Bionano Genomics Announces Publication of Study in MDS and AML Showing Utility for Refined Diagnostics and Prognostic Stratification

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SAN DIEGO, Sept. 14, 2022 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) today announced the publication of a study evaluating the performance of OGM for detection of cytogenetic abnormalities in myelodysplastic syndromes (MDS) and acute myeloid leukemia (AML) samples. This work is the second independent study, following a recent publication from researchers at MD Anderson Cancer Center, showing that OGM enables better molecular characterization of MDS. This paper extends that research to AML and the findings indicate that OGM may have an even greater impact on the characterization of AML compared to MDS, which led the researchers to recommend integrating OGM into new prognostic scoring methods for both myeloid malignancies.

In the study published in *Blood Cancer Journal*, researchers analyzed samples from 68 adult MDS and AML patients using OGM to evaluate OGM's performance in the detection of cytogenetic abnormalities that may impact diagnosis and stratification into groups for treatment. In 33% of MDS samples and 54% of AML samples, the study reported more clinically relevant variants were detected using OGM than were found by traditional cytogenetic methods and these variants were reported to be highly relevant to the understanding of pathogenesis of these disorders.

Additional findings of the study:

- The R-IPSS score was changed for 6 cases, which could impact prognosis or assist in patient stratification.
- In 8 cases, OGM found clinically significant events (mainly complex cytogenetics).
- OGM also detected balanced structural variants (SVs) identifying partner genes of driver genes not routinely identified by other techniques.

"What is gratifying about this study is that it confirms the conclusions that were reported by MD Anderson regarding MDS and it extends that work to include AML. These are areas where innovation can play a big role in improvements in patient management as well as the development of new approaches in disease diagnosis and treatment," commented Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics.

The publication can be found here: https://www.nature.com/articles/s41408-022-00718-1

About Bionano Genomics

Bionano Genomics is a provider of genome analysis solutions that can enable researchers and clinicians to reveal answers to challenging questions in biology and medicine. The Company's mission is to transform the way the world sees the genome through OGM solutions, diagnostic services and software. The Company offers OGM solutions for applications across basic, translational and clinical research. Through its Lineagen business, the Company also provides diagnostic testing for patients with clinical presentations consistent with autism spectrum disorder and other neurodevelopmental disabilities. Through its BioDiscovery business, the Company also offers an industry-leading, platform-agnostic software solution, which integrates next-generation sequencing and microarray data designed to provide analysis, visualization, interpretation and reporting of copy number variants, single-nucleotide variants and absence of heterozygosity across the genome in one consolidated view. For more information, visit www.bionanogenomics.com, www.lineagen.com or www.biodiscovery.com

Forward-Looking Statements of Bionano Genomics

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "could," "believe" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) convey uncertainty of future events or outcomes and are intended to identify these forward-looking statements. Forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, the ability and utility of OGM to detect SVs in MDS or AML, the utility and adoption of using OGM in determining prognostic scores for MDS and AML, and the ability of OGM to detect clinically relevant SVs and provide a more comprehensive analysis of the genome for applications in genetic disease and cancer. Each of these forward-looking statements involves risks and uncertainties. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include the risks and uncertainties associated with: the impact of the COVID-19 pandemic on our business and the global economy; general market conditions; changes in the competitive landscape and the introduction of competitive technologies or improvements to existing technologies; failure of future study results to support those demonstrated in the paper referenced in this press release; failure OGM to detect clinically relevant SVs in MDS or AML; failure of the market to adopt the use of OGM into new prognostic scoring methods for myeloid malignancies; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; the ability of medical and research institutions to obtain funding to support adoption or continued use of our technologies; and the risks and uncertainties associated with our business and financial condition in general, including the risks and uncertainties described in our filings with the Securities and Exchange Commission, including, without limitation, our Annual Report on Form 10-K for the year ended December 31, 2021 and in other filings subsequently made by us with the Securities and Exchange Commission. All forward-looking statements contained in this press release speak only as of the date on which they were made and are based on management's assumptions and estimates as of such date. We do not undertake any obligation to publicly update any forward-looking statements, whether as a result of the receipt of new information, the occurrence of future events or otherwise.

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