Bionano Announces Robust Presence at Upcoming Cytogenetics Conferences ESHG and ACC with 39 Scientific Presentations and Posters Highlighting the Utility of the Optical Genome Mapping Workflow

May 30, 2024

- *A record 31 scientific presentations and posters at the 2024 European Society for Human Genetics (ESHG) Annual Conference and 8 scientific presentations and posters at the 2024 American Cytogenomics Conference (ACC) will highlight the application of optical genome mapping (OGM) in genetic disorder, rare disease, and cancer research applications*
- *Bionano will host a sponsored session at ESHG featuring an overview of the Company's OGM workflow delivered by Bionano's chief medical officer, Dr. Alka Chaubey, a presentation from Dr. Laura Batlle Masó at Vall d'Hebron Institute of Research (Spain) on OGM's potential utility in resolving hereditary angioedema (HAE) cases, a presentation from Dr. Bart van der Sanden at Radboud UMC (Netherlands) on how OGM may be useful for the detection of structural variants (SVs) relevant to rare disease, and a presentation from Marlene Ek at Karolinska Institute (Sweden) highlighting OGM's ability to unveil more cytogenomic insights into multiple myeloma samples than traditional cytogenetic methods*
- *At ACC, a sponsored session will feature Dr. Mike Gallagher, market development manager at Bionano, highlighting OGM's ability to enhance detection of pathogenic variants and to advance genetic disease research. Dr. Gallagher will also introduce the latest innovations in the OGM workflow, including the Stratys™ system and VIA™ software*

SAN DIEGO, May 30, 2024 (GLOBE NEWSWIRE) -- Bionano Genomics, Inc. (Nasdaq: BNGO) today announced the Company's robust participation at two upcoming cytogenetics conferences, the 2024 European Society for Human Genetics (ESHG) Annual Conference and the 2024 American Cytogenomics Conference (ACC), with a record 39 scientific presentations and posters across the two conferences that highlight the utility of the Company's OGM workflow for applications in genetic disease, cancer, and rare disease research and discussing the latest advances to the Company's suite of products, including the high throughput Stratys system and VIA software.

ESHG brings together industry and academic professionals annually to discuss new technologies and advances in the field of human genetics. ESHG sessions will take place June 1-4, 2024 virtually and in Berlin, Germany.

ACC is a biennial conference focused on new technologies and advances in the field of cytogenetics. ACC will be held June 2-5, 2024 in Norfolk, Virginia.

Bionano will host a sponsored session at ESHG featuring an overview of the Company's OGM workflow delivered by Bionano's chief medical officer, Dr. Alka Chaubey, a presentation from Dr. Laura Batlle Masó at Vall d'Hebron Institute of Research (Spain) on OGM's potential utility in resolving hereditary angioedema (HAE) cases, a presentation from Dr. Bart van der Sanden at Radboud UMC (Netherlands) covering how OGM may be useful for the detection of SVs relevant to rare disease, and a presentation from Marlene Ek at Karolinska Institute (Sweden) highlighting OGM's ability to unveil more cytogenomic insights into multiple myeloma samples than traditional cytogenetic methods.

At ACC, a sponsored session will feature Dr. Mike Gallagher, market development manager at Bionano, highlighting OGM's ability to enhance detection of pathogenic variants and to advance genetic disease research. Dr. Gallagher will also introduce the latest innovations in the OGM workflow, including the Stratys system and VIA software.

Erik Holmlin, PhD, president and chief executive officer of Bionano, stated, "We are excited to see the progress that the global OGM community is making, which is highlighted by the growth in the number of scientific posters and presentations on OGM from the last time the ESHG and ACC conferences were held. We believe this expansion demonstrates the increased customer adoption of OGM, with routine and repeated utilization for innovative research into genetic disorders, cancer and rare disease."

ESHG scientific presentations and poster sessions:

Scientific presentations and poster sessions on OGM at ESHG take place in the exhibition halls unless otherwise noted.

Abstract/ Poster Number	Title	Authors	Presented
P14.015.A	Deciphering a complex short size RERE rearrangement: importance of combined approaches for duplication interpretation	Fauqueux J.	June 2, 2024 10:15-11:15 AM CEST
P01.065.A	A Canadian lab's experience using optical genome mapping to clinically genotype hematological neoplasms	Hamadeh Z.	June 2, 2024 10:15-11:15 AM CEST
P03.025.A	Characterization of a complex rearrangement between three chromosomes in a fetus with skeletal anomalies by optical genome mapping	Heinrich U.	June 2, 2024 10:15-11:15 AM CEST

