
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Bionano Genomics, Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

09075F305

(CUSIP Number)

01/03/2025

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
 Rule 13d-1(c)
 Rule 13d-1(d)

SCHEDULE 13G

CUSIP No. 09075F305

Names of Reporting Persons

1

CVI Investments, Inc.

Check the appropriate box if a member of a Group (see instructions)

2

(a)

(b)

3

Sec Use Only

Citizenship or Place of Organization

4

CAYMAN ISLANDS

Number of
Shares

5 Sole Voting Power

Beneficially Owned by Each Reporting Person With: 0.00
 Shared Voting Power
 6
 10,700,000.00
 Sole Dispositive Power
 7
 0.00
 Shared Dispositive Power
 8
 10,700,000.00

9 Aggregate Amount Beneficially Owned by Each Reporting Person
 10,700,000.00
 Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
 10
 Percent of class represented by amount in row (9)
 11 7.7 %
 Type of Reporting Person (See Instructions)
 12 CO

Comment for Type of Reporting Person: With respect to Row 6 and Row 8 above, Heights Capital Management, Inc. is the investment manager to CVI Investments, Inc. and as such may exercise voting and dispositive power over the shares reported as beneficially owned by CVI Investments, Inc. herein.

SCHEDULE 13G

CUSIP No. 09075F305

1 Names of Reporting Persons
 Heights Capital Management, Inc.
 Check the appropriate box if a member of a Group (see instructions)
 2 (a)
 (b)
 3 Sec Use Only
 Citizenship or Place of Organization
 4 DELAWARE
 Sole Voting Power
 5
 0.00
 Shared Voting Power
 6
 10,700,000.00
 Sole Dispositive Power
 7
 0.00
 Shared Dispositive Power
 8
 10,700,000.00
 Aggregate Amount Beneficially Owned by Each Reporting Person
 9
 10,700,000.00
 Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)
 10



Percent of class represented by amount in row (9)

11

7.7 %

Type of Reporting Person (See Instructions)

12

CO

Comment for Type of Reporting Person: With respect to Row 6 and Row 8 above, Heights Capital Management, Inc. is the investment manager to CVI Investments, Inc. and as such may exercise voting and dispositive power over the shares reported as beneficially owned by CVI Investments, Inc. herein.

SCHEDULE 13G

Item 1.

Name of issuer:

(a)

Bionano Genomics, Inc.

Address of issuer's principal executive offices:

(b)

9540 Towne Centre Drive, Suite 100, San Diego, CA 92121

Item 2.

Name of person filing:

(a)

This statement is filed by the entities listed below, who are collectively referred to herein as "Reporting Persons," with respect to the shares of Common Stock of Bionano Genomics, Inc. (the "Company"), par value \$0.0001 per share (the "Shares"). (i) CVI Investments, Inc. (ii) Heights Capital Management, Inc.

Address or principal business office or, if none, residence:

(b)

The address of the principal business office of CVI Investments, Inc. is: P.O. Box 309GT Uglund House South Church Street George Town Grand Cayman KY1-1104 Cayman Islands The address of the principal business office of Heights Capital Management, Inc. is: 101 California Street, Suite 3250 San Francisco, California 94111

Citizenship:

(c)

Citizenship is set forth in Row 4 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

Title of class of securities:

(d)

Common Stock, par value \$0.0001 per share

CUSIP No.:

(e)

09075F305

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

(a)

Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);

(b)

Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);

(c)

Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);

(d)

Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);

(e)

An investment adviser in accordance with § 240.13d-1(b)(1)(ii)(E);

(f)

An employee benefit plan or endowment fund in accordance with § 240.13d-1(b)(1)(ii)(F);

(g)

A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

(h)

A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);

(i)

A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);

(j)

A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution:

(k)

Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K).

Item 4. Ownership
Amount beneficially owned:

(a) The information required by this Item 4(a) is set forth in Row 9 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person. The Company's prospectus supplement (to Prospectus dated May 10, 2023, Registration No. 333-270459), filed on January 6, 2025, indicates there were 139,824,247 Shares outstanding as of the completion of the offering of the Shares referred to therein.

Percent of class:

(b) 7.7 %

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

The information required by this Item 4(c)(i) is set forth in Row 5 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

(ii) Shared power to vote or to direct the vote:

The information required by this Item 4(c)(ii) is set forth in Row 6 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person. Heights Capital Management, Inc., which serves as the investment manager to CVI Investments, Inc., may be deemed to be the beneficial owner of all Shares owned by CVI Investments, Inc. Each of the Reporting Persons hereby disclaims any beneficial ownership of any such Shares, except for their pecuniary interest therein.

(iii) Sole power to dispose or to direct the disposition of:

The information required by this Item 4(c)(iii) is set forth in Row 7 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

(iv) Shared power to dispose or to direct the disposition of:

The information required by this Item 4(c)(iv) is set forth in Row 8 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person. Heights Capital Management, Inc., which serves as the investment manager to CVI Investments, Inc., may be deemed to be the beneficial owner of all Shares owned by CVI Investments, Inc. Each of the Reporting Persons hereby disclaims any beneficial ownership of any such Shares, except for their pecuniary interest therein.

Item 5. Ownership of 5 Percent or Less of a Class.

Item 6. Ownership of more than 5 Percent on Behalf of Another Person.
Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.
Not Applicable

Item 8. Identification and Classification of Members of the Group.
Not Applicable

Item 9. Notice of Dissolution of Group.
Not Applicable

Item 10. Certifications:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect, other than activities solely in connection with a nomination under ?? 240.14a-11.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

CVI Investments, Inc.

Signature: /s/ Brian Sopinsky

Name/Title: Brian Sopinsky, Secretary of Heights Capital Management, Inc.

Date: 01/13/2025

Heights Capital Management, Inc.

Signature: /s/ Brian Sopinsky

Name/Title: Brian Sopinsky, Secretary

Date: 01/13/2025

Comments accompanying signature: Heights Capital Management, Inc. serves as authorized agent of CVI Investments, Inc. pursuant to a Limited Power of Attorney, a copy of which is attached as Exhibit I hereto.

Exhibit Information

EXHIBIT INDEX EXHIBIT DESCRIPTION _____ I Limited Power of Attorney II Joint Filing Agreement