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): May 9, 2019

Bionano Genomics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**001-38613**	**26-1756290**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

9540 Towne Centre Drive, Suite 100 San Diego, California	**92121**
(Address of Principal Executive Offices)	(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))

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
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

Item 2.02 Results of Operations and Financial Condition.

On May 9, 2019, Bionano Genomics, Inc. (the "Company") issued a press release reporting its financial results for the first quarter ended March 31, 2019. 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

Exhibit No.	Description
99.1	Press release issued May 9, 2019, reporting financial results for the first quarter ended March 31, 2019.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Bionano Genomics, Inc.

Date: May 9, 2019

By: /s/ R. Erik Holmlin, Ph.D.

R. Erik Holmlin, Ph.D.

President and Chief Executive Officer
(Principal Executive Officer)

Bionano Genomics Reports First Quarter 2019 Financial Results and Provides Business Update

Conference Call and Webcast scheduled for today, May 9, at 4:30 pm ET

SAN DIEGO, May 9, 2019 - Bionano Genomics, Inc. (NASDAQ: BNGO), a life sciences instrumentation company that develops and markets Saphyr, a platform for ultra-sensitive and ultra-specific structural variation detection in genome analysis, today reported financial results for the first quarter ended March 31, 2019 and provided a business update.

Recent Business Highlights

- Advanced programs designed to establish Saphyr as the leading platform for cytogenetics laboratories and replace potentially outdated technologies such as fluorescence in-situ hybridization (FISH), karyotyping and microarrays. Bionano is currently conducting two studies that will evaluate patients for different hematologic malignancies and certain rare genetic diseases and compare the results obtained using Saphyr to those obtained using standard of care tests. These studies are designed to show that Saphyr provides equivalent results to standard of care methods in a simplified and more reliable workflow that is less susceptible to errors and test failures.

- Announced a publication showing that scientists at leading Chinese academic medical centers, together with Berry Genomics, a leading provider of pre-natal diagnostic tests in China, used Saphyr to correctly diagnose patients with facioscapulohumeral muscular dystrophy (FSHD). The publication showed that Saphyr can offer an improvement in workflow, provide highly

accurate FSHD diagnoses and potentially add new clinical markers without modifying the assay or workflow.

- Announced the publication of the largest study of human genomes using Saphyr, which further demonstrated the utility of Saphyr's technology in detecting structural variation. In the study, UCSF, Drexel University and The Chinese University of Hong Kong used Saphyr to analyze structural variation in 154 human samples, which had been previously analyzed with Illumina sequencing in the 1000 Genomes Project, and revealed never-before-seen structural variations. Bionano optical mapping identified 8.5 times more large insertions and 35% more large deletions than reported by the 1000 Genomes Project using Illumina sequencing.

- Announced the publication of the Human Genome Structural Variation Consortium study, which found Saphyr to be essential for the comprehensive and efficient detection of structural variations. The study showed that most large structural variations detected by Saphyr were undetected by other technologies, including Illumina and PacBio systems. For example, for insertions larger than 10,000 bp, which is the size range where most clinically relevant genomic variations are found, Saphyr detected more events than all other genomic methods combined. The publication highlights the unique capability of Saphyr to comprehensively detect structural variations and enable the identification of their human disease associations. These detection capabilities are some of the drivers of the rapid increase in adoption of Saphyr to transform traditional cytogenetics into digital cytogenetics.

- Launched new capabilities of the Saphyr system designed to significantly improve cost effectiveness, speed and ease of use for digital cytogenetics, which included:

    - a new version of the Saphyr Chip as well as a dual-cartridge capability that allows customers to process up to 42 whole human genomes per week;

    - a new sample preparation kit that enables customers to process up to six patient samples in less than four hours, compared to 48 hours for its predecessor, and offers lower cost on a per-sample basis, automatable protocol, faster run times and higher data quality.

- Announced a new data analysis pipeline designed for analysis of complex, heterogeneous cancer samples and samples with germline mosaicism. All major types of structural variation can be detected with more than 80% sensitivity when present in just 5% allele fraction, while translocations and inversions can be detected with more than 90% sensitivity at this low frequency. Bionano and early-access users have successfully applied this workflow to various cancer samples, including leukemia, breast, ovarian, prostate, pancreatic, among others.

- Entered into financing agreements totaling $41.5 million in debt and equity commitments from affiliates of Innovatus Capital Partners, LLC, East West Bank and Aspire Capital Fund, LLC.

“We are very pleased by the rich flow of data and publications by researchers around the globe, which we believe validates the Saphyr system as the leading platform for digital cytogenetics. Additionally, our financial performance this quarter is reflective of the strong support by academia and growing awareness commercially,” said Erik Holmlin, Ph.D., CEO of Bionano. “We continue to build our sales pipeline and execute our strategy to advance and prove the capabilities of Saphyr for our current and future customers. As we drive growth beyond our research-oriented business, we remain focused on our long-term goal of becoming the leading digital cytogenetics tool provider for genome analysis in the clinic.

