UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of **Illumina, Inc.,** **a corporation,** **and** **GRAIL, Inc.,** **a corporation.** **Respondents.**	**DOCKET NO. 9401**

COMPLAINT COUNSEL'S MOTION FOR LEAVE TO AMEND ITS EXHIBIT LIST AND TO ADMIT INTO EVIDENCE CERTAIN ADDITIONAL EXHIBITS

Complaint Counsel respectfully requests leave to amend its Final Proposed Exhibit List and to admit certain additional exhibits pursuant to Rule 3.43(b) of the Federal Trade Commission Rules of Practice ("FTC Rules"), 16 C.F.R. § 3.43(b), and the April 26, 2021 Scheduling Order ("Scheduling Order"). The Scheduling Order explains that if the parties do not consent to additional exhibits being added after the submission of the final exhibit lists, then such exhibits may be added "by an order of the Administrative Law Judge upon a showing of good cause."[1] Here, Complaint Counsel shows good cause, as Respondents will suffer no prejudice by the admission of these documents. Complaint Counsel moves to admit these documents by agreement of the parties or in response to Respondents' own late inclusion of documents on the exhibit list.[2]

[1] Scheduling Order, Additional Provisions ¶ 22.
[2] Exhibit A, *In re Otto Bock HealthCare North America, Inc.*, FTC Dkt. 9378, Order Granting Respondents' Mot. For Leave To Amend Exhibit List And To Admit Certain Exhibits (Sept. 12, 2018) [hereinafter "*Otto Bock* Order"].

Moreover, each of these documents are relevant to key issues in this case and bear sufficient indicia of reliability such that they should be admitted under this Court's precedent.

I. Background

Complaint Counsel and Respondents collectively seek to add 253 documents into evidence.[3] These late additions began as an agreement concerning Respondents' late production in discovery. During the course of discovery, both sides had agreed to supplement their production no later than August 13, 2021 to provide sufficient time to amend their respective exhibit lists in advance of trial.[4] On the day Respondents were scheduled to supplement their productions, Respondents notified Complaint Counsel that they were unable to meet the deadline.[5] In response to Complaint Counsel's objections, Respondents agreed that Complaint Counsel could supplement its exhibit list with additional documents from Respondents' delayed production "as long as necessary."[6] Respondents submitted their final supplemental production, which consisted of thousands of documents, on the eve of trial.[7]

Complaint Counsel promptly prepared a list of supplemental exhibits from these new productions and sent that list to Respondents on August 29, 2021. Complaint Counsel's list included three of the late-produced documents to which Respondents now object—PX2854, PX2849, PX2850.[8] Respondents, however, proposed to add not just recently-produced documents but also documents from previous productions, with one document dating back to 2013.[9] To rebut Respondents' proposed exhibits added throughout the fall of 2021 and spring of 2022, Complaint

[3] Exhibit B (JX3), Exhibit C (JX4), and Exhibit D (JX5).
[4] Exhibit E (Email from S. Goswami, Cravath, to S. Musser, FTC, Aug. 16, 2021, RE: Document Productions Proposal).
[5] Exhibit E.
[6] Exhibit E.
[7] Exhibit E.
[8] Exhibit F (Email from J. McNeil, FTC, to S. Goswami, Cravath, et al., Aug. 29, 2021, In re Illumina & Grail (No. 9401)).
[9] Exhibit F. (*See* RX3912, dated 10.22.2013).

Counsel has now added documents to the proposed exhibit list. In total, Respondents have added over 181 documents and Complaint Counsel has added 74 documents.[10]

Complaint Counsel and Respondents have conferred repeatedly to resolve disagreements regarding exhibits and, per this Court's instruction, have reached agreement on 220 of the 253 proposed exhibits.[11] Respondents have maintained their objections to 19 of Complaint Counsel's proposed exhibits, and Complaint Counsel stands on 14 of its objections.[12] Each of Complaint Counsel's proposed exhibits meets this Court's standard for good cause as well as the Part 3 requirements for admissibility.

II. Argument

The Scheduling Order explains that additional exhibits may be added by either "consent of all parties" or "by an order of the Administrative Law Judge upon a showing of good cause." (Scheduling Order, Additional Provisions ¶ 22). Here, the Parties agree to the admission of the majority of documents listed on JX3, JX4, and JX5. Accordingly, Complaint Counsel's exhibits to which Respondents have not lodged an objection should be admitted per this Court's prior Order. For the remaining 19 documents, Complaint Counsel meets the requirement to show good cause justifying admission.

a. Good Cause Exists

When deciding whether to admit untimely evidence, courts consider several factors, including: (1) prejudice to the opposing party; (2) the ability to cure the prejudice; and (3) the extent to which it would disrupt the orderly and efficient trial of the case. *Basic Research,* 2005 FTC LEXIS 167, at *5 (Dec. 14, 2005). First, Respondents have suffered no prejudice and, even

[10] Exhibit B (JX3), Exhibit C (JX4), and Exhibit D (JX5).
[11] Exhibit B (JX3), Exhibit C (JX4), and Exhibit D (JX5).
[12] Exhibit G (Joint Status Report). Respondents maintain their objections to the following documents: PX0393–PX0394, PX2829, PX2830, PX2832, PX2849–PX2850, PX2854, PX2868–2878.

if they have, they have had ample opportunity to cure. Complaint Counsel first proposed adding three documents—PX2854, PX2849, PX2850—on August 29, 2021, one week into trial and prior to Respondents' rebuttal case.[13] Respondents had ample time to use these documents with any witness or otherwise cure any prejudice. The admission of the remainder of Complaint Counsel's documents likewise do not prejudice Respondents.

