Bionano Announces Publication from Johns Hopkins and MD Anderson Showing that OGM can Outperform Traditional Methods in Analysis of Multiple Myeloma

April 2, 2026

SAN DIEGO, April 02, 2026 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) announced the publication of a study in the *American Journal of Hematology* demonstrating that optical genome mapping (OGM) can significantly outperform traditional analytical methods for detection of structural variations and chromosomal abnormalities in multiple myeloma (MM), a complex hematologic malignancy known for its low success rate when analyzed by traditional cytogenetic methods. The multicenter study, led by scientists from Johns Hopkins University School of Medicine and The University of Texas MD Anderson Cancer Center, found that OGM performed on real-world clinical research samples was concordant with traditional methods, had a higher overall success rate for finding pathogenic or likely pathogenic abnormalities, and yielded a result for a substantial fraction of samples that failed to reveal an answer using traditional workflows, overcoming limitations of MM analysis by techniques such as fluorescence in situ hybridization (FISH), karyotyping, and next-generation sequencing (NGS).

Key Highlights

- **Largest Published MM Cohort to Date:** A total of 211 multiple myeloma samples—the largest cohort reported to date—were analyzed using OGM (n=100) alongside traditional methods in laboratory use today, including karyotyping (n=155), FISH (n=209), and next-generation sequencing (NGS).
- **OGM Results were Highly Concordant with those from Traditional Methods:** OGM and the traditional techniques each detected highly relevant pathogenic abnormalities, including del(17p), 1q gain/amplification, 1p loss, MYC rearrangements, and IGH rearrangements, confirming high concordance.
- **OGM had Higher Overall Success Rates for Identification of Relevant Abnormalities:** OGM identified relevant chromosomal abnormalities in 92% of cases that had been previously found to be normal by karyotyping, and OGM successfully resolving 82% of the MM samples that had previously failed karyotype altogether (meaning karyotyping returned no result).
- **OGM Identified Additional Pathogenic Findings Missed by Traditional Methods:** OGM detected additional pathogenic structural abnormalities not identified by karyotyping or FISH in approximately 30% of subjects and it uncovered cryptic and complex genomic events such as chromoanagenesis in approximately 29% of samples, highlighting a broader and more comprehensive view of genomic alterations.
- **OGM's Sensitivity and Success Rate Have the Potential to Address Medical Society Recommendations for Comprehensive MM Analysis:** The increased success rate of OGM, coming from its ability to detect pathogenic variants missed by traditional methods, makes OGM valuable for the type of genomic profiling recommendations by World Health Organization (WHO), International Consensus Classification (ICC) and International Myeloma Working Group (IMWG).

"Multiple myeloma was one of the first hematologic malignancy subtypes we worked on with OGM because of how challenging it is for the cytogenetics methods in use today to tackle," commented Erik Holmlin, president and chief executive officer of Bionano. "Several groups have now published compelling studies in MM, and this study, in particular, is significant not only because of the total number of cases and scope of analysis – comparing against karyotyping, FISH and NGS – but also because of the authors' recommendation to revise laboratory workflows to include OGM and NGS. We believe that expansion of OGM analysis into MM has the potential to drive growth in adoption and utilization of OGM."

The full research study, Optical Genome Mapping for Cytogenetic Analysis in Multiple Myeloma: Real-World Evidence, is available in the American Journal of Hematology: https://doi.org/10.1002/ajh.70175

About Bionano Genomics

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 optical genome mapping (OGM) solutions, diagnostic services and software. The Company offers OGM solutions for applications across basic, translational and clinical research. The Company also offers an industry-leading, platform-agnostic genome analysis software solution, and nucleic acid extraction and purification solutions using proprietary isotachophoresis (ITP) technology. Through its Lineagen, Inc. d/b/a Bionano Laboratories business, the Company also offers OGM-based diagnostic testing services.

For more information, visit www.bionano.com or www.bionanolaboratories.com.

Bionano's products are for research use only and not for use in diagnostic procedures.

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. All statements other than statements of historical facts contained in this press release, including statements regarding our future results of operations or financial condition, business strategy and plans, and objectives of management for future operations, are forward-looking statements. Words such as "anticipate," "believe," "can," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will," or "would" 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 of OGM to outperform traditional cytogenomic methods in the analysis MM; the ability of the expansion of OGM analysis into MM to drive growth in adoption and utilization of OGM; the ability of OGM to address medical society recommendations for comprehensive MM analysis; our ability to meet our stated goals, including to drive value and penetrate into our target markets; our commercial expectations, including the potential market opportunity for structural variation analysis and OGM; our commercial opportunities related to our OGM systems and our analysis software; continued research, presentations and publications involving OGM, its utility compared to traditional cytogenetics and our technologies; and our ability to drive adoption of OGM and our technology solutions and any other statements that are not of historical fact. Each of these forward-looking statements involves risks and uncertainties. Accordingly, investors and prospective investors are cautioned not to place undue reliance on these forward-looking statements as they involve inherent risk and uncertainty (both general and specific) and should note that they are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. 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 failure of OGM to outperform legacy cytogenomic methods in the analysis of MM; the failure of the expansion of OGM analysis into MM to drive growth in adoption and utilization of OGM; the failure of OGM to address medical society recommendations for comprehensive MM analysis; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts and our ability to continue as a “going concern,” which requires us to manage costs and obtain significant additional financing to fund our strategic plans and commercialization efforts; the risk that if we fail to obtain additional financing we may seek relief under applicable insolvency laws; the impact of adverse geopolitical and macroeconomic events, such as the ongoing international conflicts and uncertain market conditions, including inflation, tariffs, and supply chain disruptions, 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; changes in our strategic and commercial plans; the ability of medical and research institutions to obtain funding to support adoption or continued use of our technologies; study results that differ or contradict the results mentioned in this press release; and the risks and uncertainties associated with our business and financial condition in general, including the risks and uncertainties including those described in our filings with the Securities and Exchange Commission (“SEC”), including, without limitation, our Annual Report on Form 10-K for the year ended December 31, 2025, our Quarterly Reports on Form 10-Q and in other filings subsequently made by us with the SEC. 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, except as may be required by law.

CONTACTS

Company Contact:
Erik Holmlin, CEO
Bionano Genomics, Inc.
+1 (858) 888-7610
eholmlin@bionano.com

Investor Relations:
Webb Campbell
Gilmartin Group
+1 (415) 520-5817
IR@bionano.com

Source: Bionano Genomics