First Quarter Financial Highlights

Total Revenue. Total revenue increased by $0.1 million, or 4.8%, to $1.9 million for the three months ended March 31, 2019, compared to $1.8 million for the same period in 2018. The increase in revenue was driven by an increase in sales to EMEIA customers, primarily offset by a decrease in sales to customers in Asia Pacific. Below is a summary of changes for the three months ended March 31, 2019 as compared to the same period in 2018:

- North America revenue decreased by $0.2 million, or 19%;
- EMEIA revenue increased by $0.8 million, or 826%; and
- Asia Pacific revenue decreased by $0.5 million, or 85%.

Cost of Revenue. Total cost of revenue increased by $0.3 million, or 36.3%, to $1.1 million for the three months ended March 31, 2019, compared to $0.8 million for the same period in 2018. The increase is due to instrument sales representing a larger percentage of total product sales.

Operating Expenses. Operating expenses increased by $1.6 million, or 30.9%, to $6.9 million for the three months ended March 31, 2019, compared to $5.3 million for the same period in 2018. The increase was primarily related to employee compensation costs associated with headcount additions to support the growth of our worldwide product distribution. In addition, we have incurred increased professional fees to support ongoing business operations and to comply with obligations associated with being a publicly traded company.

Net Loss. Net loss for the three months ended March 31, 2019 was $7.9 million, compared to a net loss of $3.8 million for the same period in 2018. The increase was largely due to increases in operating expenses and interest and other expenses recognized in association with debt and equity transactions entered into during the first quarter of 2019.

Cash and cash equivalents. At March 31, 2019, the Company had cash and cash equivalents of $20.8 million, compared to cash and cash equivalents of $16.5 million at December 31, 2018. The increase in cash and cash equivalents is primarily due to proceeds received from debt and equity transactions entered into in March 2019.

Conference Call & Webcast Details

The Company will host a conference call and live webcast to discuss its first quarter 2019 financial results and provide an update on business activities. The event will be held today at 4:30 p.m Eastern Time. Dial-in details are as follows:

Date: Thursday, May 9, 2019
Time: 4:30 p.m. Eastern Time
Toll Free: 800-239-9838
International: 323-794-2551
Conference ID: 1219046

Webcast: http://public.viavid.com/index.php?id=134340

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 is a life sciences instrumentation company in the genome analysis space. Bionano develops and markets the Saphyr system, a 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 is designed to drive the adoption of digital cytogenetics, which is a more systematic, streamlined and industrialized form of traditional cytogenetics. The Saphyr system comprises an instrument, chip consumables, reagents and a suite of data analysis tools.

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: effectiveness of Saphyr as an alternative to the Southern blot method for diagnosis of FSHD; Saphyr's unique ability to comprehensively detect structural variations and identify their human disease associations; the benefits of recent improvements to the Saphyr system, including improved cost effectiveness, speed and ease of use for digital cytogenetics; the benefits of new data and publications, including their validation of Saphyr as the leading digital cytogenetics; and our efforts to execute on our commercial 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 that our sales, revenue, expense and other financial guidance may not be as expected, as well as risks and uncertainties associated with: 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 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, 2018 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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Financial tables follow

Bionano Genomics, Inc.

Consolidated Statements of Operations

	Three Months Ended March 31,	
	2019	**2018**
Revenue:		
Product revenue	$ 1,687,586	$ 1,662,222
Other revenue	165,160	106,263
Total revenue	1,852,746	1,768,485
Cost of revenue:		
Cost of product revenue	1,119,551	840,582
Cost of other revenue	27,491	867
Total cost of revenue	1,147,042	841,449
Operating expense:		
Research and development	2,100,111	2,367,093
Selling, general and administrative	4,790,602	2,895,404
Total operating expenses	6,890,713	5,262,497
Loss from operations	(6,185,009)	(4,335,461)
Other income (expense)		
Interest expense	(272,504)	(301,981)
Change in fair value of preferred stock warrants and expirations	—	953,198
Loss on debt extinguishment	(921,496)	—
Other expense	(468,248)	(159,342)
Total other income (expenses)	(1,662,248)	491,875
Loss before income taxes	(7,847,257)	(3,843,586)
Provision for income taxes	(4,486)	(3,776)
Net loss	$ (7,851,743)	$ (3,847,362)

Bionano Genomics, Inc.

Consolidated Balance Sheets

	March 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 20,830,399	$ 16,522,729
Accounts receivable, net	4,057,128	4,514,333
Inventory	1,405,832	1,068,557
Prepaid expenses and other current assets	1,720,805	919,500
Total current assets	28,014,164	23,025,119
Property and equipment, net	1,537,113	1,777,302
Total assets	$ 29,551,277	$ 24,802,421
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 870,836	$ 1,351,736
Accrued expenses	3,628,776	2,900,129
Deferred revenue	213,898	270,998
Total current liabilities	4,713,510	4,522,863
Long-term debt	18,375,784	9,029,374
Long-term deferred revenue	304,467	304,467
Other non-current liabilities	287,325	808,366
Total liabilities	23,681,086	14,665,070
Total stockholders' equity	5,870,191	10,137,351
Total liabilities and stockholders' equity	$ 29,551,277	$ 24,802,421