Complaint Counsel's remaining proposed exhibits either come from Respondents' own files or are publicly available. As such, Respondents were on notice that these documents could be used at trial or otherwise included in evidence and are therefore not prejudiced by their inclusion. Furthermore, Complaint Counsel only added documents beyond those included in its initial August 29, 2021 proposal to respond to Respondents' addition of over 169 new documents on the exhibit list. Given that Respondents chose to expand the scope of JX3 beyond its agreement with Compliant Counsel, they cannot now claim that they are prejudiced due to a situation of their own making. Even if Respondents did suffer prejudice, they have had an opportunity to cure by proposing to add 176 documents to the proposed exhibit list.[14]

Finally, admission of these documents will not impact or delay the "orderly and efficient trial of this case," as Complaint Counsel is not seeking to extend either the trial or discovery period but instead has been trying to resolve the admissibility questions raised by Respondents since August of 2021.[15] Respondents' evidentiary objections do not rebut Complaint Counsel's showing of good cause.

[13] Exhibit F.
[14] Exhibit B (JX3), Exhibit C (JX4), and Exhibit D (JX5).
[15] Exhibit F.

b. The Proposed Exhibits Are Admissible under Rule 3.43(b)

Rule 3.43(b) provides that "[r]elevant, material, and reliable evidence shall be admitted."[16] Complaint Counsel's proposed additional exhibits contain relevant, material, and reliable information that is not currently in the record and will provide further context for evidence submitted by Respondents after the close of fact discovery. Further, to the extent any of the proposed exhibits constitutes hearsay, they are admissible because they are relevant, material, and bear satisfactory indicia of reliability so that their use is fair.[17]

Complaint Counsel's additional proposed exhibits fall into three categories: (a) Respondent documents contained in its delayed production; (b) Respondent documents that Complaint Counsel seeks to add to address proposed additions by Respondents; and (c) two documents from public sources related to Respondents' claims about BGI.

1. Late-Produced Respondent Documents

Complaint Counsel seeks admission of three documents that were part of Respondents' production on August 20, 2021, just four days before trial began. Because Respondents previously agreed that Complaint Counsel could supplement their exhibit list with these additional documents from its delayed production "as long as necessary,"[18] there is no basis for denying their admission. Further, these documents are relevant, material, and reliable, as they consist of internal Illumina business documents, created in the ordinary course of business, related to material issues in this matter. Specifically:

- PX2849 and PX2850 are Illumina documents containing {[redacted]

[16] 16 C.F.R. § 3.43(b).
[17] 16 C.F.R. § 3.43(b).
[18] Exhibit E.

[redacted]

- PX2854 is an internal Illumina document discussing [redacted] This exhibit is relevant to MCED customer concerns regarding whether Illumina will continue to provide them with [redacted]

2. Respondent Documents to Rebut Proposed Exhibits that Respondents Identified Following its Late Production

As noted, following its late production of documents on August 20, 2021, Respondents proposed to add documents from their own files. Complaint Counsel seeks admission of 14 internal Respondent business documents, created in the ordinary course of business, that materially relate to issues raised by Respondents' additional proposed exhibits:

- PX2829, PX2830, and PX2832 are documents relating to [redacted] These proposed exhibits rebut Respondents' claim that [redacted]

[19] [redacted].
[20] [redacted].
[21] PX2854 at 005.

- PX2868 is an Illumina document relating to {[redacted]} and is relevant to rebutting claims by Respondents regarding the impact of the {[redacted]}
- PX2869 is an Illumina document in which Illumina employees discuss having created {[redacted]} This exhibit is relevant to rebut Respondents' claims regarding {[redacted]}
- PX2870 is an internal Illumina document discussing {[redacted]} This exhibit is relevant to rebutting claims by Respondents regarding whether Illumina is capable of accelerating FDA approval of Grail's Galleri test.
- PX2871, PX2872, PX2873, PX2874 are internal Respondent documents discussing their {[redacted]}. For example, {[redacted]} These exhibits are relevant to rebutting claims by Respondents regarding the extent of third-party support for the merger.
- PX2875, PX2876, and PX2877 are internal Illumina documents showing that {[redacted]} These exhibits are relevant to rebutting claims by Respondents related to the likely efficacy of the Open Offer, particularly since {[redacted]}.

[22] {[redacted]}.

- PX2878 is an internal Illumina document discussing a Wall Street Journal article regarding data-security concerns raised by using BGI instruments in the United States. This exhibit is relevant to rebutting claims by Respondents regarding the competitiveness of BGI in the U.S. market.

3. Public Documents regarding BGI

Complaint Counsel seeks admission of a Commerce Department press release and a Reuters news article. Specifically:

- PX0394 is a U.S. Commerce Department press release announcing that two BGI entities were added to its "Entity List," which restricts the export, reexport, and transfer of items to entities that pose national security or foreign policy concerns to the United States.[23] The press release states that the two BGI entities were added to the Entity List "in connection with conducting genetic analyses used to further the repression of Uyghurs and other Muslim minorities."[24]
- PX0393 is a Reuters article published on July 7, 2021, which details how the Chinese military—through collaboration with BGI—collected genetic data from millions of women located in and outside of China.[25] The article states that BGI "has worked with the Chinese military" on several projects, including publishing over a dozen joint studies with the People's Liberation Army since 2010.[26] According to the article, the U.S. National Counterintelligence and Security Center told Reuters that it had "serious concerns" over how genetic data

[23] PX0394 at 002-3.
[24] PX0394 at 003.
[25] PX0393 at 002-3.
[26] PX0393 at 002-3.

> is collected by China's government and companies, posing serious risks to U.S. economics and national security, as well as privacy.[27]

These proposed exhibits are relevant to the reputational concerns about BGI raised by MCED test developers at the hearing.[28] These exhibits bear sufficient indicia of reliability such that they should be admitted under Rule 3.43(b), as they were produced from a U.S. government website (PX0394) and Reuters (PX0393).

c. Respondents' Objections Lack Merit

Respondents object that all but one of Complaint Counsel's proposed exhibits—PX2854—lack foundation.[29] Under Rule 3.43(d)(3), however, Respondents are in the best position to determine the nature of documents which come from their own files, and the burden of proof is on Respondents to "introduce evidence to rebut a presumption that such documents are authentic and kept in the regular course of business."[30] Respondents further object to PX2873 on the basis that no attempt was made to lay a foundation for this document, as it was not shown to any witness during a deposition or trial. There is no such requirement under the rules, however, and Respondents themselves seek admission of exhibits that were not shown to witnesses during a deposition or trial.

