

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

August 21, 2020

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

Re: Bionano Genomics, Inc. Registration Statement on Form S-3 Filed August 14, 2020 File No. 333-245762

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 C. Pennington, Esq.