

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT  
Pursuant to Section 13 or 15(d) of the  
Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **March 1, 2022**

**Bionano Genomics, Inc.**

(Exact Name of Registrant as Specified in its Charter)

**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**001-38613**  
(Commission  
File Number)

**26-1756290**  
(IRS Employer  
Identification No.)

**9540 Towne Centre Drive, Suite 100  
San Diego, California**  
(Address of Principal Executive Offices)

**92121**  
(Zip Code)

Registrant's telephone number, including area code: **(858) 888-7600**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

| <b>Title of each class</b>                 | <b>Trading Symbol(s)</b> | <b>Name of each exchange on which registered</b> |
|--|--------------------------|--|
| Common Stock, \$0.0001 par value per share | BNGO                     | The Nasdaq Stock Market, LLC                     |
| Warrants to purchase Common Stock          | BNGOW                    | The Nasdaq Stock Market, LLC                     |

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 2.02 Results of Operations and Financial Condition.**

On March 1, 2022, Bionano Genomics, Inc. (the “Company”) issued a press release reporting its financial results for its fourth quarter and fiscal year ended December 31, 2021. The full text of the press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

In accordance with General Instruction B.2. of Form 8-K, the information contained or incorporated herein, including the press release filed as Exhibit 99.1, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as expressly set forth by specific reference in such filing to this Current Report on Form 8-K.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

| <b>Exhibit No.</b> | <b>Description</b>   |
|--------------------|--|
| 99.1               | <a href="#">Press release issued March 1, 2022, reporting financial results for the fourth quarter and fiscal year ended December 31, 2021</a> |
| 104                | Inline XBRL for the cover page of this Current Report on Form 8-K  |

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## Bionano Genomics Reports Fourth Quarter and Full Year 2021 Financial Results and Provides Revenue Outlook for 2022

- *Full-year 2021 revenue growth of 111% over 2020*
- *Achieved publicly announced anticipated milestones for 2021*
- *Strong balance sheet with \$250.6 million in cash, cash equivalents, and available-for-sale securities as of YE 2021*
  - *Conference call today, March 1<sup>st</sup>, 2022 at 4:30 PM ET*

SAN DIEGO, March 1, 2022 -- Bionano Genomics, Inc. (Nasdaq: BNGO), pioneer of optical genome mapping (OGM) solutions on the Saphyr<sup>®</sup> system and provider of NxClincial<sup>™</sup>, a leading software solution for visualization, interpretation and reporting of genomic data, today reported financial results for the fourth quarter and full year ended December 31, 2021 and revenue outlook for 2022.

"We believe 2021 was transformational for Bionano. Not only did we achieve our publicly announced anticipated milestones for 2021, we added a world-class software product through the acquisition of BioDiscovery and significantly enhanced our software development expertise. As a provider of optical genome mapping systems, software, and testing and laboratory services, we believe that Bionano has transformed from an instrument company into a global genomics company focused on elevating the health and wellness of all people with a wide array of compelling solutions for genome analysis," commented Erik Holmlin, PhD, President and Chief Executive Officer of Bionano. "We begin 2022 looking to continue the momentum that built throughout 2021 by elevating our performance to new heights as we work towards executing on our ELEVATE! strategy for 2022 and drive toward our mission to transform the way the world sees the genome."

### Recent Highlights

- Revenue was \$18.0 million for the full year and \$6.3 million for the fourth quarter of 2021, representing 111% and 58% increases over the corresponding periods of 2020.
- 12,518 flow cells sold during 2021.
- Reached installed base of 164 systems, a 69% increase over year end 2020.
- Significantly expanded 3-day 2022 Symposium year-over-year: 31 oral presentations on OGM; 82 countries represented; 37 scientific posters; and 4,064 total registrants, a 63% increase over 2021.
- Appointed Vincent Wong, JD, MBA and Aleksandar Rajkovic, PhD, MD as members of the Board of Directors

Chris Stewart, Chief Financial Officer of Bionano added, "Q4 2021 was an outstanding quarter, capping off a tremendous year where we achieved impressive year-over-year revenue growth of 111%. We leveraged our strong balance sheet to acquire BioDiscovery and their industry leading software in Q4 2021 to get us to the next level. We begin 2022 in a strong position and look forward to executing on our goal to drive value for our stakeholders."