Respondents also object that Complaint Counsel's proposed exhibits constitute unreliable hearsay lacking any exception being offered as proof of the matters stated therein. However, all of the proposed exhibits (except for PX0393 and PX0394) are documents produced from Respondents' own files and contain communications among Illumina employees in the ordinary

[27] PX0393 at 005.
[28] *See, e.g.*, {[redacted]}; Gao, Tr. 2898-99.
[29] Exhibit G at 4.
[30] 16 C.F.R. § 3.43(b).

course of business, which are opposing party statements admissible as non-hearsay.[31] PX0393 and PX0394—which were produced from a U.S. government website (PX0394) and Reuters (PX0393)—bear sufficient indicia of reliability such that they should be admitted under Rule 3.43(b), in contrast to Respondents' proposed addition of several news articles from much less well-known sources as well as numerous press releases from third parties.

III. Conclusion

For the foregoing reasons, Complaint Counsel moves for leave to amend its exhibit list and to admit certain additional exhibits into evidence.

Dated: March 2, 2022

Respectfully submitted,

s/ Susan A. Musser

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[31] Fed. R. Evid. 801(d)(2)(D).

EXHIBIT A

PUBLIC

UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of Otto Bock HealthCare North America, Inc., a corporation, Respondent.	Docket No. 9378

ORDER GRANTING RESPONDENT'S MOTION FOR LEAVE TO AMEND EXHIBIT LIST AND TO ADMIT CERTAIN EXHIBITS

I.

On August 29, 2018, Respondent Otto Bock HealthCare North America, Inc. ("Ottobock" or "Respondent") filed a motion requesting leave to amend its Final Proposed Exhibit List and to admit certain documents into evidence ("Motion"). The documents consist of [redacted]. Federal Trade Commission ("FTC") Complaint Counsel filed an opposition to the Motion on September 6, 2018 ("Opposition"). On September 10, 2018, Respondent filed a reply, pursuant to an order from the bench during trial on September 6, 2018 ("Reply").

Based on full consideration of the Motion, the Opposition, the Reply, the exhibits submitted in support thereof, and the entire record in the case, the Motion is GRANTED, as further explained below.

II.

The Complaint in this matter, issued on December 20, 2017, alleges that the transaction pursuant to which Respondent purchased Freedom, consummated on September 22, 2017 (the "Merger"), violated Section 7 of the Clayton Act and Section 5 of the FTC Act. Complaint ¶ 1. According to the Complaint, the Merger may substantially lessen competition in an alleged market for microprocessor controlled prosthetic knees ("MPKs") sold to prosthetic clinics in the United States. Complaint ¶¶ 1, 64-67.

Respondent's Answer to the Complaint, filed January 10, 2018, as amended by a filing on February 15, 2018, denied, among other allegations, that the Merger harms consumers or competition and further asserted that the Merger enhances competition, consumer choice, and innovation, and will further improve quality of life for amputees. Amended Answer ¶ 57. Respondent's Answer also included affirmative defenses, including that [redacted] Amended Answer at 30 (Respondent's Seventh Affirmative Defense) [redacted].

On February 13, 2018, Complaint Counsel moved to strike Respondent's Seventh Affirmative Defense, which the Commission denied on April 18, 2018. The Commission construed the Seventh Affirmative Defense as a denial and held that [redacted], while insufficient by itself to defeat all potential liability:

> could potentially be relevant to rebut a showing of likely anticompetitive effects for the period after a [redacted] is completed, and [redacted]. Moreover, in support of its denial, Respondent may develop and present relevant evidence regarding the adequacy of the [redacted]. Those factual issues are properly addressed in the hearing before Chief Administrative Law Judge Chappell.

Opinion and Order, April 18, 2018 (Slip. Op. at 6).

On May 29, 2018, Respondent submitted its Final Proposed Exhibit List, pursuant to the Scheduling Order issued in this case on January 18, 2018 ("Scheduling Order"). At the Final Prehearing Conference on July 10, 2018, Respondent and Complaint Counsel submitted Joint Stipulations on Admissibility of Exhibits for exhibits listed on their respective exhibit lists (JX-002). Trial in this matter commenced on July 10, 2018. JX-002 was entered into evidence on July 18, 2018.

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[1] On December 13, 2017, prior to the issuance of the Complaint, [redacted].

On [redacted], after JX-002 was initially submitted, Respondent [redacted]. On [redacted], Respondent [redacted].

Respondent now seeks to amend its Final Exhibit List and have [redacted] admitted into evidence. Complaint Counsel opposes the requested amendment and admission of [redacted].

III.

A.

Provision 16 of the Scheduling Order provides: "Additional exhibits may be added after the submission of the final [exhibit] lists only by consent of all parties, or, if the parties do not consent, by an order of the Administrative Law Judge upon a showing of good cause." Scheduling Order ¶ 16. "Good cause is demonstrated if a party seeking to extend a deadline demonstrates that a deadline cannot reasonably be met despite the diligence of the party seeking the extension." *In re Chicago Bridge*, 2002 FTC LEXIS 69, at *5 (Oct. 23, 2002).

Respondent argues that because [redacted] were not in existence at the time Respondent submitted its Final Proposed Exhibit List, it could not have added them at that time and, therefore, good cause exists to amend Respondent's Final Proposed Exhibit List. Respondent further states that it promptly provided Complaint Counsel with [redacted] shortly after [redacted] and that Respondent's counsel discussed the details of [redacted] at length with Complaint Counsel.

Complaint Counsel argues that Respondent has not explained why it failed to procure [redacted] prior to the April 6, 2018 cutoff for fact discovery or the May 29, 2018 deadline for submitting final exhibit lists. Complaint Counsel further argues that Respondent failed to show that it was diligent in seeking to obtain [redacted] earlier and failed to show that the deadline could not reasonably have been met. Therefore, according to Complaint Counsel, Respondent has failed to demonstrate good cause.

