



Bionano Announces Series of Major Advancements to its Suite of Computational Tools for Comprehensive Cancer Analysis

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SAN DIEGO, May 09, 2024 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) today announced significant upgrades to its suite of computational tools for comprehensive cancer analysis. These advancements to the company's VIA™ software solution enhance the detection and interpretation of aneusomies, and improve the analysis, visualization, interpretation, and reporting of data types including optical genome mapping (OGM), next generation sequencing, and microarray, for comprehensive assessment of hematological diseases.

Advancements to the suite of tools include:

- **Enhanced Detection of Critical Variants**
 - **Improved sensitivity and precision** provide increased accuracy for detection of aneusomies with variant allele fractions (VAFs) as low as 5%, with sensitivities and positive predictive values of 95% or greater
 - **Increased ability to detect small structural variants (SVs) at low allele fractions** through a reference-guided approach in a new pipeline to detect novel SVs from OGM data
- **Automated Analysis and Interpretation of Variants**
 - **Enhancements to automated SV classification** include critical SV data such as quality, frequency and size to more accurately identify disease-relevant SVs, making analysis and interpretation faster and more efficient
 - **A new standardized Phred scale calculation for SV confidence scores** aligns with industry standards and simplifies the identification of high-quality variants, instilling confidence in users for variant calls
 - **New copy number variant (CNV) dual analysis completes the variant analysis pipeline** and enables residual disease assessment with the ability to differentiate new emergent variants from original variants
- **Dynamic Visualization for Better Representation of Findings**
 - **Upgraded Circos plot visualization offers a comprehensive view of the genomic landscape**, promoting clear and accurate interpretation of datasets and differentiation between simple and complex genomes
 - **Customized and automated reporting options** offer the ability to include Circos plots, whole genome plots and ideograms for a faster and more complete visual representation of SVs relevant to sample analysis

"Understanding the full scope of genomic abnormalities, such as aneuploidy, is crucial for advancing our understanding of complex diseases, including cancer. These advancements to our VIA software and Bionano Solve pipeline offer researchers working with OGM data more precise and sensitive detection methods for genomic research. We believe the upgrades announced today will improve researchers' ability to visualize, interpret and report results in a streamlined process that offers greater utility for the identification of critical cancer signatures from a genome-wide perspective," commented Erik Holmlin, PhD, president and chief executive officer of Bionano.

About Bionano

Bionano 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, and nucleic acid extraction and purification solutions using proprietary isotachopheresis (ITP) technology. Through its Lineagen, Inc. d/b/a Bionano Laboratories business, the Company also provides OGM-based testing for certain laboratory developed tests. 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.bionano.com and www.bionanolaboratories.com.

Unless specifically noted otherwise, Bionano's OGM products are for research use only and not for use in diagnostic procedures.

Forward-Looking Statements of Bionano

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "ability," "believe," "will" 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 utility of ability of the advancements to the VIA software described in this press release to enhance the detection and interpretation of aneusomies, and to improve the analysis, visualization, interpretation, and reporting of data types including OGM, next generation sequencing, and microarray, for comprehensive assessment of hematological diseases; the ability and utility of the advancements to the VIA software described in this press release to provide researchers working with OGM data more precise and sensitive detection methods for genomic research; the ability of the upgrades announced in this press release to improve researchers' ability to visualize, interpret and report results in a streamlined process that offers greater utility for the

identification of critical cancer signatures from a genome-wide perspective ; our ability to drive adoption of the VIA software; execution of our stated strategies and plans; and other statement not of historical fact. 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 geopolitical and macroeconomic developments, such as recent and potential future bank failures, the ongoing conflicts between Ukraine and Russian and Israel and Hamas, and related sanctions, a on our business and the global economy; general market conditions, including inflation and supply chain disruptions; the failure of the advancements to the VIA software described in this press release to enhance the detection and interpretation of aneusomies, and to improve the analysis, visualization, interpretation, and reporting of data types including OGM, next generation sequencing, and microarray, for comprehensive assessment of hematological diseases; the failure of the advancements to the VIA software described in this press release to provide researchers working with OGM data more precise and sensitive detection methods for genomic research; the failure of the upgrades announced in this press release to improve researchers' ability to visualize, interpret and report results in a streamlined process that offers greater utility for the identification of critical cancer signatures from a genome-wide perspective; the failure of the VIA software to accelerate the adoption of OGM and overcome barriers to adoption of OGM by high-volume users; the failure of our ability to drive adoption of the VIA software; execution of our stated strategies and plans; changes in the competitive landscape and the introduction of competitive technologies or improvements to existing technologies; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts and our ability to continue as a "going concern"; 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, 2023 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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