P16.077.A	Accurate identification of pathogenic structural variants guided by multi-platform comparison	Moeinzadeh M.	June 2, 2024 10:15-11:15 CEST
P01.163.B	Deciphering the molecular complexity of the IKZF1 plus profile using optical genome mapping	Lühmann J.	June 2, 2024 16:45-17:45 PM CEST
P12.023.B	SORD and SORD2P inversion: long read sequencing identifies a novel genetic mechanism underlying inherited neuropathy	Manini A.	June 2, 2024 16:45-17:45 PM CEST
P04.029.B	Optical genome mapping facilitates rapid characterization of structural variants in families with developmental eye anomalies	Merepa S.	June 2, 2024 16:45-17:45 PM CEST
P01.007.C	Large genomic rearrangement: tandem duplication and triplication in BRCA1 gene causative for hereditary breast and ovarian cancer	Aldrige Allister B.	June 3, 2024 10:15-11:15 AM CEST
P15.102.C	Establishing ultra-rapid genome sequencing in neonatal and pediatric intensive care units in Germany – project Baby Lion	Auber B.	June 3, 2024 10:15-11:15 AM CEST
P14.029.C	Optical genome mapping of a patient with ring chromosome 3 shows the importance of choosing the proper reference genome for the analysis	Burssed B.	June 3, 2024 10:15-11:15 AM CEST
P14.025.C	Positive predictive value of balanced structural variants reported through short-read genome sequencing: do we need orthogonal confirmation?	Chatron N.	June 3, 2024 10:15-11:15 AM CEST
P14.013.C	Optical genome mapping identifies hidden structural variants in 58 undiagnosed rare disease patient-parent trios	Hoischen A.	June 3, 2024 10:15-11:15 AM CEST
P01.160.C	Deciphering copy number variations within the complex genomic region of the PMS2 gene using optical genome mapping	Maier J.	June 3, 2024 10:15-11:15 AM CEST
P12.032.C	The WWOX gene variants detection in patient with cerebellar ataxia using optical genome mapping	Rutkowska K.	June 3, 2024 10:15-11:15 AM CEST
P01.051.C	Enhanced cytogenomic analysis of complex karyotype in myelodysplastic syndrome using optical genome mapping	Valkama A.	June 3, 2024 10:15-11:15 AM CEST
P21.065.D	Advancing genetic diagnostics: optical genome mapping's efficacy in identifying structural variants for autosomal recessive diseases	Beyza Ogutlu O.	June 3, 2024 16:45-17:45 PM CEST
P15.079.D	Benefits of the analysis of a complex chromosomal rearrangement in the implementation of long read approaches	Chambon P.	June 3, 2024 16:45-17:45 PM CEST
P04.011.D	A combined approach of innovative DNA- and RNA-technologies reveals hidden LINE-1/ERV insertion in IQCB1 as causative variant for Senior Løken syndrome	de Bruijn S.	June 3, 2024 16:45-17:45 PM CEST
P01.056.D	Exome sequencing identified rare recurrent copy number variants and hereditary breast cancer susceptibility	Mantere T.	June 3, 2024 16:45-17:45 PM CEST
P15.091.D	A multimodal approach to molecular diagnosis in NF1 highlights the need for bespoke analysis in undiagnosed patients	McAleese-Park E.	June 3, 2024 16:45-17:45 PM CEST
P10.021.D	Optical genome mapping finally unveils the genetic cause of aniridia and intellectual disability in a 17-year-old after seven years of diagnostic odyssey	Telman W.	June 3, 2024 16:45-17:45 PM CEST
E-poster	Optical genome mapping for comprehensive genomic rearrangement analysis	Flunkert J.	Online

E-poster	Optical genome mapping: lighting the way in complex clinical cases	Monge Lobo I.	Online
E-poster	Refining genotype-phenotype correlation in complex chromosomal rearrangements using optical genome mapping – case report	Vallova V.	Online
E-poster	Unraveling the mysteries of balanced rearrangements: optical genome mapping spotlights BCL11B misregulation in a familial translocation	Alcalá San Martín A.	Online
E-poster	Optical genome mapping (OGM) allows the characterization of a complex chromosome rearrangement associated with recurrent pregnancy loss	Trost D.	Online
E-poster	Focus on deletions and duplications identified by optical genome mapping technique in a cohort of 100 patients: comparison with MCA	Doco-Fenzy M.	Online

Room	**Title**	**Presenter**	**Presented**
Poster presentation	Optical genome mapping identifies hidden structural variants in previously undiagnosed rare disease cases in Solve-RD	van der Sanden B.	June 1, 2024 19:00-19:15 PM CEST, Room A8
Poster presentation	Multiomics and deep phenotyping in MECP2 Duplication syndrome: insight into disease severity, expression variability, and nucleic acid therapeutics	Pehlivan D.	June 1, 2024 19:45-20:00 PM CEST, Room A8
Poster presentation	Next generation cytogenetics by optical genome mapping	Kanagal-Shamanna R.	June 3, 2024 08:30-10:00 AM CEST, Room A2
Sponsored session	Insights into constitutional disorders and beyond: scaling to new heights with optical genome mapping	Chaubey A., Batlle Masó L., van der Sanden B., Ek M.	June 3, 2024 14:00-15:30 PM CEST Room New York 3 (Level 1)

ACC scientific presentations and poster sessions:

Scientific presentations and poster sessions on OGM at ACC take place in the exhibition hall.