Respondent replies that it presented [redacted], but that Complaint Counsel rejected [redacted] on April 9, 2018, after the close of fact discovery.[2] Respondent states that it then [redacted]

[2] In addition, on June 19, 2018, Respondent filed a motion to withdraw this matter from adjudication for consideration of a proposed settlement and submitted to the Commission a consent proposal, [redacted]. The Commission, by Order dated July 9, 2018, denied the motion, stating "[n]egotiations between Complaint Counsel and Respondent appear to be ongoing" and that "the appropriate next step is further negotiation between Respondent and Complaint Counsel[.]" Subsequent to that denial, [redacted].

[redacted].

Respondent has demonstrated that it could not have included [redacted] on its Final Proposed Exhibit List by the May 29, 2018 exhibit list deadline despite its diligence, and thus has established "good cause" for adding these exhibits.

B.

Pursuant to Rule 3.43(b) of the Commission's Rules of Practice, "[r]elevant, material, and reliable evidence shall be admitted. . . . Evidence, even if relevant, may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice . . ." 16 C.F.R. § 3.43(b). Complaint Counsel does not challenge the relevancy, materiality, or reliability of [redacted]. Instead, Complaint Counsel argues that [redacted] should be excluded because the probative value is substantially outweighed by unfair prejudice to Complaint Counsel.

Complaint Counsel claims that it will be prejudiced if [redacted] are admitted after the close of its case-in-chief because [redacted] were not produced until after discovery ended and Complaint Counsel did not have the opportunity to develop evidence to demonstrate that [redacted].

Complaint Counsel has failed to demonstrate that it will be prejudiced by admission of [redacted]. First, Complaint Counsel overstates the evidentiary effect of admitting [redacted]. As recited above, Respondent's intention to [redacted] is already part of the record in this case. The proposed exhibits demonstrate only that Respondent has [redacted] – nothing more and nothing less. Second, it is not apparent that any additional discovery is required in order to avoid undue prejudice. According to Respondent, Complaint Counsel has met with, or plans to meet with, [redacted]. In addition, Complaint Counsel has elicited testimony at trial from multiple Freedom employees [redacted]. Moreover, Complaint Counsel has elicited testimony from Ottobock's Scott Schneider specifically regarding [redacted], thereby opening the door to their admission.[3] On this record, the argument that admission of [redacted] is prejudicial is unconvincing.

[3] E.g., Schneider Tr. 198 (rough, September 6, 2018) ([redacted]). Respondent objected to Complaint Counsel's questioning regarding [redacted], stating that Respondent had avoided such questioning on its direct examination of Mr. Schneider because Complaint Counsel had objected to Respondent's Motion to admit [redacted], and a ruling was pending. Respondent's objection was overruled and the testimony was allowed.

IV.

For all the foregoing reasons, the Motion is GRANTED. [redacted] will be admitted into evidence.

ORDERED:

DM Chappell

D. Michael Chappell
Chief Administrative Law Judge

Date: September 18, 2018

Notice of Electronic Service

I hereby certify that on September 18, 2018, I filed an electronic copy of the foregoing Order Granting Respondent's Motion for Leave to Amend Exhibit List , with:

D. Michael Chappell
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I hereby certify that on September 18, 2018, I served via E-Service an electronic copy of the foregoing Order Granting Respondent's Motion for Leave to Amend Exhibit List , upon:

