Bionano Announces Multiple Publications in 2026 Describing Unique Utility of OGM in Studies of Reproductive Health and Prenatal Genetic Disorders

June 11, 2026

Findings from 13 different studies analyzing 730 subjects to date in 2026 across multiple geographies underscore utility of OGM in key research areas including infertility, recurrent pregnancy loss, preimplantation genetics and prenatal genetic conditions

SAN DIEGO, June 11, 2026 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) announced that to date in 2026, a total of 13 studies analyzing 730 samples were published with key findings that demonstrate the utility of optical genome mapping (OGM) for the detection and characterization of structural variants (SVs) in studies of reproductive health and prenatal genetic disorders. Reproductive disorders including infertility and recurrent pregnancy loss are highly prevalent and very often carry a genetic component.

The studies span a wide spectrum of research topics in reproductive medicine, including male infertility, assisted reproduction and preimplantation genetics, recurrent pregnancy loss, prenatal diagnosis, and spontaneous abortion. Conducted by independent research groups across multiple countries, they employed a range of experimental designs including prospective cohort analyses and retrospective reanalysis of previously inconclusive cases. OGM was evaluated alongside standard methods including karyotyping, chromosome Y microdeletion testing, copy number variation (CNV) sequencing, and whole-exome sequencing; one study also assessed OGM in combination with long-read sequencing for carrier screening. Sample types included peripheral blood, prenatal specimens, and products of conception, collectively reflecting the breadth of clinical contexts in which structural variant detection is needed.

Key findings from 9 of the 13 studies include:

- **OGM identified a genetic cause in 1 in 4 subjects with unexplained infertility** — variants in a cohort of 220 individuals that had been undetectable by all prior methods
- **OGM revised or corrected genetic findings in more than half of assisted reproduction cases,** improving prior interpretations in 58.3% of cases and detecting a cryptic X-Y chromosomal translocation missed by all prior cytogenetic methods
- **OGM revealed the cause of recurrent miscarriage** by uncovering hidden chromosomal rearrangements undetected by conventional testing;
- **OGM matched and exceeded standard prenatal diagnostic methods** — up to 99.03% concordance across 217 samples, with additional structural variants the standard tests missed
- **OGM identified the genetic basis of spontaneous abortion** in 66.7% of parental cases across 24 cohorts, including de novo variants in 12.5% of those cohorts
- **OGM performed robustly with limited prenatal material,** successfully analyzing low-cell-count samples and producing results comparable to standard conditions
- **OGM resolved previously inconclusive carrier-screening cases** when combined with long-read sequencing, correctly identifying carrier status and reclassifying prior misdiagnoses

“These studies further expand the reach of the now more than 12,500 published clinical research genomes analyzed with OGM, which is a critical mass that few solutions have reached in such a short time,” said Alka Chaubey, PhD, chief medical officer of Bionano. “Across 13 independent studies, OGM added value by improving genetic resolution, refining variant interpretation, and detecting cryptic and complex structural variants that standard approaches can miss. These capabilities are among those highly sought after by clinical researchers who seek to tie together reproductive risk assessment, genetic counseling, and the search for underlying genetic drivers across infertility, pregnancy loss, and prenatal disorders.”

The following is the list of publications referenced in the key findings above:

	Title	Authors	Link
1	The landscape of structural variants in male infertility identified by optical genome mapping	Anja Kovanda et al.	https://www.medrxiv.org/content/10.64898/2026.02.27.26347236v1
2	The value of Optical genome mapping technique for the verification of suspected chromosomal structural variations among patients undergoing assisted reproduction	Yuxin Zhang et al.	https://pubmed.ncbi.nlm.nih.gov/41645367/
3	Optical genome mapping as a tool for unsolved balanced translocations in couples with adverse pregnancy outcomes: a case series	Xiaohuan Zhang et al.	https://pubmed.ncbi.nlm.nih.gov/41508122/
4	Genetic analysis of two cases of submicroscopic chromosomal structural variants leading to abnormal pregnancies	Chengxiu Xie et al.	https://pubmed.ncbi.nlm.nih.gov/41663305/
5	Etiological analysis of a family with recurrent miscarriages caused by complex genomic rearrangement	Yuxin Zhang et al.	https://pubmed.ncbi.nlm.nih.gov/41645369/
6	Evaluation of the efficacy of optical genome mapping in prenatal diagnosis: a retrospective cohort study	Kaili Yin et al.	https://pubmed.ncbi.nlm.nih.gov/41559681/

