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): November 24, 2023

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	0	
San Diego, California		92121
(Address of Principal Executive Office	es)	(Zip Code)
Registrant's	telephone number, including area code: (85	58) 888-7600
Check the appropriate box below if the Form 8-K filling following provisions:	ng is intended to simultaneously satisfy the	he filing obligations of the registrant under any of the
 □ Written communications pursuant to Rule 425 under □ Soliciting material pursuant to Rule 14a-12 under th □ Pre-commencement communications pursuant to Ru □ Pre-commencement communications pursuant to Ru 	e Exchange Act (17 CFR 240.14a-12) ale 14d-2(b) under the Exchange Act (17 Cl	\$ 77
Securities registered pursuant to Section 12(b) of the Act	i:	
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
Indicate by check mark whether the registrant is an enchapter) or Rule 12b-2 of the Securities Exchange Act of		ale 405 of the Securities Act of 1933 (§230.405 of thi
Emerging growth company \square		
If an emerging growth company, indicate by check mark or revised financial accounting standards provided pursu		

EXPLANATORY NOTE

On March 10, 2023, Bionano Genomics, Inc. (the "Company") filed a Registration Statement on Form S-3, as amended (File No. 333-270459), with the Securities and Exchange Commission, which included a prospectus supplement relating to the offer and sale by the Company of up to \$200.0 million of shares of the Company's common stock ("Common Stock") through Cowen and Company, LLC ("Cowen"), as sales agent, pursuant to a Sales Agreement, dated March 23, 2021, as amended March 9, 2023, by and between the Company and Cowen (the "ATM Sales Program").

A copy of a legal opinion of Cooley LLP relating to the legality of the issuance and sale of up to 49,000,000 shares of Common Stock pursuant to the Sales Agreement was attached to a Current Report on Form 8-K filed on July 18, 2023 as Exhibit 5.1 (the "Prior Opinion"). Additionally, as described in a Current Report on Form 8-K filed on October 11, 2023, the Company entered into a securities purchase agreement (the "Purchase Agreement") for the issuance of \$80.0 million aggregate principal amount of senior secured convertible notes. This legal opinion is necessary to ensure the Company's continued access to the ATM Sales Program as required under the Purchase Agreement. The Company is filing with this Current Report on Form 8-K an updated legal opinion of Cooley LLP relating to the legality of the issuance and sale of up to 149,000,000 shares of Common Stock pursuant to the Sales Agreement, which includes the 49,000,000 shares of Common Stock previously covered in the Prior Opinion

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit

No. Exhibit Title or Description

5.1 Opinion of Cooley LLP.

104 Cover Page Interactive Data File (the cover page XBRL tags are embedded within the inline XBRL document)

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.

Date: November 24, 2023

Bionano Genomics, Inc.

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

R. Erik Holmlin, Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)



Thomas A. Coll +1 858 550 6013 collta@cooley.com

November 24, 2023

Bionano Genomics, Inc. 9540 Towne Centre Drive, Suite 100 San Diego, CA 92121

Ladies and Gentlemen:

We have acted as counsel to Bionano Genomics, Inc., a Delaware corporation (the "Company"), in connection with the offering by the Company of up to \$200,000,000 of shares (the "Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock"), pursuant to a Registration Statement on Form S-3 (No. 333-270459) (the "Registration Statement"), filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"), and the prospectus included in the Registration Statement (the "Prospectus") relating to a Sales Agreement, dated March 23, 2021, as amended March 9, 2023, by and between the Company and Cowen and Company, LLC (the "Agreement"), covering the offering, issuance and sale by the Company of the Shares, as described in the Prospectus.

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company's certificate of incorporation and bylaws, each as currently in effect, and (c) such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies, the accuracy, completeness and authenticity of certificates of public officials and the due authorization, execution and delivery of all documents by all persons other than the Company where authorization, execution and delivery are prerequisites to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified such matters.

We have assumed (i) that each sale of Shares will be duly authorized by the Board of Directors of the Company, a duly authorized committee thereof or a person or body pursuant to an authorization granted in accordance with Section 152 of the General Corporation Law of the State of Delaware (the "DGCL"), (ii) that no more than 149,000,000 Shares will be sold under the Agreement pursuant to the Prospectus and (iii) that the price at which the Shares are sold will equal or exceed the par value of the Common Stock. We express no opinion to the extent that future issuances of securities of the Company, anti-dilution adjustments to outstanding securities of the Company and/or other matters cause the number of shares of the Common Stock available for issuance under the Agreement to exceed the number of shares of the Common Stock available for issuance by the Company.

Our opinion is expressed only with respect to the DGCL as in effect on the date hereof. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefor in accordance with the Agreement, the Registration Statement and the Prospectus, will be validly issued, fully paid and nonassessable.

Cooley LLP 10265 Science Center Drive San Diego, CA 92121 t: (858) 550-6000 f: (858) 550-6420 cooley.com



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We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus and to the filing of this opinion as an exhibit to the Company's Current Report on Form 8-K to be filed with the Commission for incorporation by reference into the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act and the rules and regulations of the Commission promulgated thereunder.

Our opinion set forth above is limited to the matters expressly set forth in this letter, and no opinion should be implied or may be inferred beyond the matters expressly stated. This opinion speaks only as to law and facts in effect or existing as of the date hereof, and we undertake no obligation or responsibility to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Sincerely,

Cooley LLP

By: /s/ Thomas A. Coll

Thomas A. Coll

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