Poster/Presentation	**Title**	**Presenter**	**Presented**
Exhibitor theater session	Revolutionizing cytogenomics with optical genome mapping: high-resolution structural variant detection with an elevated sample-to-answer workflow	Gallagher M.	June 3, 2024 12:15-12:35 PM EST
Poster presentation	Enhanced detection of primary oncogenic drivers in pediatric T-lymphoblastic leukemia (T-ALL) by optical genome mapping (OGM)	Raca G.	June 3, 2024 2:00-2:15 PM EST
Poster presentation	Utility of optical genome mapping as an additional tool to standard cytogenetic workup in hematological malignancies	Toruner G.	June 3, 2024 2:15-2:30 PM EST
Poster presentation	A curated research catalogue of structural variation from 809 postnatal cases detected by optical genome mapping	Pang A.	June 3, 2024 4:00-4:15 PM EST
Poster presentation	A search for genetic determinants in neural tube defects using optical genome mapping	Sahajpal N.	June 3, 2024 4:15-4:30 PM EST
Poster presentation	Cross-comparison of optical genome mapping and chromosomal microarray data using VIA software	Yu J.	June 3, 2024 4:30-4:45 PM EST
Poster hall	Efficient hematological malignancy analysis and reporting workflow using optical genome mapping	Clifford B.	

Poster hall	Isotachophoresis (ITP) for high-throughput isolation of UHMW gDNA suitable for optical genome mapping (OGM)	Yadav M.

More details on Bionano's presence at the ESHG conference can be found here, and virtual posters will be shown here; more details on Bionano's presence at the ACC conference can be found here.

About Bionano

Bionano 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. The Company also offers an industry-leading, platform-agnostic genome analysis software solution and nucleic acid extraction and purification solutions using proprietary isotachophoresis (ITP) technology. Through its Lineagen, Inc. d/b/a Bionano Laboratories business, the Company also offers OGM-based diagnostic testing services. For more information, visit www.bionano.com, www.bionanolaboratories.com or www.purigenbio.com.

Unless specifically noted otherwise, Bionano's OGM products are for research use only and not for use in diagnostic procedures.

Forward-Looking Statements of Bionano

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "ability," "believe," "may," "potential," "will," 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, OGM's utility for genetic disorder, rare disease, and cancer research applications; OGM's ability and utility for resolving HAE cases; the ability and utility of OGM to detect SVs relevant to rare disease; the ability of OGM to unveil more cytogenomic insights into multiple myeloma samples than traditional cytogenetic methods; OGM's ability to enhance detection of pathogenic variants and to advance genetic disease research; the utility of the latest innovations in OGM workflows, including the Stratys system and VIA software; the utility of OGM for research in the areas reported in the presentations given and the posters made available at the ESHG Annual Conference 2024 and AAC 2024; the growth and adoption of OGM for use in genetic disorder, rare disease, and cancer research applications; the ability and utility of our OGM solutions to drive market adoption of OGM; and any other statements not of historical fact. 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 global pandemics, bank failures, interest rate changes, supply disruptions, and the ongoing conflicts in the Ukraine and Russia and between Israel and Hamas, 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; the failure of OGM's utility for genetic disorder, rare disease, and cancer research applications; the failure of OGM to resolve HAE cases; the failure of OGM to detect SVs relevant to rare disease; the failure of OGM to unveil more cytogenomic insights into multiple myeloma samples than traditional cytogenetic methods; the failure of OGM to enhance detection of pathogenic variants and to advance genetic disease research; the failure of our latest innovations in OGM workflows, including the Stratys system and VIA software; the failure of OGM for research in the areas reported in the presentations given and the posters made available at the ESHG Annual Conference 2024 and AAC 2024; the growth and adoption of OGM for use in genetic disorder, rare disease, and cancer research applications; the ability and utility of our OGM solutions to drive market adoption of OGM; the ability of our OGM solutions to offer the anticipated benefits for and contributions to the areas reported in the presentations given and posters made available at the ESHG Annual Conference 2024 and AAC 2024; future study results contradicting the results reported in the presentations given and posters made available at the ESHG Annual Conference 2024 and AAC 2024; 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; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts and to continue as a "going concern"; 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, 2023 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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