March 17, 2020

VIA EDGAR

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attn: Jeffrey Gabor

Re: Bionano Genomics, Inc. (the "Company")
Registration Statement on Form S-3
Filed: March 11, 2020
File No. 333-237070

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, the Company hereby requests that the Securities and Exchange Commission (the "*Commission*") take appropriate action to cause the above-referenced Registration Statement to become effective at 4:30 p.m. Eastern Time on March 19, 2020 or as soon thereafter as is practicable.

If you have any questions regarding this request, please contact James Pennington of Cooley LLP at (858) 550-6029.

Very truly yours,

Bionano Genomics, Inc.

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

R. Erik Holmlin, Ph.D.

President and Chief Executive Officer