



Bionano Recaps Advances in Optical Genome Mapping Showcased at AMP 2025

December 11, 2025

SAN DIEGO, Dec. 11, 2025 (GLOBE NEWSWIRE) -- Bionano Genomics (NASDAQ: BNGO) participated in the Association for Molecular Pathology (AMP) Annual Meeting, held November 11-15, 2025 in Boston, MA. Key presentations at the conference highlighted how optical genome mapping (OGM) can enhance the detection of structural variants (SVs) with greater clarity and sensitivity than traditional cytogenetic and molecular techniques. Through platform presentations and poster sessions, multiple researchers emphasized the expanding utility of OGM in inherited disease testing, reproductive disorders, hematological malignancies, and solid tumors.

Key Highlights from AMP 2025:

A total of thirteen studies, noted below, highlighted the increasing use of OGM and its capacity to detect novel and clinically relevant structural variants, either independently or complementary to other molecular and cytogenetic methods. When taken together, these results demonstrate OGM's potential strength as a high-resolution, genome-wide technique for uncovering genetic mechanisms that drive complex diseases.

Researchers also presented data showing streamlined laboratory workflows and successful integration of OGM into existing cytogenetics and next-generation sequencing (NGS) pipelines, reinforcing its utility in both clinical and translational research settings.

1. Utility of Optical Genome Mapping in a Case of Recurrent Pregnancy Loss –Amira Othman, **Queens University, Canada**
2. Comprehensive Molecular Profiling of Pediatric Low-Grade Gliomas: A Multi-Omics Approach to Uncover Novel Targets – Madhumala Sadanandappa, **Geisel School of Medicine at Dartmouth, US**
3. Development of a Combined Protocol for Simultaneous Purification of DNA or RNA from FFPE Samples Using Bionano G2 FFPE DNA Kit and the Ionic System – Annick Lalonde, **CHU de Quebec, Canada**
4. Evaluating Recurrent Pregnancy Loss using Optical Genome Mapping integrated with gene-specific Structural Variant profiling – Debopriya Chakraborty, **Dartmouth Hitchcock Medical Center, US**
5. Establishing a Comprehensive Approach for WES-Negative Paediatric Population with Suspected Neurodevelopmental Disorder – Yeseul Kim, **Seoul National University College of Medicine, Korea**
6. Improved Algorithms for Optical Genome Mapping Workflows in Constitutional Disease and Oncology Applications – Andy Wing Chung Pang, **Bionano Genomics, US**
7. OGM Complementarity with Next-generation Sequencing (NGS) to Improve Genomic Assessment in Multiple Myeloma – Sara Akhavanfard, **Case Western Reserve University, US**
8. Optical Genome Mapping Enables Genome-wide Structural Variant Detection Using Fresh-Frozen Tissue – Shrivaprasad H. Sathyanarayana, **Dartmouth Hitchcock Medical Center-Dartmouth Health, US**
9. Optical Genome Mapping Uncovers Variants in an Adult T-cell Acute Lymphoblastic Leukemia (T-ALL) – Amanda Maxfield, **Geisel School of Medicine at Dartmouth, US**
10. Optical Genome Mapping Reveals Chromoanagenesis in Congenital Disorders –Gordana Raca, **Children's Hospital Los Angeles, US**
11. Optical Genome Mapping Unravels Cryptic Rearrangements in Acute Leukemias – Lina Shao, **University of Michigan, US**
12. Synopsis of Optical Genome Mapping Quality Benchmarks in 200 Cancer Samples – Kyle Tonseth, **Dartmouth Health, US**
13. Validation of Optical Genome Mapping for Lymphoid Malignancies – Maged Zeineldin, **Johns Hopkins University School of Medicine, US**

The scientific program for the event is available at the AMP website linked here: <https://amp25.amp.org/program/program-highlights/>

"We believe the work presented at AMP demonstrates how OGM is reshaping the landscape of cytogenomics and molecular pathology. As we continue to innovate and expand our platform, we're committed to enabling a future where comprehensive structural variant analysis is routine, efficient, and accessible to every lab," commented Erik Holmlin, PhD, president and CEO of Bionano.

For more information on Bionano's OGM solutions, visit www.bionano.com.

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 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 isotachopheresis (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 "can," "capacity," "believe," "potential," 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 with greater clarity and sensitivity than traditional cytogenetic and molecular techniques; the potential for increased use of OGM; the ability and utility of OGM to detect novel and clinically relevant structural variants, either independently or complementary to other molecular and cytogenetic methods; the ability and utility of OGM as a high-resolution, genome-wide technique for uncovering genetic mechanisms that drive complex diseases; the ability and utility of OGM to reshape the landscape of cytogenomics and molecular pathology; our expectations regarding product uptake, revenue, flowcell usage by customers we consider to be routine users of OGM, market development and OGM adoption, including as evidenced through publications highlighting the utility and applications of OGM, our commercial prospects and future financial and operating results; continued research, presentations and publications involving OGM, its utility compared to traditional cytogenetics and our technologies; 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 ability and utility of OGM to detect SVs with greater clarity and sensitivity than traditional cytogenetic and molecular techniques; the potential for increased use of OGM; the failure of OGM to detect novel and clinically relevant structural variants, either independently or complementary to other molecular and cytogenetic methods; the failure of OGM to be a high-resolution, genome-wide technique for uncovering genetic mechanisms that drive complex diseases; the failure of OGM to reshape the landscape of cytogenomics and molecular pathology; future publications or presentations that contradict the findings of the publications or presentations referenced in this press release; our failure to drive adoption of OGM and our technology solutions; 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 conflicts between Ukraine and Russia and Israel and Gaza 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; the risk that we are not able to complete a strategic transaction that would increase stakeholder value; 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, 2024, 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.

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