased amounts of monocytic myeloid-derived suppressor cells (mMDSCs), compared to non-survivors.

Phase II study of durvalumab (anti-PD-L1 antibody) in combination with R-CHOP or lenalidomide plus R-CHOP in previously untreated, high-risk diffuse large B-cell lymphoma. (Abstract # TPS7573)
NanoString's Lymphoma Subtyping Test is being used to determine Cell of Origin in an ongoing clinical trial. The primary study objective is to explore the clinical activity of durvalumab with R-CHOP in non-activated B-cell-like (non-ABC) and durvalumab with lenalidomide + R-CHOP (R2-CHOP) in ABC previously untreated DLBCL; secondary objectives are to evaluate safety and identify biomarkers predictive of clinical response.

Association of molecular subtype, proliferation, and immune genes with efficacy of carboplatin versus gemcitabine addition to taxane-based, anthracycline-free neoadjuvant chemotherapy in early triple-negative breast cancer (TNBC): Results of the randomized WSG ADAPT-TN trial. (Abstract #573)
NanoString assays combining the PAM50 breast cancer assay and immune profiling were used to characterize patients in a clinical trial. In early TNBC, basal-like subtype, higher Ki67 (by IHC), and lower HER-2 score were associated with chemo-sensitivity for both neoadjuvant arms. Chemo-resistance pathways differed between the two taxane-based combinations. The positive predictive impact of immunological genes in the nab-pac - carbo arm could influence optimal patient selection for immune-modulative therapy.

Impact of consensus molecular subtyping (CMS) on overall survival (OS) and progression free survival (PFS) in patients (pts) with metastatic colorectal cancer (mCRC): Analysis of CALGB/SWOG 80405 (Alliance). (Abstract #3511)

CALGB 80405 was a randomized Ph3 trial showing no OS or PFS difference in mCRC pts treated with Bevacizumab (Bev) or Cetuximab (Cet) in the first line. A Nanostring platform was used to determine the CMS classification of 392 KRAS wt (codon 12 and 13) primary tumors and correlated it with OS and PFS in patients enrolled in 80405. Data suggest that CMS is associated with OS and PFS in first line therapy in mCRC patients. Preliminary data suggest that certain CMS may be associated with efficacy of Bev and Cet based chemotherapy.

Clinical Practice
Impact of the Prosigna (PAM50) assay on adjuvant clinical decision making in patients with early stage breast cancer: Results of a prospective multicenter public program. (Abstract # e12062)

In this prospective decision impact study, Prosigna results led to a 39% change in adjuvant therapy indication. Patients with initial indication of CHT were changed to HT alone in > 50% of cases. Thus, Prosigna results influenced the treatment decisions and reinforced its clinical utility in real-world settings. The intrinsic subtype classification based on IHC didn't show to be an adequate surrogate for the genomic subtypes as determined by Prosigna.

At the 2017 ASCO Annual Meeting, NanoString will showcase its nCounter platform, Digital Spatial Profiling and 3D Biology capabilities at booth #20097.

Abstract #	Summary	Hyperlink
e23198	Molecular classification with NanoString nCounter system in triple-negative breast cancer.	http://abstracts.asco.org/199/AbstView_199_191159.html
e23103	Molecular sequencing and gene fusion detection in non-small cell lung cancer (NSCLC) patients: Impact of co-existing alterations.	http://abstracts.asco.org/199/AbstView_199_185875.html
3076	Molecular characterization of immune-related severe adverse events (irSAE).	http://abstracts.asco.org/199/AbstView_199_193474.html
8015	Pembrolizumab (Pembro) plus lenalidomide (Len) and low-dose dexamethasone (Dex) for relapsed/refractory multiple myeloma (RRMM): Efficacy and biomarker analyses.	http://abstracts.asco.org/199/AbstView_199_186733.html
e21030	Immune cell profiling of melanoma metastases from patients	http://abstracts.asco.org/199/AbstView_199_191545.html

treated with TriMixDC-MEL
dendritic cell therapy in combination with ipilimumab.