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EXHIBIT B

JX3

PUBLIC

Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
PX0221	Document: Hubbell et al Supplementary Materials	00/00/0000	PX0221-001	PX0221-028			3.43(b)	
PX0338	Horizontal Merger Guidelines (August 2010)	8/19/2010	PX0338-001	PX0338-037			3.43(b)	
PX0376	Document: Illumina Inc at Goldman Sachs Global Healthcare Conference - Final, June 13, 2017	6/13/2017	PX0376-001	PX0376-010			3.43(b)	
PX0377	Article: "Illumina Acquires Grail to Accelerate Patient Access to Life-Saving Multi-Cancer Early-Detection Test," Illumina, August 18, 2021	8/18/2021	PX0377-001	PX0377-005			3.43(b), 3.43(d)(3)	
PX0378	Illumina Form 8-K, August 18, 2021	8/18/2021	PX0378-001	PX0378-008			3.43(b), 3.43(d)(3)	Yes
PX0385	Document: Singular Genomics, 10-Q for the QE June 30, 2021	6/30/2021	PX0385-001	PX0385-140			3.43(b)	
PX0387	Presentation: Singular Genomics, Investor Presentation, September 2021	9/1/2021	PX0387-001	PX0387-026			3.43(b)	
PX0388	Website: ClinicalTrials.gov - PRIME Study Details	8/12/2019	PX0388-001	PX0388-010			3.43(b)	
PX0389	Website: ClinicalTrials.gov - Why Should I Register and Submit Results	05/00/21	PX0389-001	PX0389-006			3.43(b)	
PX0390	Website: ClinicalTrials.gov Search Results - Grail	9/23/2021	PX0390-001	PX0390-001			3.43(b)	
PX0391	Website: ClinicalTrials.gov Search Results - Illumina	9/23/2021	PX0391-001	PX0391-002			3.43(b)	
PX0392	Document: FDA - Summary of Safety and Effectiveness Data - Praxis	6/29/2017	PX0392-001	PX0392-042			3.43(b)	
PX0393	Article: China's gene giant harvests data from millions of pregnant women, Reuters	7/7/2021	PX0393-001	PX0393-011		Authenticity; Hearsay; Reliability; Foundation	3.43(b)	
PX0394	Article: Commerce Department Adds Eleven Chinese Entities Implicated in Human Rights Abuses in Xinjiang to the Entity List, U.S. Dep't of Commerce	7/20/2020	PX0394-001	PX0394-006		Authenticity; Hearsay; Reliability; Foundation	3.43(b)	
PX0395	Article: Grail and Cirina Combine to Create Global Company Focused on Early Detection of Cancer	3/31/2017	PX0395-001	PX0395-003			3.43(b)	
PX0396	Website: Solutions - Helio Health	00/00/20	PX0396-001	PX0396-003			3.43(b)	
PX0398	Interview: Michael Katz on Challenges to Antitrust Policy, Tech Policy Institute	7/8/2021	PX0398-001	PX0398-026			3.43(b)	
PX0400	Article: Gilbert and Katz, An Economist's Guide to U.S. v. Microsoft (JEP 2001)	00/00/2001	PX0400-001	PX0400-024			3.43(b)	
PX0404	Book Chapter: Katz, Vertical Contractual Relations, Chapter 11, Handbook of Industrial Organization, Volume I (1989)	00/00/1989	PX0404-001	PX0404-067			3.43(b)	
PX0405	Press Release: Illumina Appoints Bob Ragusa as Chief Executive Officer (CEO) of Grail, October 14, 2021	10/14/2021	PX0405-001	PX0405-003			3.43(b)	
PX0406	Article: Vertical Merger Enforcement Challenges at the FTC	7/17/1995	PX0406-001	PX0406-005			3.43(b)	
PX0408	Document: Illumina Form 10-Q for the period ended October 3, 2021	10/3/2021	PX0408-001	PX0408-057			3.43(b)	
PX2302	Email from Nicole Berry to Curtis Fideler; Michael Gallad re: Re: PRIVILEGED & CONFIDENTIAL - Customer Communications re Grail announcement w/ Attach Grail Customer List.xlsx	9/21/2020	ILMN-FTCVOL_08871829	ILMN-FTCVOL_08871832			3.43(b), 3.43(d)(3)	
