R. Erik Holmlin, Ph.D. President and Chief Executive Officer Bionano Genomics, Inc. 9540 Towne Centre Drive, Suite 100 San Diego, California 92121

> Re: Bionano Genomics, Inc. Registration Statement on Form S-3 Filed March 11, 2020 File No. 333-237070

Dear Dr. Holmlin:

This is to advise you that we have not reviewed and will not review your registration statement.

Please refer to Rules 460 and 461 regarding requests for acceleration. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Please contact Jeffrey Gabor at 202-551-2544 with any questions.

Sincerely,

Division of

Corporation Finance

Office of Life

Sciences

cc: James Pennington, Esq.