### Key Business Highlights in Q4 2021

The Company executed on its commercialization strategy, built scientific momentum by presenting data at key scientific meetings and drove utilization of Saphyr at key institutions across the globe, with the following highlights:

- Expanded the installed base of Saphyr systems from 141 at the end of Q3 to 164 at the end of Q4.
- Sold 3,204 nanochannel array flow cells during the quarter ended December 31, 2021, which represents 29% growth over the same quarter in 2020.
- Completed the first prototype for the next generation single molecule imaging system for OGM. The prototype is being used to integrate and test the key engineering designs of a new instrument and consumable intended to meet the needs of high-volume users. The commercial system based on this prototype is expected to be commercially released in the first half of 2023.
- Launched version 6.1 of BioDiscovery's NxClinical software with expanded capabilities for next-generation sequencing (NGS) data in genetic diseases and cancer. NxClinical is an industry-leading, platform-agnostic software solution, which integrates NGS and microarray data designed to provide analysis, visualization, interpretation and reporting of copy number variants (CNV), single-nucleotide variants and absence of heterozygosity across the genome in one consolidated view.
- OGM with Saphyr was adopted at several notable cytogenetics laboratories and academic medical centers in the United States, including University Pittsburgh Medical Center (UPMC), and Pacific Northwest Research Institute. Outside the United States, Saphyr was adopted in Australia, Europe, China, Taiwan and Japan.
- Announced publication of a study by Johns Hopkins University in the Journal of Clinical & Anatomic Pathology outlining a stepwise approach to adoption of OGM for cancer analysis in the cytogenetics lab. The principal conclusions of this publication were that OGM provides an alternative workflow that provides valuable genomic information often with higher resolution than traditional methods without sacrificing sensitivity. OGM is complementary to methods like NGS, which reveal sequence variants, and provides an opportunity to simplify and consolidate workflows for structural variation (SV) analysis by using OGM as an alternative to chromosomal microarray (CMA), fluorescence in-situ hybridization (FISH) and karyotyping.
- Publication of a study authored at The University of Texas MD Anderson Cancer Center, which evaluated the utility of OGM as an alternative to traditional cytogenomic methods for the characterization of SV in myelodysplastic syndrome (MDS). The study was published in Blood, the journal of the American Society of Hematology (ASH) and presented at the 2021 annual conference.
- Publication of the first readout from the ongoing clinical trial designed to support establishing OGM as part of standard of care (SOC) in diagnosis of genetic disease for postnatal patients. The IRB-approved, multi-site, ongoing study evaluated 331 individual sample runs from 202 unique samples across 5 sites for interim measures of key endpoints:
  - Concordance with standard of care – 97.7% (214 out of 219 samples)
  - Partially concordant with SOC – 2.3% (5 out of 219 samples)
  - Concordance with SOC for pathogenic variant calls – 100% (219 out of 219 samples)
  - Concordance with chromosomal microarray (CMA) – 100% (103 out of 103 samples)
  - First-pass success rate for OGM – 94% (311 out of 331 samples)

- Reproducibility of analytical QC from site-to-site – 98.8% (171 out of 173 replicates)
- Reproducibility of pathogenic variant calls from site-to-site – 100% (173 out of 173 replicates)
- Bionano acquired BioDiscovery, Inc., including its industry-leading software, NxClinical, to accelerate and broaden Bionano's position in digital cytogenetics and comprehensive genome analysis.
- Added exceptional talent across leadership functions across the Company, including in positions in finance and accounting, sales, marketing, customer solutions, operations, laboratory operations product development and most recently the people function with the addition of Helene Klein as Chief People Officer.

#### **Q4 2021 and Full Year 2021 Financial Highlights**

- Total revenue for the fourth quarter of 2021 was a record \$6.3 million, up 58% from the same period in 2020. Full year 2021 revenue was \$18.0 million, an increase of 111% compared to 2020.
- Gross margin for the fourth quarter of 2021 was 4%, compared to 30% from the fourth quarter of 2020. The decrease was primarily due to low yields on our chip consumables produced at one of our contract manufacturers and a resulting write-off of inventory. Full year 2021 gross margin was 22%, down from 33% in 2020.
- Fourth quarter 2021 GAAP operating expense was \$29.0 million, compared to \$12.3 million in the prior year. Fourth quarter 2021 non-GAAP operating expense was \$21.8 million, compared to \$11.4 million in the fourth quarter of 2020. Fourth quarter 2021 non-GAAP operating expense excludes \$4.8 million in stock-based compensation, \$1.2 million in amortization of intangibles, and \$1.2 million in acquisition related expenses. The year-over-year increase was primarily due to increased headcount-related spending, increased R&D expense, and expenses associated with our acquisition of BioDiscovery. Full year 2021 GAAP operating expense was \$81.0 million and non-GAAP operating expense was \$68.4 million. Full year 2021 non-GAAP operating expense excludes \$9.7 million in stock-based compensation, \$1.4 million in amortization of intangibles, and \$1.5 million in acquisition-related transaction costs.<sup>1</sup>
- At December 31, 2021, the Company had cash, cash equivalents, and available-for-sale securities of \$250.6 million compared to cash and cash equivalents of \$38.4 million at December 31, 2020. The increase in cash is primarily due to the equity raises that the Company completed in the first quarter of 2021.