PX2829	Email from Linda Mansolillo to Richard Graff re: Providence St Joseph Health System Illumina Executive Strategy Session (INTERNAL) UPDATES	7/15/2019	ILMN-FTCVOL_00662476	ILMN-FTCVOL_00662477		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2830	Email from Ammar Qadan to Francis deSouza and ILMN-Org-deSouza Direct Staff re: Announcement on innovative partnership between Illumina and Harvard Pilgrim w/ attach: Copy of Copy of H.P. BusinessCaseAnalysis.7.12.17a.xlsx	1/31/2018	ILMN-FTCVOL_02709860	ILMN-FTCVOL_02709862		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2832	Email from Mimmi Brown to Jonathan Seaton and Jeff Eidel re: RE: Value Based Agreement approach to Average Risk NIPT	9/13/2017	ILMN-FTCVOL_04538202	ILMN-FTCVOL_04538202		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2849	Email from Christian Cotter to David Mok, Brian Blanchett, and Melinda Alongi re: Grail Funds	6/2/2021	FTC_ILMN_00142074	FTC_ILMN_00142075		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2850	Email from Brian Blanchett to Melinda Alongi and David Mandell re: FW: Grail Funds	6/2/2021	FTC_ILMN_00140339	FTC_ILMN_00140340		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2851	Illumina-Grail Hold Separate Commitments, August 18, 2021	8/18/2021	PX2851-001	PX2851-009			3.43(b), 3.43(d)(3)	
PX2852	Email from Rebecca Enigk to Nicole Berry and Curtis Fideler re: Helio - open letter	5/24/2021	FTC_ILMN_00139861	FTC_ILMN_00139861			3.43(b), 3.43(d)(3)	
PX2853	Email from Francis deSouza to Emily Milsovic re: Emailing: Draft May2021 ExecSession vlf w/ attach: Draft May2021 ExecSession vlf.pptx	5/2/2021	FTC_ILMN_00149944	FTC_ILMN_00149960			3.43(b), 3.43(d)(3)	Yes
PX2854	Email from Vincent Brissot to Francis deSouza re: Zesty News: 70% Meetings Set up Exec Sponsor Program w/ attach: Hospital For Sick Children (Final).pptx; Exec Program Accounts.xlsx	5/3/2021	FTC_ILMN_00149961	FTC_ILMN_00149964		Hearsay	3.43(b), 3.43(d)(3)	
PX2855	Email from Hans Bishop to Francis deSouza re: Fwd: Suggested WSJ op-ed by Hans Bishop w/ attach: OpEd Bishop 4-25 AM.pdf	4/25/2021	FTC_ILMN_00150001	FTC_ILMN_00150003_0001			3.43(b), 3.43(d)(3)	
PX2858	Email from Peter Fromen to Laura Lauman re FW: Cancer opportunity - Dennis Lo	8/9/2012	ILMN-FTCVOL_19964836	ILMN-FTCVOL_19964836			3.43(b), 3.43(d)(3)	
PX2859	Email from Robert Bookstein to Peter Fromen; Gordon Cann; Jian-Bing Fan; et al. re: Feedback to Call/Webex with Dennis Lo w/ Attach: GC notes on Lo call.docx; RE: Re: Call/Webex with Dennis Lo	9/5/2012	ILMN-FTCVOL_20655367	ILMN-FTCVOL_20655371			3.43(b), 3.43(d)(3)	
PX2860	Email from Sameer Rohatgi to Stephane Mouradian; Richard Rava; Charles Moehle; et al. re: Decheng Capital - Dennis Lo	3/10/2015	ILMN-FTCVOL_20680517	ILMN-FTCVOL_20680517			3.43(b), 3.43(d)(3)	
PX2861	Email from Rebecca Chambers to Jay Flatley, Marc Stapley, Francis deSouza et al. re: Lancelot PR messaging w/ attach: LancelotCommunicationsSummary.121816.pptx	12/18/2016	ILMN-FTCVOL_04584760	ILMN-FTCVOL_045847601			3.43(b), 3.43(d)(3)	
PX2862	Email from Marc Stapley to Jay Flatley, Francis deSouza, Paul Scagnetti et al. re: Grail Series B Term Sheet w/ attach: Grail Series B - Summary of Key Issues 12.7.2016 - RevisedHipptx, Napa K2 Evolution[1].docx, SF-#5592562-v2-Grail ARCH Series B term sheet (002)[11.docx	12/7/2016	ILMN-FTCVOL_07838414	ILMN-FTCVOL_07838430			3.43(b), 3.43(d)(3)	
PX2863	Email from Anold Thackray to Jay Flatley and Mark Jones re: w/ attach: Jay Flatley. Edited OH 1(1) with revisions.docx, Jay Flatley. Edited OH 1 (2).docx, Jay Flatley. Edited OLI 2.docx, Jay Flatley. Edited OLI 3.docx, Jay Flatley. Edited OLI 4.docx, Jay Flatley. Edited OLI 5.docx	3/5/2017	ILMN-FTCVOL_08088934	ILMN-FTCVOL_08089086			3.43(b), 3.43(d)(3)	

