



Bionano Genomics to Acquire Purigen Biosystems to Enable Further Simplified and Accelerated DNA Isolation for Optical Genome Mapping (OGM) and Address Difficult Sample Types in New Applications with Isotachophoresis (ITP) on the Ionic Purification System

November 28, 2022

- *Acquisition adds isotachophoresis (ITP), a proprietary technology licensed exclusively from Stanford University and developed by Purigen Biosystems for isolation and purification of nucleic acids, to the arsenal of tools for potentially simplifying ultra high molecular weight (UHMW) DNA isolation and purification for optical genome mapping (OGM) with more consistency at scale*
- *Adds the Ionic® Purification System, a commercially available platform for isolation of DNA and RNA from complex biological samples including those with low cell counts or otherwise challenging types such as formalin-fixed paraffin embedded (FFPE) tumor tissue, to Bionano's portfolio of products*
- *Adds a world-class team with strong experience in developing, commercializing and supporting ITP-based systems for isolation and purification of biomolecules from a wide variety of sample types*
- *Bionano to host a conference call and webcast to discuss the transaction tomorrow, Tuesday, November 29, at 8:30 a.m. ET*

SAN DIEGO, Nov. 28, 2022 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (NASDAQ: BNGO) today announced that it has entered into a definitive agreement to acquire Purigen Biosystems, Inc. (Purigen), a company that develops and commercializes automated nucleic acid extraction and purification solutions using proprietary [isotachophoresis \(ITP\) technology](#), which was licensed exclusively from Stanford and developed by Purigen. Purigen's ITP technology is a solution-based purification approach and therefore different from protocols in routine use today, which tend to rely on binding to a matrix, washing and then removal from the matrix. Those protocols are less efficient at capturing molecules from dilute solutions or from samples with small amounts of cells and often result in shorter average lengths of DNA than what optical genome mapping (OGM) requires. The transaction is expected to accelerate the adoption of OGM due to anticipated improvements in its ultra high molecular weight (UHMW) DNA sample preparation workflow.

"Bionano continuously seeks to enhance its technology portfolio with the goal of making OGM even more powerful and accessible. Today's announcement of the proposed acquisition of Purigen is another step towards that goal. Over the past decade, we believe Purigen's talented team has developed best-in-class solutions for automated DNA and RNA extraction from complex samples. We are thrilled to welcome the Purigen team to Bionano and look forward to working together to transform the way the world sees the genome," said Erik Holmlin, PhD, president and chief executive officer of Bionano Genomics. "We believe the addition of the Ionic Purification System, its ITP technology and the Purigen team can enable Bionano to further simplify and streamline the process of DNA isolation for OGM and may also enable new applications for more sample types where low concentrations and small quantities of cells and the UHMW DNA they contain have proven to be challenging for our current solutions."

Strategic Benefits of the Transaction

- **Expands Bionano's Sample Prep Portfolio Capabilities Toward Creating an End-to-End Solution for OGM that May Accelerate Adoption of OGM by Further Simplifying the DNA Isolation Workflow**
 - Incorporating ITP is expected to enable Bionano to tackle a number of sample types that are commonly used today throughout cancer research, genetic disease and other areas of discovery research and cell bioprocessing
 - This proposed acquisition follows an extensive co-development program in which the Purigen team demonstrated the feasibility of isolating UHMW DNA on the Ionic system. Bionano plans to incorporate Purigen's ITP-based methods into the OGM workflow of Bionano's Saphyr® system, which could potentially further simplify UHMW DNA purification, thus making it faster and providing reliability at scale that would be beneficial for routine use in a commercial setting
 - Along with prior acquisitions of Lineagen and BioDiscovery, this acquisition furthers Bionano's goal of adding solutions from sample to answer to create an end-to-end solution for the adoption of OGM
 - This proposed acquisition complements Bionano's co-development partnership with Hamilton, which has developed a solution for the automation of Bionano's current isolation chemistry, by enabling Bionano to address more

challenging sample types and samples with limited quantities of cells

Transaction Details

Bionano's transaction consideration will be up to \$64 million, including \$32 million cash paid at closing subject to adjustment for, among other things, cash, unpaid indebtedness, unpaid transaction expenses and net working capital relative to a specified target. The remainder of the consideration is contingent on the achievement of certain milestones. The acquisition is expected to close on or before December 8, 2022. Cowen and Company L.L.C. served as exclusive financial advisor to Bionano on this transaction.

Conference Call and Webcast

The Company will host a conference call and live webcast tomorrow, Tuesday, November 29, 2022 at 8:30 a.m. ET to discuss this announcement. To participate in the conference call, please dial one of the following numbers 15 minutes before the scheduled start time:

United States: +1-833-630-1956

International: +1-412-317-1837

Conference ID: 0803294

Webcast: <https://edge.media-server.com/mmc/p/juzb4jec>

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.

About Purigen Biosystems

Purigen Biosystems is focused on redefining nucleic acid sample preparation with an innovative platform based on the isotachopheresis technology invented by Juan Santiago, PhD, and his team at Stanford University. Purigen's automated benchtop instrument and accompanying microfluidic chip purify nucleic acid samples from a wide variety of sources, including minute or otherwise challenging cancer samples. The purified nucleic acids are immediately compatible with a wide range of downstream detection methods, including next-generation sequencing, PCR, and other genomic tests. For more information, visit www.purigenbio.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 "look forward to," "can," "believe," "may," "potential," "plan," "would," "expect" 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 in this press release include statements regarding Bionano and Purigen, including, but not limited to, statements related to the proposed acquisition of Purigen Biosystems and the anticipated closing, results and benefits thereof, including: improvements in the OGM sample preparation workflow, such as simplifying it and making it more consistent and reliable at scale, which, among other things would be beneficial for routine use in a commercial setting; accelerated or expanded adoption of OGM in clinical research for cancer and genetic disease, as well as in discovery research and applications in cell bioprocessing; development of new applications for more sample types with OGM through incorporation of the ITP technology; and incorporation of the ITP technology into the OGM workflow. 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 ability of Bionano and Purigen to complete the transaction on the agreed-upon terms, which could be impacted by, among other things, stockholder litigation or the occurrence of any event, change or other circumstance that could give rise to the termination of the definitive transaction agreement relating to the proposed transaction; diversion of management's attention from ongoing business operations in order to negotiate and complete the transaction; failure to integrate the ITP technology into the OGM workflow or otherwise successfully integrate the Purigen business, including the failure to complete development of ITP applications for OGM; failure to achieve the benefits contemplated by the transaction; the transaction costs and/or inestimable liabilities associated with completing the transaction and their impact on our results of operations and financial condition; increased regulatory scrutiny; the impact of adverse geopolitical and macroeconomic events, such as the COVID-19 pandemic and the ongoing conflict between Ukraine and Russia, on our business and the global economy; general market conditions and stock price volatility; changes in the competitive landscape and the introduction of competitive technologies or improvements to existing technologies; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; the ability of our target customers 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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Source: Bionano Genomics