<sup>1</sup> Non-GAAP operating expense is a non-GAAP financial measure. For a description of this non-GAAP financial measure, please refer to "Non-GAAP Financial Measures", and for a reconciliation of non-GAAP operating expense to operating expense reported in accordance with GAAP, please refer to the financial tables accompanying this release.

## 2022 Financial Guidance

- Bionano expects full year 2022 revenue to be in the range of \$24 million to \$27 million, which would represent a range of 33% to 50% growth over full year 2021 revenue.

## 2022 ELEVATE! Anticipated 2022 Milestones

|      |  |
|------|--|
| 1Q22 | Receive IRB approval for hematological study   |
| 1Q22 | Apply for category 1 CPT code for OGM  |
| 2Q22 | Site selection complete and enrollment commencement for hematological malignancy study               |
| 2Q22 | Data generation commencement for prenatal study  |
| 3Q22 | Bionano Labs test menu expanded to include genetic disease and hematological malignancies            |
| 4Q22 | Completion of postnatal study (enrollment, analysis and assessment of all primary endpoints)         |
| 4Q22 | Release labeling protocol 2.0 and SP Next DNA isolation protocol                                     |
| 4Q22 | Pre-commercial version of new high throughput imaging system for OGM system running in the field     |
| 4Q22 | Interim publication on prenatal study  |
| 4Q22 | Installed base of 240 Saphyr systems, which would represent at least a 45% growth from year-end 2021 |

## Conference Call & Webcast Details

| <u>Conference Call &amp; Webcast Details</u> |   |
|--|---|
| Date:  | Tuesday, March 1, 2022  |
| Time:  | 4:30 p.m. Eastern Time  |
| Toll Free:                                   | (855) 940-5312  |
| International:                               | (929) 517-0416  |
| Conference ID:                               | 8795841   |
| Webcast:                                     | <a href="https://edge.media-server.com/mmc/p/iy5k7mh6">https://edge.media-server.com/mmc/p/iy5k7mh6</a> |

To access the call, participants should dial the applicable telephone number above at least 5 minutes prior to the start of the call. An archived version of the webcast will be available for replay in the Investors section of the Bionano website.

## 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 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 [bionanogenomics.com](http://bionanogenomics.com), [lineagen.com](http://lineagen.com) or [biodiscovery.com](http://biodiscovery.com).

## **Non-GAAP Financial Measures**

To supplement Bionano's financial results reported in accordance with U.S. generally accepted accounting principles (GAAP), the Company has provided non-GAAP operating expense in this press release, which is a non-GAAP financial measure. Non-GAAP operating expense excludes from GAAP reported operating expense the following components as detailed in the reconciliation table accompanying this press release: stock-based compensation, amortization of intangibles and acquisition-related transaction costs.

Bionano believes that non-GAAP operating expense is useful to investors and analysts as a supplement to its financial information prepared in accordance with GAAP for analyzing operating performance and identifying operating trends in its business. Bionano uses non-GAAP operating expense internally to facilitate period-to-period comparisons and analysis of its operating performance in order to understand, manage and evaluate its business and to make operating decisions. Accordingly, the Company believes this measure allows for greater transparency with respect to key financial metrics it uses in assessing its own operating performance and making operating decisions.

This non-GAAP financial measure is not meant to be considered in isolation or as a substitute for comparable GAAP measures; should be read in conjunction with the Company's consolidated financial statements prepared in accordance with GAAP; has no standardized meaning prescribed by GAAP; and is not prepared under any comprehensive set of accounting rules or principles. In addition, from time to time in the future, there may be other items that the Company may exclude for purposes of its non-GAAP financial measures; and the Company may in the future cease to exclude items that it has historically excluded for purposes of its non-GAAP financial measures. Likewise, the Company may determine to modify the nature of its adjustments to arrive at its non-GAAP financial measures. Because of the non-standardized definitions of non-GAAP financial measures, the non-GAAP financial measure as used by Bionano in this press release and the accompanying reconciliation table has limits in its usefulness to investors and may be calculated differently from, and therefore may not be directly comparable to, similarly titled measures used by other companies.

For a reconciliation of non-GAAP operating expense to operating expense reported in accordance with GAAP, please refer to the financial tables accompanying this release.