7	A methodological study on the process of prenatal optical genome mapping: focusing on cell culture and quality control	Xueting Yang et al.	https://pubmed.ncbi.nlm.nih.gov/41547838/
8	Integrating Optical Genome Mapping With Conventional Methods in Families Seeking Genetic Counseling	Yiyun Xu et al.	https://pubmed.ncbi.nlm.nih.gov/41565457/
9	Xq28 duplication not F8 inversion: integrated genetic reanalysis redefines prenatal carrier diagnosis	Xueting Yang et al.	https://pubmed.ncbi.nlm.nih.gov/41882109/

About Bionano Genomics
Bionano is a provider of genome analysis solutions that 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. Bionano offers OGM solutions for applications across basic, translational, and clinical research, as well as an industry-leading, platform-agnostic genome analysis software solution and nucleic acid extraction and purification solutions using proprietary isotachophoresis (ITP) technology. Through its 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 safe harbor provisions 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,” “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 forward-looking statements. Forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things: our expectations regarding market adoption of our products; our commercial prospects and future financial and operating results; and our ability to meet our stated goals and commercial opportunities. 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. There are a number of important factors that could cause the actual results to differ materially from those expressed in any forward-looking statement made by us. These factors include, but are not limited to: the ability and utility of OGM (as defined above) to detect and characterize SVs (as defined above) in reproductive health and prenatal genetic disorders as described in the studies referenced in this press release; future study results that differ or contradict the results from studies mentioned in this press release; our ability to continue as a going concern as disclosed in our filings with the SEC, which requires us to manage costs and obtain significant additional financing to fund our strategic plans and commercialization efforts; our ability to execute on our strategy and achieve our objectives; our ability to continue to drive OGM adoption by potential customers for routine use in genomic analysis; continued research, presentations and publications involving OGM and its utility compared to traditional cytogenetics and our technologies; our ability to drive adoption of OGM and our technology solutions; our ability to further deploy new products and applications for our technology platforms; our expectations and beliefs regarding future growth of the business and the markets in which we operate; our ability to consummate any strategic alternatives including the risk that if we fail to obtain additional financing we may seek relief under applicable insolvency laws; the size and growth potential of the markets for our products, and our ability to serve those markets; the rate and degree of market acceptance of our products; our ability to manage the growth of our business and integrate acquired businesses; our ability to expand our commercial organization to address effectively existing and new markets that we intend to target; the impact from future regulatory, judicial, and legislative changes or developments in the U.S. and foreign countries; our ability to compete effectively in a competitive industry; the introduction of competitive technologies or improvements in existing technologies and the success of any such technologies; the performance of our third-party contract sales organizations, suppliers and manufacturers; our ability to attract and retain key scientific or management personnel; the impact of adverse geopolitical and macroeconomic developments, such as recent and future bank failures, ongoing international conflicts, and related sanctions, regional or global pandemics, inflation, tariffs, increased cost of goods, supply chain issues, and global financial market conditions; on our business and operations, as well as the business or operations of our suppliers, customers, manufacturers, research partners and other third parties with whom we conduct business and our expectations with respect to the duration of such impacts and the resulting effects on our business; our ability to realize the anticipated benefits and synergies of our prior and any future acquisitions or other strategic transactions; our ability to attract collaborators and strategic partnerships; 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 (“SEC”), including, without limitation, our Annual Report on Form 10-K for the year ended December 31, 2025, any subsequently filed 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.

CONTACT
Investor Relations:
Webb Campbell
Gilmartin Group
+1 (415) 520-5817