3509	Clinical utility of colon cancer molecular subtypes: Validation of two main colorectal molecular classifications on the PETACC-8 phase III trial cohort.	http://abstracts.asco.org/199/AbstView_199_184450.html
530	Effects of age, immune landscape, and response to trastuzumab (H) in HER-2 positive (HER2+) breast cancer in NCCTG (Alliance)-N9831.	http://abstracts.asco.org/199/AbstView_199_194585.html
TPS7573	Phase II study of durvalumab (anti-PD-L1 antibody) in combination with R-CHOP or lenalidomide plus R-CHOP in previously untreated, high-risk diffuse large B-cell lymphoma.	http://abstracts.asco.org/199/AbstView_199_183083.html
E12062	Impact of the Prosigna (PAM50) assay on adjuvant clinical decision making in patients with early stage breast cancer: Results of a prospective multicenter public program.	http://abstracts.asco.org/199/AbstView_199_190002.html
7512	Clinical and biologic covariates of outcomes in ZUMA-1: A pivotal trial of axicabtagene ciloleucel (axi-cel; KTE-C19) in patients with refractory aggressive non-Hodgkin lymphoma (r-NHL).	http://abstracts.asco.org/199/AbstView_199_182974.html
9575	Multidimensional spatial characterization of the tumor microenvironment (TME) in synchronous melanoma metastases (SMM) to yield insights into mixed responses to therapy in metastatic melanoma (MM) patients (pts).	http://abstracts.asco.org/199/AbstView_199_193477.html
e14614	Intra-tumour heterogeneity in the regulation of immune-tolerogenic pathways in primary and metastatic hepatocellular carcinoma (HCC).	http://abstracts.asco.org/199/AbstView_199_188238.html
e13052	Molecular profiling of cancer outliers.	http://abstracts.asco.org/199/AbstView_199_189377.html
e12134	Immune biomarkers and treatment (tx) outcome in hormone receptor-positive (HR+) breast cancer (BC) patients (pts) treated with preoperative chemotherapy (preop chemo) plus bevacizumab (bev).	http://abstracts.asco.org/199/AbstView_199_188242.html
3511	Impact of consensus molecular subtyping (CMS) on overall survival (OS) and progression free survival (PFS) in patients (pts) with metastatic colorectal cancer (mCRC): Analysis of CALGB/SWOG 80405 (Alliance).	http://abstracts.asco.org/199/AbstView_199_188347.html
e12134	Different patterns of non immediate allergic reaction to BRAF inhibitor in two patients with metastatic melanoma.	http://abstracts.asco.org/199/AbstView_199_188242.html
e20028	Novel prognostic markers for epithelioid malignant pleural mesothelioma.	http://abstracts.asco.org/199/AbstView_199_191936.html
e21052	Different patterns of non immediate allergic reaction to BRAF inhibitor in two patients with metastatic melanoma.	http://abstracts.asco.org/199/AbstView_199_190435.html
e23091	Effect of bavituximab in combination with nivolumab on tumor immune response in a 3D ex vivo system of lung cancer patients.	http://abstracts.asco.org/199/AbstView_199_193973.html
7547	Rapid, real-time central pathology review for E1412: A novel and successful paradigm for future	http://abstracts.asco.org/199/AbstView_199_180423.html

National Clinical Trials Network diffuse large B cell lymphoma studies.

