

CERTAIN PORTIONS OF THIS LETTER HAVE BEEN OMITTED FROM THE VERSION FILED VIA EDGAR. CONFIDENTIAL TREATMENT HAS BEEN REQUESTED WITH RESPECT TO THE OMITTED PORTIONS. INFORMATION THAT WAS OMITTED IN THE EDGAR VERSION HAS BEEN NOTED IN THIS LETTER WITH A PLACEHOLDER IDENTIFIED BY THE MARK “[\*\*\*]”.

July 18, 2022

United States Securities and Exchange Commission  
Division of Corporation Finance  
Office of Life Sciences  
100 F Street, N.E.  
Washington, D.C. 20549

Attn: Gary Newberry  
Tara Harkins

Re: **Bionano Genomics, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2021**  
**Form 8-K filed on October 19, 2021**  
**File No. 001-38613**

Ladies and Gentlemen:

We are in receipt of the comment letter, dated June 23, 2022, from the staff (the “*Staff*”) of the Securities and Exchange Commission (the “*SEC*”) regarding the above captioned filings on Form 10-K for the fiscal year ended December 31, 2021 (the “*Form 10-K*”) and Form 8-K, filed on October 19, 2021 (the “*Form 8-K*”). Below is the response of Bionano Genomics, Inc. (the “*Company*,” “*we*,” “*our*” or similar terminology) to the Staff’s comments.

For the Staff’s convenience, we have incorporated the Staff’s comments into this response letter in italics. The Company acknowledges that it is responsible for the adequacy and accuracy of the disclosure in the Form 10-K and the Form 8-K.

### **Confidential Treatment Request**

Due to the commercially sensitive nature of information contained in this letter, the Company hereby requests, pursuant to 17 C.F.R. § 200.83, that certain portions of this letter be maintained in confidence, not be made part of any public record and not be disclosed to any person. The Company has filed a separate copy of this letter, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment.

**Form 10-K for the Fiscal Year Ended December 31, 2021**

**Item 9A. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures, page 106**

1. *Consistent with Item 307 of Regulation S-K, please amend your filing to disclose the conclusions of your principal executive and principal financial officers regarding the effectiveness of your disclosure controls and procedures as of the end of the period covered by the report – i.e., December 31, 2021.*

**Response:** The Company respectfully acknowledges the Staff’s comment and confirms that it inadvertently included a typographical error referencing effectiveness of its internal control over financial reporting (“**ICFR**”) rather than effectiveness of its disclosure controls and procedures in the second paragraph under the heading “Evaluation of Disclosure Controls and Procedures” in Item 9A of the Form 10-K. The Company acknowledges that the disclosures regarding disclosure controls and procedures required by Item 307 of Regulation S-K are separate from the disclosures regarding ICFR required by Item 308(a) of Regulation S-K.

The Company respectfully directs the Staff’s attention to the first paragraph under the heading “Evaluation of Disclosure Controls and Procedures” in Item 9A of the Form 10-K, in which the Company disclosed that its management, including its principal executive and principal financial officers, evaluated the effectiveness of the Company’s disclosure controls and procedures as of December 31, 2021, and provided a description of the meaning and purpose of “disclosure controls and procedures” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended. The Company advises the Staff that, following such evaluation, its management, with the participation of its principal executive and principal financial officers, concluded that such disclosure controls and procedures were effective as of December 31, 2021, and intended to include a statement to this effect in the Form 10-K, as it has in prior periodic reports, had the Company not inadvertently included the typographical error referencing ICFR.

The Company also respectfully advises the Staff that the Company’s Quarterly Report on Form 10-Q for the period ended March 31, 2022, filed with the SEC on May 5, 2022, also contained separate statements regarding management’s evaluation of the Company’s disclosure controls and procedures as of March 31, 2022 pursuant to Item 307 of Regulation S-K, with a corresponding conclusion that the Company’s management, with the participation of its principal executive and principal financial officers, concluded that such disclosure controls and procedures were effective.

On the basis of the foregoing, the Company respectfully requests that the Staff permit the Company to confirm hereby future compliance with Item 307 of Regulation S-K for future periodic filings with the SEC, in lieu of requiring the Company to amend the Form 10-K. Accordingly, should the Staff grant the Company’s request, the Company hereby confirms that it will include in its future filings with the SEC, where applicable, the disclosure required by Item 307 of Regulation S-K as to the conclusions of its principal executive and principal financial officers regarding the effectiveness of its disclosure controls and procedures as of the end of the period covered by the applicable filing.

