



Bionano Announces Publication from Institut Curie Showing Utility of OGM for Detection of HRD in Breast Cancer

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SAN DIEGO, Jan. 11, 2023 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) today announced the publication of a study analyzing optical genome mapping (OGM) as a method to identify homologous recombination deficiency (HRD) in breast cancer samples. The study reported that OGM successfully assessed levels of HRD in all samples, potentially improving genomic profiling of solid tumor samples and offering an efficient, lower-cost method of detecting HRD with greater sensitivity than whole genome sequencing (WGS).

In the study, researchers at Institut Curie analyzed fifteen retrospective HRD triple negative breast carcinoma samples from the RadioPARP clinical trial investigating poly ADP ribose polymerase (PARP) inhibitors to assess OGM's ability to identify HRD tumors, which are associated with a hypersensitivity to some classes of drugs, in particular to PARP inhibitors. In this study, OGM identified high numbers of tandem duplication and insertion events and large-scale genomic alterations that are characteristic of HRD, including subclonal variants missed by WGS. Though WGS is commonly used for HRD detection, the study authors highlighted challenges associated with using traditional methods and cited OGM's robust detection of large structural variants with a high resolution, even in samples with low tumor content, as evidence of its potential application as a first-line method in solid tumor analysis for identification of HRD.

"This paper serves as a good demonstration of OGM's utility for assessing HRD, which is an emerging biomarker used to identify patients who may respond to PARP inhibitors. We believe this study shows that OGM can help overcome the limitations of traditional methods and may capture greater numbers of genomic events reflective of HRD, which we believe may translate into more patients being qualified for life-saving treatments, such as PARP inhibitors," commented Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics.

This publication can be found [here](#).

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, Inc. d/b/a Bionano Laboratories 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, www.bionanolaboratories.com or 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 "believe," "can," "may," "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 tandem duplications, insertions, and large-scale genomic alterations that are characteristic of HRD in breast cancer samples; the ability and utility of OGM to detect HRD in breast cancer samples; and the ability and utility of OGM HRD detection to impact clinical decision making. 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: global and macroeconomic events, such as the impact of the COVID-19 pandemic and the ongoing Ukraine-Russian conflict and related sanctions, 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; failure of OGM to detect tandem duplications, insertions, and large-scale genomic alterations that are characteristic of HRD; failure of OGM to improve genomic profiling of solid tumor samples through more efficient and cost-effective detection of HRD in breast cancer samples with greater sensitivity than whole genome sequencing (WGS); future study results contradicting the results reported in the publication referenced above; 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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