## **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," "should," "believe," "would," "could," "potential," "outlook," "guidance," "goal" 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: our growth prospects and future financial and operating results, including our 2022 revenue guidance and the expectations related thereto; our ability to meet our goal to drive value; the anticipated benefits of the BioDiscovery acquisition, including with respect to customer adoption of NxClinical; our commercial expectations, including the potential market opportunity for structural variation analysis and OGM; the opportunities presented by our high-throughput prototype for the Saphyr system and its timely commercial release; continued research involving OGM and our technologies and our ability to drive adoption of OGM and our technology solutions; expected timing and results from our clinical trials; our ability to accelerate and broaden our position in digital cytogenetics and comprehensive genome analysis; and the



execution of our strategy, including the 2022 ELEVATE! strategy and our anticipated 2022 milestones. 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, including the introduction of competitive technologies or improvements in existing technologies; changes in our strategic and commercial plans; our ability to obtain sufficient financing to fund our strategic plans and commercialization efforts; whether medical and research institutions will adopt and/or continue to use our technologies, including as a result of their funding and the results of studies evaluating the utility and effectiveness of OGM; 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.

## CONTACTS

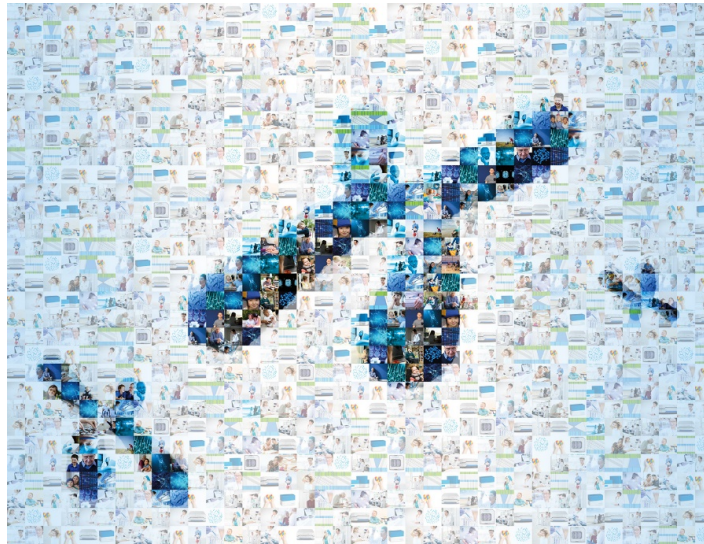
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### Investor Relations and

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**BIONANO GENOMICS, INC**  
**Consolidated Statement of Operations (Unaudited)**  
**Three Months Ended December 31,**

|   | Three Months Ended December 31, |                 | Years Ended December 31, |                 |
|---|---------------------------------|-----------------|--------------------------|-----------------|
|   | 2021                            | 2020            | 2021                     | 2020            |
| <b>Revenue:</b>   |                                 |                 |                          |                 |
| Product revenue   | \$ 3,850,000                    | \$ 2,727,000    | \$ 11,695,000            | \$ 6,230,000    |
| Service and other revenue                               | 2,452,000                       | 1,263,000       | 6,286,000                | 2,273,000       |
| Total revenue   | 6,302,000                       | 3,990,000       | 17,981,000               | 8,503,000       |
| <b>Cost of revenue:</b>                                 |                                 |                 |                          |                 |
| Cost of product revenue                                 | 4,801,000                       | 2,384,000       | 10,524,000               | 4,810,000       |
| Cost of service and other revenue                       | 1,262,000                       | 427,000         | 3,583,000                | 920,000         |
| Total cost of revenue                                   | 6,063,000                       | 2,811,000       | 14,107,000               | 5,730,000       |
| <b>Operating expenses:</b>                              |                                 |                 |                          |                 |
| Research and development                                | 9,215,000                       | 2,877,000       | 22,485,000               | 10,256,000      |
| Selling, general and administrative                     | 19,807,000                      | 9,428,000       | 58,490,000               | 31,068,000      |
| Total operating expenses                                | 29,022,000                      | 12,305,000      | 80,975,000               | 41,324,000      |
| Loss from operations                                    | (28,783,000)                    | (11,126,000)    | (77,101,000)             | (38,551,000)    |
| <b>Other income (expenses)</b>                          |                                 |                 |                          |                 |
| Interest income   | 236,000                         | —               | 236,000                  | —               |
| Interest expense  | (206,000)                       | (608,000)       | (927,000)                | (2,519,000)     |
| Gain on forgiveness of Paycheck Protection Program Loan | —                               | —               | 1,775,000                | —               |
| Loss on debt extinguishment                             | —                               | —               | (2,076,000)              | —               |
| Other income (expenses)                                 | 37,000                          | (7,000)         | (59,000)                 | (7,000)         |
| Total other income (expenses)                           | 67,000                          | (615,000)       | (1,051,000)              | (2,526,000)     |
| Loss before income taxes                                | (28,716,000)                    | (11,741,000)    | (78,152,000)             | (41,077,000)    |
| Provision for income taxes                              | 5,767,000                       | 11,000          | 5,717,000                | (29,000)        |
| Net loss  | \$ (22,949,000)                 | \$ (11,730,000) | \$ (72,435,000)          | \$ (41,106,000) |

