



Bionano Genomics Announces Significant Progress in China with WeHealth Shanghai's Adoption of Bionano's Saphyr System and the Demonstration by Various Institutions of Optical Genome Mapping in Reproductive Health and Genetics

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SAN DIEGO, July 06, 2021 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) announced significant progress in China with the adoption of its Saphyr® System for optical genome mapping (OGM) by WeHealth Shanghai, a leading provider of genome analysis services in reproductive health. The adoption was announced at the Structural Variation Symposium in Shanghai, organized with support from the Shanghai Society of Genetics. WeHealth announced the launch of its complete genome-analysis offering with OGM combined with whole-exome or whole-genome sequencing.

The Structural Variation Symposium also featured a series of scientific presentations covering a wide range of applications of OGM in genome analysis. Multiple presentations were delivered on reproductive health, a significant need and opportunity in China with approximately 16 million births annually. Dr. Xiangdong Kong from The First Affiliated Hospital of Zhengzhou University used OGM for prenatal testing in families with a history of facioscapulohumeral muscular dystrophy (FSHD), a form of muscular dystrophy. Since the current standard of care for FSHD analysis uses an antiquated technology requiring quantities of DNA far greater than can be collected by amniocentesis, prenatal testing for FSHD has not occurred in China. Using OGM, Dr. Kong successfully analyzed 12 prenatal specimens for FSHD, representing an opportunity to redefine the standard of care in China regarding FSHD analysis with OGM.

Dr. Miao Jiang from The First Affiliated Hospital of Soochow University studied the blood clotting disorder hemophilia A. Approximately 40% of hemophilia A cases are caused by a large inversion in the gene for the blood clotting factor F8. Currently, the diagnostic workflow for hemophilia A testing consists of a combination of two types of polymerase chain reaction (PCR), multiplex ligation-dependent probe amplification (MLPA), Sanger sequencing and a custom next-generation sequencing (NGS) panel. Dr. Jiang showed that OGM can replace four traditional techniques with a single assay, and that OGM combined with the NGS panel has the potential to be the new standard for hemophilia A testing.

Dr. Chenming Xu from the Obstetrics & Gynecology Hospital of Fudan University used OGM to analyze the genomes of parents suffering from recurrent pregnancy loss (RPL) in the context of preimplantation genetic testing. OGM was able to successfully identify structural variants in the parents at sufficiently high resolution so that subsequent embryo selection using PCR was possible, bypassing the need for fluorescent *in-situ* hybridization (FISH) for the selection of embryos, which is comparably slower and requires custom probes, which are expensive.

"This week's WeHealth symposium demonstrates the success of our market development efforts in China", commented Erik Holmlin, PhD, CEO of Bionano Genomics. "We are seeing both a growth in Saphyr adoption and an expansion of its applications. The China market is important in part because it represents one of the world's largest in reproductive health and genetics. We continue to invest in our commercial operations in China, driven by our new commercial leaders, CCO Jason Priar and China business leader Li Yu. We look forward to seeing continued progress in China as a result of these efforts."

About Bionano Genomics

Bionano is a genome analysis company providing tools and services based on its Saphyr system to scientists and clinicians conducting genetic research and patient testing, and providing diagnostic testing for those with autism spectrum disorder (ASD) and other neurodevelopmental disabilities through its Lineagen business. Bionano's Saphyr system is a research use only platform for ultra-sensitive and ultra-specific structural variation detection that enables researchers and clinicians to accelerate the search for new diagnostics and therapeutic targets and to streamline the study of changes in chromosomes, which is known as cytogenetics. The Saphyr system is comprised of an instrument, chip consumables, reagents and a suite of data analysis tools. Bionano provides genome analysis services to provide access to data generated by the Saphyr system for researchers who prefer not to adopt the Saphyr system in their labs. Lineagen has been providing genetic testing services to families and their healthcare providers for over nine years and has performed over 65,000 tests for those with neurodevelopmental concerns. For more information, visit www.bionanogenomics.com or www.lineagen.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" 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 anticipated use of Saphyr by the institutions named in this press release; potential broader adoption or use of Saphyr for reproductive health and genetics in China and other regions; OGM's effectiveness and utility in reproductive health applications, including its potential to redefine the standard of care in such applications; Saphyr's capabilities in comparison to and in conjunction with other genome analysis technologies and its potential to replace traditional cytogenetic technologies; our plans and expectations regarding increased adoption of Saphyr in China or other existing markets and expansion into new markets; our assessments regarding market opportunities; and the execution of Bionano's strategy. 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 products; 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; the loss of key members of management and our commercial team; 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, 2020 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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