bionano® GENOMICS + PURIGEN BIOSYSTEMS

Creating an End-to-End Solution for OGM &
Transforming the Way the World Sees the Genome

Investor Call and Webcast
November 29, 2022

Legal Disclaimer

This presentation contains forward-looking statements. Forward-looking statements describe future expectations, plans, results or strategies and are generally preceded by terms such as “may,” “will,” “should,” “could,” “would,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “projects,” “predicts,” “potential,” “goal” and similar expressions (including the negative thereof). Forward-looking statements in this presentation include, but are not limited to, statements regarding: (i) growth drivers and expected levels of our organic growth; (ii) Bionano's ability to create an end-to-end solution for OGM; (iii) the benefits of isotachophoresis to the OGM workflow in comparison to other techniques and technologies; (iv) the benefits the acquisition may bring to Bionano's partnerships; (v) expected adoption of OGM and the benefits the acquisition may have in promoting such adoption; (vi) the benefits of integrating Purigen's assets and personnel with Bionano's business; (vii) the anticipated closing of the acquisition and the timing and expectations related thereto; (viii) Bionano's plans and expectations with respect to Purigen's business following the closing of the acquisition; (ix) the anticipated benefits of the transaction summarized in this presentation, and our leadership position in the market; (x) our ability to stay in front of competitors’ improvements in technologies; (xi) anticipated milestones; and (xii) other statements that are not historical facts.

Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Forward-looking statements are based only on current information, assumptions and expectations, and involve a number of risks and uncertainties relating to (i) our inability to integrate Purigen’s business into our own; (ii) challenges inherent in developing, manufacturing and commercializing products; (iii) the timing and mix of customer orders among our products; (iv) our ability to further deploy new products and applications and expand the markets for our technology platforms; (v) third parties’ abilities to manufacture our instruments and consumables; (vi) the success of products competitive with our own; (vii) our expectations and beliefs regarding future growth of the business and the markets in which we operate; (viii) the accuracy of our estimates; (ix) our ability to fund our operations; and (x) changes in our strategic and commercial plans; and (xi) the application of generally accepted accounting principles which are highly complex and involve many subjective assumptions. We are under no duty to update any of these forward-looking statements after the date of this presentation to conform these statements to actual results or revised expectations, except as required by law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation. Moreover, except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements contained in this presentation.

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Bionano is Acquiring Technology that Can Enable it to Achieve its Goal of Creating an End-to-End Solution for OGM

DNA Isolation + DNA Labeling + 

+ Data Processing + Data Analysis

PURIGEN BIOSYSTEMS

BioDiscovery (2021)
A BIONANO GENOMICS COMPANY

Every genome analysis begins at the sample ….

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Purigen Biosystems Corporate Overview

- **Purigen Biosystems was formed in 2012** with technology exclusively licensed from Stanford University
- **Core technology, isotachophoresis (ITP),** was developed in the Stanford Microfluidics Laboratory led by Dr. Juan Santiago
- **Dr. Klint Rose, CSO and co-founder of Purigen**, earned his PhD with Dr. Santiago at Stanford University
- **Purigen develops and commercializes systems** based on ITP designed for rapid, efficient & high-performance automated RNA and DNA extraction
- **28 employees** across functions including R&D, sales & marketing, manufacturing, customer support and G&A
- **Acquisition follows an extensive co-development program** led by Bionano's COO, Mark Oldakowski, in which the Purigen team demonstrated the feasibility of isolating ultra-high molecular weight (UHMW) DNA on the Ionic® Purification System for use with Bionano's Saphyr® instrument

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Ionic Purification System

- **Purigen's Ionic Purification System**
  - **Commercially available** platform for isolation of DNA and RNA
  - **Uses isotachophoresis (ITP)** for isolation and purification
  - **Addresses complex biological samples** including those with low cell counts
  - **Purifies 8 samples in 1 hour with < 5 minutes** of total hands-on time per sample in a fully automated workflow, often with better results than currently available techniques (e.g., next-generation sequencing with FFPE samples)
  - **Current adoption is for variety of sample types and applications**, including formalin-fixed paraffin embedded (FFPE) tumor tissue
- **Purigen's ITP technology**
  - **Solution-based concentration approach** to be used in development of kits for isolation of UHMW DNA
  - **Different from the techniques in routine use today** which tend to rely on binding to a matrix, washing and then removal from the matrix
  - **Results in higher yields and quality** of DNA & RNA compared to column-based kits

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Expected Strategic Benefits of the Transaction

Expected to be a key step in simplifying the end-to-end workflow for OGM – potential for fast, easy & robust routine use at scale

Expands Bionano's technology portfolio for sample preparation & adds an automation platform designed for rapid, high throughput sample preparation

ITP-based methods for UHMW DNA could potentially overcome limitations of current binding-based methods to further simplify sample preparation for OGM and provide a common platform for OGM and next-generation sequencing (NGS) sample preparation

Acquisition may complement 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 including dilute samples or those with limited quantities of cells

ITP is expected to be important in expanding the adoption of OGM by enabling Bionano to better address more sample types that are commonly used today throughout cancer research, genetic disease and other areas of discovery research and cell bioprocessing

Integration Plan

- **Dr. Klint Rose, co-founder and CSO,** will become a Bionano fellow and lead development of ITP solutions for OGM
- **Existing location for Purigen in Pleasanton, CA will remain in use**
- **Current Purigen employees are expected to join Bionano** and become part of the appropriate functional team in Bionano

The goal of the integration plan is to:

- Fully support existing Purigen customers
- Expand the Ionic system installed base to customers who may or may not be OGM users to position Bionano as a key solution provider in molecular pathology and cytogenomics
- Commercialize the Ionic system for OGM use with a variety of sample types

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Summary of Deal Terms

- Up to $64M in total cash consideration
  - $32M to be paid at closing, subject to adjustment, and up to $32M to be paid in the future based on achievement of certain milestones
- Expected to close on or before December 8, 2022

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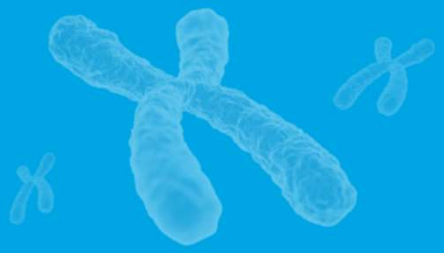

Questions & Answers

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