**BIONANO GENOMICS, INC**  
**Consolidated Balance Sheet (Unaudited)**

|   | December 31,          |                      |
|---|-----------------------|----------------------|
|   | 2021                  | 2020                 |
| <b>Assets</b>                                     |                       |                      |
| Current assets:                                   |                       |                      |
| Cash and cash equivalents                         | \$ 24,571,000         | \$ 38,449,000        |
| Investments                                       | 226,041,000           | —                    |
| Accounts receivable, net                          | 4,934,000             | 2,775,000            |
| Inventory   | 12,387,000            | 3,315,000            |
| Prepaid expenses and other current assets         | 4,481,000             | 2,250,000            |
| <b>Total current assets</b>                       | <b>272,414,000</b>    | <b>46,789,000</b>    |
| Property and equipment, net                       | 10,318,000            | 4,910,000            |
| Operating lease right-of-use asset                | 6,691,000             | —                    |
| Financing lease right-of-use asset                | 3,926,000             | —                    |
| Intangible assets                                 | 26,842,000            | 1,475,000            |
| Goodwill  | 56,160,000            | 7,173,000            |
| Other long-term assets                            | 749,000               | 103,000              |
| <b>Total assets</b>                               | <b>\$ 377,100,000</b> | <b>\$ 60,450,000</b> |
| <b>Liabilities and stockholders' equity</b>       |                       |                      |
| Current liabilities:                              |                       |                      |
| Accounts payable                                  | \$ 9,696,000          | \$ 2,930,000         |
| Accrued expenses                                  | 9,694,000             | 5,599,000            |
| Contract liabilities                              | 684,000               | 416,000              |
| Operating lease liability                         | 1,467,000             | —                    |
| Finance lease liability                           | 299,000               | —                    |
| <b>Total current liabilities</b>                  | <b>21,840,000</b>     | <b>8,945,000</b>     |
| Operating lease liability, net of current portion | 5,288,000             | —                    |
| Finance lease liability, net of current portion   | 3,642,000             | —                    |
| Contingent consideration                          | 9,066,000             | —                    |
| Long-term debt, net of current portion            | —                     | 16,325,000           |
| Long-term contract liabilities                    | 146,000               | 98,000               |
| <b>Total liabilities</b>                          | <b>\$ 39,982,000</b>  | <b>\$ 25,368,000</b> |
| Stockholders' equity:                             |                       |                      |
| Common Stock                                      | 29,000                | 19,000               |
| Additional paid-in capital                        | 553,747,000           | 178,747,000          |
| Accumulated deficit                               | (216,119,000)         | (143,684,000)        |
| Accumulated other comprehensive loss              | (539,000)             | —                    |
| <b>Total stockholders' equity</b>                 | <b>337,118,000</b>    | <b>35,082,000</b>    |
| <b>Total liabilities and stockholders' equity</b> | <b>\$ 377,100,000</b> | <b>\$ 60,450,000</b> |

**BIONANO GENOMICS, INC**

**Reconciliation of GAAP Operating Expense to Non-GAAP Operating Expense (Unaudited)**

|                                     | Three Months Ended December 31, |               | Years Ended December 31, |               |
|-------------------------------------|---------------------------------|---------------|--------------------------|---------------|
|                                     | 2021                            | 2020          | 2021                     | 2020          |
| GAAP operating expense              | \$ 29,022,000                   | \$ 12,305,000 | \$ 80,975,000            | \$ 41,324,000 |
| Stock-based compensation expense    | (4,802,000)                     | (451,000)     | (9,719,000)              | (1,554,000)   |
| Transaction related expenses        | (1,218,000)                     | (423,000)     | (1,458,000)              | (1,523,000)   |
| Intangible asset amortization       | (1,196,000)                     | (79,000)      | (1,433,000)              | (105,000)     |
| Adjusted non-GAAP operating expense | \$ 21,806,000                   | \$ 11,352,000 | \$ 68,365,000            | \$ 38,142,000 |