



## **Bionano Genomics Announces a Publication From the First Affiliated Hospital of Zhengzhou Highlighting the Utility of OGM**

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SAN DIEGO, May 12, 2022 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO), pioneer of optical genome mapping (OGM) solutions on the Saphyr<sup>®</sup> system and provider of NxClinical<sup>™</sup> software, the leading solution for visualization, interpretation and reporting of genomic data, today announced the publication of an evaluation of OGM from The First Affiliated Hospital of Zhengzhou, the largest hospital in Central China, highlighting the utility of OGM for structural variant analysis, including in a workflow for preimplantation genetic testing.

In this study, researchers, led by Dr. Xiangdong Kong, evaluated the use of OGM to detect chromosome balanced translocations and compared results to a variety of methods, including karyotype analysis, FISH, and CNV-seq. Balanced reciprocal translocations are one of the most common chromosomal abnormalities and may lead to infertility, recurrent pregnancy loss, or genetic defects. Analysis of this abnormality may be helpful in the screening and analysis of embryos prior to implantation, as part of fertility treatment. The paper suggests a need for new methods to complement existing analysis techniques, such as karyotype and FISH, which are described as time consuming and relatively low-resolution, and next generation sequencing (NGS) which can enable copy number variation (CNV) analyses at the whole genome level but cannot be used to detect chromosomal translocations or inversions. The authors demonstrated that OGM performed well in the analysis of these variants, which led them to suggest that OGM could be used as part of the workflow to detect chromosomal abnormalities at a higher resolution.

"We believe this paper highlights the growing validation of OGM in different applications for clinical research in cytogenetics. The work by Dr. Kong and his team at Zhengzhou University further extends this validation and highlights the utility of OGM. Incorporating OGM data in the analysis of embryos prior to implantation is innovative and the approach could be part of a solution for recurrent pregnancy loss, which represents an area of unmet need globally," commented Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics.

The paper is available at:

[Evaluation of optical genome mapping for detecting chromosomal translocation in clinical cytogenetics - Dai - - Molecular Genetics & Genomic Medicine - Wiley Online Library](#)

### **About Bionano Genomics**

Bionano Genomics 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. Through its Lineagen business, the Company also provides diagnostic testing for patients with clinical presentations consistent with autism spectrum disorder and other neurodevelopmental disabilities. Through its BioDiscovery business, 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.bionanogenomics.com](http://www.bionanogenomics.com), [www.lineagen.com](http://www.lineagen.com) or [www.biodiscovery.com](http://www.biodiscovery.com)

### **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. Words such as "may," "will," "could," "suggest," 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 and the Saphyr<sup>®</sup> system to detect chromosome balanced translocations in preimplantation embryos and the potential for OGM to become part of workflow analyses to detect chromosomal abnormalities. 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 the COVID-19 pandemic on our business and the global economy; general market conditions; changes in the competitive landscape and the introduction of competitive technologies or improvements in existing technologies; failure of future study results to support those demonstrated in the paper referenced in this press release; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; 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, 2021 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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