**Form 8-K Filed on October 19, 2021**

**Exhibits**

2. We note from Item 9.01 that you acquired BioDiscovery, LLC for \$75 million in October 2021. Please provide to us your significance calculations under Rule 3-05 of Regulation S-X for this acquisition. To the extent that separate financial statements are required to be included under Rule 3-05 of Regulation S-X, please revise to include these financial statements and the related pro forma financial statements under Article 11 of Regulation S-X.

**Response:** The Company respectfully advises the Staff that it considered the requirements of Rule 3-05 and Article 11 of Regulation S-X and determined that it was not required to include audited financial statements of, and pro forma financial information relating to the acquisition of, BioDiscovery, LLC (“**BioDiscovery**”). The acquisition of BioDiscovery constituted an acquisition of a “business” within the meaning of Rule 11-01(d) of the Securities Act. The Company compared (i) the amount of the Company’s investment in BioDiscovery, against the Company’s market capitalization (the “**Investment Test**”); (ii) the total assets of BioDiscovery as of December 31, 2020, against the Company’s total consolidated assets as of December 31, 2020 (the “**Asset Test**”); and (iii) the lower of (a) the revenue of BioDiscovery for the year ended December 31, 2020, against the Company’s consolidated revenue for the year ended December 31, 2020 (the “**Revenue Component**”) and (b) the absolute value of the pre-tax income or loss, as applicable, of BioDiscovery for the year ended December 31, 2020, against the absolute value of the Company’s pre-tax income or loss, as applicable, for the year ended December 31, 2020 (the “**Income Component**”) and, together with the Revenue Component, the “**Income Test**”). The Company respectfully advises the Staff that its acquisition of BioDiscovery did not meet the threshold to be considered a significant acquisition pursuant to Rule 3-05 or Article 11 of Regulation S-X as none of the Asset Test, the Investment Test or the Income Test exceeded the 20% significance threshold as applied to the acquisition of a “business” (as defined in Rule 11-01(d) of Regulation S-X), as shown in the table below. Moreover, each of the Asset Test, Investment Test and Income Test were below 10% significance.

The Company’s calculations of the significance tests for the BioDiscovery acquisition are as follows:

**Investment Test – 4.92%**

**Asset Test – [\*\*\*]%**

**Income Test – [\*\*\*]%**

The percentages were calculated as follows (the dollar amounts below are in U.S. dollars and based on U.S. GAAP audited financial statements of the Company and the most recent pre-acquisition annual financial statements of BioDiscovery):

<b>Investment Test:</b>	Total investment in BioDiscovery	\$	74,756,000	=	4.92%
	Aggregate worldwide market value of the Company’s voting and non-voting common equity <sup>1</sup>	\$	1,518,521,682		
<b>Asset Test:</b>	Total assets of BioDiscovery as of December 31, 2020	\$	[***]	=	[***]%
	Consolidated total assets of the Company as of December 31, 2020	\$	60,449,526		
<b>Income Test<sup>2</sup> – Income Component:</b>	Pre-tax income (loss) of BioDiscovery for the year ended December 31, 2020	\$	[***]	=	[***]%
	Pre-tax income (loss) of the Company for the year ended December 31, 2020	\$	41,077,158		

\* \* \* \* \*

<sup>1</sup> Calculated using the average of the daily closing price of the Company’s shares of common stock for the last five trading days of the Company’s most recently completed month ending prior to date of the definitive acquisition agreement.

<sup>2</sup> As discussed above, the Income Test is equal to the lower of the Income Component and the Revenue Component. The Revenue Component was determined as follows: a quotient obtained by dividing (i) the revenue of BioDiscovery for the year ended December 31, 2020, which was equal to \$[\*\*\*], by (ii) the consolidated revenue of the Company for the year ended December 31, 2020, which was equal to \$8,502,984, resulting in the Revenue Component equaling [\*\*\*]%. However, because the Income Component is [\*\*\*]% and lower than the Revenue Component, the Income Test is determined by the Income Component and not significant.

Please advise us if we can provide any further information or assistance to facilitate your review. Please direct any questions or further comments regarding this response letter to the undersigned at (858) 888-7614. Thank you.

Sincerely,

/s/ Christopher Stewart

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Christopher Stewart  
Chief Financial Officer  
Bionano Genomics, Inc.

cc: Erik Holmlin, *Bionano Genomics, Inc.*  
Thomas A. Coll, *Cooley LLP*  
Sarah K. Sellers, *Cooley LLP*  
Reid S. Hooper, *Cooley LLP*  
Phillip S. McGill, *Cooley LLP*