



## Bionano Announces Publication Showing OGM's High Resolution Structural Variation Detection in Cancer Validated by Cas9-Directed Nanopore Sequencing

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SAN DIEGO, April 24, 2024 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO), today announced the results of an implementation study conducted by researchers at University Medical Center Groningen that compared optical genome mapping (OGM) to traditional cytogenetic methods for the detection of structural variants (SVs) in bone marrow aspirate (BMA) samples. OGM has been shown to regularly detect SVs missed by other methods, as a result of the higher resolution and sensitivity of OGM. Some of OGM's novel findings, however, are difficult for other methods to validate, because of their resolution limitations. In this paper, researchers used OGM to detect variants in the BMA samples that were missed by traditional methods, and then applied targeted Cas9-directed Nanopore sequencing to validate the variants detected with OGM and define the breakpoints at the base pair level. The study results highlight OGM's ability to provide researchers with a more comprehensive understanding of leukemia subtypes and the potential of targeted Cas9-directed Nanopore sequencing to validate new findings efficiently and at high resolution, compared to other genome analysis methods, including short read or other long read sequencing methods.

"We were pleased to see researchers conclude that the findings detected by OGM in leukemia samples were robust and superior to classical cytogenetic methods. When these findings are validated with Cas9-directed Nanopore sequencing, we believe the result is a powerful whole genome analysis tool that has the potential to identify pathogenically relevant SVs and further our understanding of molecular subtypes in blood cancer," commented Erik Holmlin, PhD, president and chief executive officer of Bionano.

The publication can be viewed [here](#).

### 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](http://www.bionano.com) and [www.bionanolaboratories.com](http://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," "potential," "shown" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances and the negatives thereof) 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 regularly detect SVs missed by other cytogenetic methods; the ability and utility of Cas-9 directed LRS to validate SVs detected using OGM; the ability and utility of OGM to detect SVs relevant to blood cancers; and other statements that are not historical facts.

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 future bank failures, the ongoing conflicts between Ukraine and Russia and Israel and Hamas, and related sanctions, and any global pandemics, inflation, or supply disruptions, on our business and the global economy; challenges inherent in developing, manufacturing and commercializing products; our ability to further deploy new products and applications and expand the markets for our technology platforms; the failure of OGM to regularly detect SVs missed by other cytogenetic methods; the failure of Cas-9 directed LRS to validate SVs detected using OGM; the failure of OGM to detect SVs relevant to blood cancers; future study results that contradict or do not support the study results described in this press release; our expectations and beliefs regarding future growth of the business and the markets in which we operate; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; our ability to effectively manage our uses of cash, and our ability to continue as a "going concern"; the ability of institutions to obtain funding to support adoption or continued use of our technologies; and 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 are under no duty to update any of these forward-looking statements after the date they are made to conform these statements to actual results or revised expectations, except as required by law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date the statements are made. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements contained in this press release.

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