e20050	Prognostic gene signatures for lung adenocarcinoma using digital multiplexed gene expression in formalin-fixed paraffin embedded tissue.	http://abstracts.asco.org/199/AbstView_199_191389.html
9541	Distinct gene expression, mutational profile and clinical outcomes of V600E and V600K/R BRAF-mutant metastatic melanoma (MM).	http://abstracts.asco.org/199/AbstView_199_189323.html
5591	High-intermediate risk endometrial cancer: Can gene expression predict recurrence?	http://abstracts.asco.org/199/AbstView_199_194796.html
6047	Cellular immune biomarkers to prognosticate for survival to adoptive T-cell therapy in advanced nasopharyngeal cancer.	http://abstracts.asco.org/199/AbstView_199_188801.html
e12541	Identification of differentially expressed genes associated with clinical response after treatment of breast cancer skin metastases with imiquimod.	http://abstracts.asco.org/199/AbstView_199_193845.html
10503	Molecular alterations to predict survival and response to chemotherapy of pediatric low-grade glioma.	http://abstracts.asco.org/199/AbstView_199_188674.html
e23090	Anti-PD1 treatment to induce M1 polarization of tumor infiltrating macrophages in a 3D ex vivo system of lung cancer patients.	http://abstracts.asco.org/199/AbstView_199_193442.html
8557	Biomarkers of pembrolizumab (P) activity in mesothelioma (MM): Results from a phase II trial.	http://abstracts.asco.org/199/AbstView_199_191066.html
6049	Correlation of constitutive PD-1 resistance in HNC with GM-CSF expression and presence of myeloid derived suppressor cells (MDSCs).	http://abstracts.asco.org/199/AbstView_199_193264.html
511	Seven-year (yr) follow-up of adjuvant paclitaxel (T) and trastuzumab (H) (APT trial) for node-negative, HER2-positive breast cancer (BC).	http://abstracts.asco.org/199/AbstView_199_191222.html
529	Impact of DNA repair deficiency signature on outcomes in triple negative breast cancer (TNBC) patients treated with AC chemotherapy (SWOG S9313).	http://abstracts.asco.org/199/AbstView_199_193082.html
e20610	Coexistence of rearranged during transfection (RET) variants and activating EGFR mutations with their molecular implications in lung adenocarcinomas.	http://abstracts.asco.org/199/AbstView_199_188676.html
e23205	In silico validation of a prostate cancer recurrence prognostic signature based on pathways related to stem cells.	http://abstracts.asco.org/199/AbstView_199_192614.html
e13090	Characterization of germline and tumor genomic profile in unselected young black breast cancer patients.	http://abstracts.asco.org/199/AbstView_199_189758.html
8573	Pembrolizumab in patients with recurrent thymic carcinoma: Results of a phase II study.	http://abstracts.asco.org/199/AbstView_199_191168.html
TPS594	CORALLEEN: A phase 2 clinical trial of chemotherapy or letrozole plus ribociclib as neoadjuvant treatment for postmenopausal patients with luminal B/HER2-negative breast cancer.	http://abstracts.asco.org/199/AbstView_199_189618.html
11553	CCL5 expression and tumor infiltrating immune cells in triple negative breast cancer.	http://abstracts.asco.org/199/AbstView_199_190711.html

| 573 | Association of molecular subtype, proliferation, and immune genes with efficacy of carboplatin versus gemcitabine addition to taxane-based, anthracycline-free neoadjuvant chemotherapy in early triple-negative breast cancer (TNBC): Results of the randomized WSG ADAPT-TN trial. | http://abstracts.asco.org/199/AbstView_199_188021.html |

About NanoString Technologies, Inc.

NanoString Technologies provides life science tools for translational research and molecular diagnostic products. The company's nCounter® Analysis System has been employed in life sciences research since it was first introduced in 2008 and has been cited in more than 1,600 peer-reviewed publications. The nCounter Analysis System offers a cost-effective way to easily profile the expression of hundreds of genes, proteins, miRNAs, or copy number variations, simultaneously with high sensitivity and precision, facilitating a wide variety of basic research and translational medicine applications, including biomarker discovery and validation. The company's technology is also being used in diagnostics. The Prosigna® Breast Cancer Prognostic Gene Signature Assay together with the nCounter Dx Analysis System is FDA 510(k) cleared for use as a prognostic indicator for distant recurrence of breast cancer. In addition, the company is collaborating with multiple biopharmaceutical companies in the development of companion diagnostic tests for various cancer therapies, helping to realize the promise of precision oncology.

For more information, please visit www.nanostring.com.

Forward-Looking Statements

This news release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These forward-looking statements include statements regarding the capabilities of the company's products. Such statements are based on current assumptions that involve risks and uncertainties that could cause actual outcomes and results to differ materially. These risks and uncertainties, many of which are beyond our control, include market acceptance of our products; the impact of competition; as well as the other risks set forth in the company's filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. NanoString Technologies disclaims any obligation to update these forward-looking statements.

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