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Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
PX2868	Email from Marc Stapley to Nicholas Naclerio re: Quest Supply Agreement - Executed	12/5/2013	ILMN-FTCVOL_04226055	ILMN-FTCVOL_04226056		Hearsay, Foundation	3.43(b), 3.43(d)(3)	
PX2869	Email from Dominic Moriarty to Joel Fellis re: Custom products	1/27/2017	ILMN-FTCVOL_04146783	ILMN-FTCVOL_04146784		Hearsay, Foundation	3.43(b), 3.43(d)(3)	
PX2870	Email from Joydeep Goswami to Alex Aravanis, Susan Tousi, Phil Febbo re: RE: Update on ctDNA ssPMA strategy	3/15/2021	FTC_ILMN_00007200	FTC_ILMN_00007201		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2871	Presentation: Agenda	00/00/2021	FTC_ILMN_00011012	FTC_ILMN_00011014		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2872	Email from Steve Keane to Christen Cotter, Merrilyn Datta, Kathryne Reeves; et al. re: RE: EU press release w/ Attach: Illumina - Annulment Filing Press Release.docx	4/26/2021	FTC_ILMN_00145844	FTC_ILMN_00145845		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2873	Email from Margaret Yam to Charles Dadswell, Phil Febbo, Kathryne Reeves; et al. re: Updated Grail Update Deck for This Afternoon w/ Attach: Consolidated Grail Update v4.pptx	4/23/2021	FTC_ILMN_00148072	FTC_ILMN_00148084		Foundation	3.43(b), 3.43(d)(3)	
PX2874	Email from Jason Levin to Phil Febbo, Christen Cotter, Adrienne Petz, et al. re: KOL Outreach - Contacts and Outreach Guide w/ Attach: KOL Outreach Guide and Talking Points 04.22.21.docx	4/22/2021	FTC_ILMN_00150639	FTC_ILMN_00150640		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2875	Email from Omead Ostadan to Bob Ragusa re: Fwd: Notes of Guardant meeting at RWC on 10/30	11/5/2019	ILMN-FTCVOL_00283729	ILMN-FTCVOL_00283730		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2876	Email from Bob Ragusa to Susan Tousi re: Re: Massive NextSeq kit failures reported at Natera, 3 lots in quarantine, 3 SCARS, >$12M in NextSeq reagent revenue at risk	3/27/2017	ILMN-FTCVOL_21184256	ILMN-FTCVOL_21184258		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2877	Email from Michael Kimpland to Brenda Kahl, Damon Silvestry, Deborah Wrona, et al. re: ILMN Visit: Executive Meeting [Send Ahead Deck] w/ Attach: Exec Meeting Draft Slides v4.0.pptx	9/26/2017	ILMN-FTCVOL_21811874	ILMN-FTCVOL_21811884		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX2878	Email from John Moon to Jeff Mandell, Steve Barnard, Boyan Boyanov, et al. re: RE: WSJ Article	1/13/2021	ILMN-FTCVOL_26332205	ILMN-FTCVOL_26332210		Hearsay; Foundation	3.43(b), 3.43(d)(3)	
PX4585	Email from Linda Mansolillo to Alexis Tosti re:[EXTERNAL] Greetings from Grail	7/31/2020	GRAIL-DOC-00959769	GRAIL-DOC-00959771			3.43(b), 3.43(d)(3)	
PX4604	Email from Merrilee Johnstone to Eric Klein, Donald Richards, and Allen Cohn re: Following up re CCGA3 Primary Manuscript: Interest from Annals of Oncology w/ attach: Klein_AnnalsOnc_CCGA3Primary_Submission version_May19_rev27May2021.docx; Klein_AnnalsOnc_CCGA3Primary_Response to Reviewer.docx	5/27/2021	GRAIL-LIT-00226884	GRAIL-LIT-00226916			3.43(b), 3.43(d)(3)	
PX4606	Email from Frances Wu to Abram Barth, Kristine Mechem, Vasiliki Demas et al. re: Health Advances-GRAIL Work Order 2 for Review w/ attach: Health Advances Diagnostic Regulatory Landscape Assessment Kick Off 2021 May11.pptx	5/12/2021	GRAIL-LIT-00227614	GRAIL-LIT-00227622			3.43(b), 3.43(d)(3)	
PX4607	Presentation: Grail Strategy Planning Roadmap (Workshop #2)	9/2/2020	GRAIL-LIT-00241391	GRAIL-LIT-00241391			3.43(b), 3.43(d)(3)	
PX4608	Presentation: 2021 Corporate Goals	00/00/2021	GRAIL-LIT-00242890	GRAIL-LIT-00242890			3.43(b), 3.43(d)(3)	
PX4609	Document: Galleri V3 DDP Meeting Minutes 2021	00/00/2021	GRAIL-LIT-00242891	GRAIL-LIT-00242925			3.43(b), 3.43(d)(3)	Yes
PX4610	Email from Joshua Ofman to Stephanie Guttendorf re: EOW - Week Ending 07/16/2021	7/19/2021	GRAIL-LIT-00244173	GRAIL-LIT-00244178			3.43(b), 3.43(d)(3)	
PX4611	Presentation: Board of Directors Meeting, May 2021	5/27/2021	GRAIL-LIT-00243267	GRAIL-LIT-00243370			3.43(b), 3.43(d)(3)	
PX4612	Presentation: Board of Directors Meeting, May 2021	5/27/2021	GRAIL-LIT-00243018	GRAIL-LIT-00243018			3.43(b), 3.43(d)(3)	
PX4613	Email from Vikram Bajaj to science_organization@grailbio.com re: Fwd: [confidential & embargoed] Grail and Cirina combine forces to address the global burden of cancer	5/31/2017	GRAIL-DOC-00700887	GRAIL-DOC-00700889			3.43(b), 3.43(d)(3)	
PX4614	Email from Elaine Cheung to Nicole Robinson re: Grail news w/ Attach: CONFIDENTIAL-APPROVED GRAIL_Cirina Press release 5_31.pdf	5/31/2017	GRAIL-DOC-01263749	GRAIL-DOC-01263751			3.43(b), 3.43(d)(3)	
PX4615	Presentation: AstraZeneca Due Diligence Audit	4/22/2021	GRAIL-LIT-00243735	GRAIL-LIT-00243735			3.43(b), 3.43(d)(3)	
PX4616	Presentation: AACR 2021 Conference Report	5/5/2021	GRAIL-LIT-00242202	GRAIL-LIT-00242202			3.43(b), 3.43(d)(3)	
PX4617	Email from Candace Bain to Yiren Hu, Richard Huang, pipeline-eng et al. re: LIMS Integration of Dark Cycle Run Control	4/29/2021	GRAIL-LIT-00227551	GRAIL-LIT-00227561			3.43(b), 3.43(d)(3)	
PX4618	Email from Richard Huang to Yiren Hu, pipeline-eng, Eiljah Carrel et al. re: LIMS Integration of Dark Cycle Run Control	4/29/2021	GRAIL-LIT-00227534	GRAIL-LIT-00227543			3.43(b), 3.43(d)(3)	
PX4619	Email from Vlad Korobkin to Michael Podoll, Alexis Tosti, Matthew Strom re: RE: ILMN trading analysis w/ Attach: Watson PIB - 2020.09.11.pdf	9/12/2020	GRAIL-DOC-00467971	GRAIL-DOC-00468177			3.43(b), 3.43(d)(3)	
PX4620	Presentation: Project Knight - Board Update II	5/10/2017	GRAIL-DOC-01865517	GRAIL-DOC-01865540			3.43(b), 3.43(d)(3)	
PX6105	Expert Report and Declaration of Dr. Michael Katz	10/8/2021	PX6105-001	PX6105-023			3.43(b)	
PX7145	Depo Transcript: Michael Katz (RC Expert)	10/26/2021	PX7145-001	PX7145-093			3.43(b)	
PX8685	Document: Invitae Admissibility Declaration (RX)	8/19/2021	PX8685-001	PX8685-002			3.43(b)	
PX8686	Document: Exact Sciences Admissibility Declaration (RX)	8/23/2021	PX8686-001	PX8686-005			3.43(b)	
RX3758	Galleri Launch Readiness Biweekly Updates for ELT	6/4/2021	GRAIL-LIT-00244223	GRAIL-LIT-00244223			3.43(b)	
RX3759	Galleri Launch Readiness Biweekly Updates for ELT	6/17/2021	GRAIL-LIT-00244224	GRAIL-LIT-00244224			3.43(b)	
RX3760	Galleri Launch Readiness Biweekly Updates for ELT	7/1/2021	GRAIL-LIT-00244225	GRAIL-LIT-00244225			3.43(b)	
RX3761	Galleri Launch Readiness Biweekly Updates for ELT	7/15/2021	GRAIL-LIT-00244226	GRAIL-LIT-00244226			3.43(b)	
RX3912	LDT and CLIA_FAQs (https://www.cms.gov/Regulations-and-Guidance/Legislation/CLIA/Downloads/LDT-and-CLIA_FAQs.pdf)	10/22/2013					3.43(b)	
RX3913	Oxford Nanopore Technologies Website: Products (https://nanoporetech.com/products)	8/22/2021					3.43(b)	

Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
RX3915	BusinessWire, Fulgent Genetics and Helio Health Announce Strategic Partnership to Commercialize Early Cancer Detection Tests (https://www.businesswire.com/news/home/20210809005729/en/Fulgent-Genetics-and-Helio-Health-Announce-Strategic-Partnership-to-Commercialize-Early-Cancer-Detection-Tests)	8/9/2021					3.43(b)	
RX3918	Letter of Intent from N. Berry to J. Platt (Inivata, Inc.)	10/22/2020	ILMN-FTCVOL_02622036	ILMN-FTCVOL_02622036			3.43(b)	
RX3919	Letter of Intent from N. Berry to P. Diaz (Myriad Genetics, Inc.)	11/18/2020	ILMN-FTCVOL_03350719	ILMN-FTCVOL_03350719			3.43(b)	
RX3920	Letter of Intent from N. Berry to E. Lefkofksy (Tempus Labs, Inc.)	10/20/2020	ILMN-FTCVOL_07750027	ILMN-FTCVOL_07750027	RX2140		3.43(b)	
RX3921	Guardant Health, Inc., Annual Report for Fiscal Year Ending 12/31/2020	2/25/2021					3.43(b)	
RX3923	Guardant Health, Inc., Form 10-Q for the Quarterly Period Ended March 31, 2021	5/6/2021					3.43(b)	
RX3924	Guardant Health, Inc., Form 10-Q for the Quarterly Period Ended June 30, 2021	8/5/2021					3.43(b)	
RX3925	Guardant Health, Inc., FQ2 2021 Earnings Call Transcripts	8/5/2021					3.43(b)	
RX3926	ClinicalTrials.Gov Search Results for “Guardant”	8/25/2021					3.43(b)	
RX3927	Guardant Website Screenshots, “ECLIPSE”, https://guardanthealth.com/eclipse/ (accessed Aug. 26, 2021)	8/26/2021					3.43(b)	
RX3928	Guardant Website Screenshots, “Solutions”, https://guardanthealth.com/solutions/#lunar-2 (accessed Aug. 26, 2021)	8/26/2021					3.43(b)	
RX3929	Nephron IP Review: Get Ready for NGS Competition	8/23/2021				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3930	Exact Sciences Admissibility Declaration	8/23/2021					3.43(b)	
RX3931	Invitae Admissibility Declaration	8/6/2021					3.43(b)	
RX3933	Guardant Admissibility Declaration	9/1/2021					3.43(b)	
RX3934	Press Release: Guardant Health Expands Guardant360® Portfolio With New Tests for Treatment Response Monitoring and Complete Genomic Profiling	6/22/2021					3.43(b)	
RX3935	Addendum to Open Offer, dated September 8, 2021	9/8/2021					3.43(b)	Yes
RX3936	Email from Adam Welland to Mike Nolan et. al. re RE: Invitation: Illumina Supply Agreement-April/Mike(Freenome) @ Wed Apr 21, 2021 10:30am - 11am (PDT) (david.lo@freenome.com) attaching 2021 06 18 - Supply Agreement (ILMN RL).docx	6/21/2021	FTC_ILMN_00140161	FTC_ILMN_00140164			3.43(b)	Yes
RX3937	Attachment: 2021.06.18 - Supply Agreement (ILMN RL)	6/18/2021	FTC_ILMN_00140165	FTC_ILMN_00140205			3.43(b)	Yes
RX3938	Email from Nicole Berry to Adam Welland re FW: Invitation: Illumina Supply Agreement-April/Mike(Freenome) @ Wed Apr 21, 2021 10:30am - 11am (PDT) (david.lo@freenome.com)	6/29/2021	FTC_ILMN_00140115	FTC_ILMN_00140119			3.43(b)	
RX3939	Oxford Nanopore Technologies Limited Registration Document UK	9/9/2021					3.43(b)	
RX3941	Comparison of the MGISEQ-2000 and Illumina HiSeq 4000 sequencing platforms for RNA sequencing	9/20/2019				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3942	Comparative analysis of 7 short-read sequencing platforms using the Korean Reference Genome: MGI and Illumina sequencing benchmark for whole-genome sequencing	2/16/2021				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3943	Comparative performance of the BGI and Illumina sequencing technology for single-cell RNA-sequencing	5/13/2020				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3944	Systematic comparison of germline variant calling pipelines cross multiple next-generation sequencers	6/27/2019				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3945	Comparative analysis of novel MGISEQ-2000 sequencing platform vs Illumina HiSeq 2500 for whole-genome sequencing	3/16/2020				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3946	Comparison between MGI and Illumina sequencing platforms for whole genome sequencing	4/17/2021				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3947	The Long and the Short of It: PacBio Strikes $800M Deal to Acquire Omniome	7/21/2021					3.43(b)	
RX3948	BGI Genomics H1 Revenues Fall 11 Percent on COVID-19 Testing Decline	8/30/2021					3.43(b)	
RX3949	Natera and BGI Genomics Announce Commercial Launch ofthe BGI/Natera Signatera Assay in China	6/24/2021					3.43(b)	
RX3950	Oncogene Concatenated Enriched Amplicon Nanopore Sequencing for rapid, accurate, and affordable somatic mutation detection	9/6/2021				Hearsay, Reliability, Improper expert opinion	3.43(b)	
RX3951	National Cancer Institute - Cancer Stat Facts: Common Cancer Sites	2021					3.43(b)	
RX3952	U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines	8/19/2010					3.43(b)	
RX3953	Federal Trade Commission Withdraws Vetical Merger Guidelines and Commentary	9/15/2021					3.43(b)	
RX3956	Natera Selected for Circulating Tumor DNA Study in Colorectal Cancer	11/6/2017					3.43(b)	
RX3958	Spreadsheet: EEA Win-Loss Summary	00/00/0000	FTC_ILMN_00154047	FTC_ILMN_00154047			3.43(b)	
RX3959	Spreadsheet: MGI & BGI Deals and Tenders Summary	00/00/0000	FTC_ILMN_00154048	FTC_ILMN_00154048			3.43(b)	
RX3960	Open Offer 4(g) Disclosure: GRAIL Product and Service Purchasing	9/13/2021					3.43(b)	
RX3961	R. Parikh, Z. Obermeyer & A. Navathe, Regulation of predictive analytics in medicine	2/22/2019					3.43(b)	
RX3965	Letter from J. DiMemmo to J. Stover re: Proposed Revisions to Highmark Health's and its Affiliates' Firewall Policies	1/23/2017					3.43(b)	
RX3966	Letter from J. Stover to J. DiMemmo re: Highmark Health Response to Conditions 7, 8, and/or 9 of the April 29, 2012 Approving Determination and Order	5/1/2019					3.43(b)	
RX3967	Office of the Assistant Secretary for Planning and Evaluation U.S. Department of Health and Human Services, Guidelines for Regulatory Impact Analysis	2016					3.43(b)	

Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
RX3968	FDA, Mammography Quality Standards Act; Amendments to Part 900 Regulations: Preliminary Regulatory Impact Analysis; Initial Regulatory Flexibility Analysis; Unfunded Mandates Reform Act Analysis	2016					3.43(b)	
RX3969	Seventh Amendment to Supply Agreement Between Illumina, Inc. and Natera, Inc.	10/7/2021	FTC_ILMN_00154058	FTC_ILMN_00154073		Hearsay, Completeness, Foundation, Party document produced after close of fact discovery and live hearing	3.43(b)	
RX3970	Illumina, Inc. Form 8-K, dated January 10, 2016	1/10/2016					3.43(b)	
RX3971	Illumina, Inc. Form 8-K, dated September 20, 2020	9/20/2020					3.43(b)	
RX3972	Illumina, Inc. Form 8-K, dated March 1, 2017	3/1/2017					3.43(b)	
RX3973	Email from T. Gutliffe to J. Leite re Completed: IVD Plan Beetween Roche and Illumina	10/2/2020	ILMN-FTCVOL_02979379	ILMN-FTCVOL_02979398			3.43(b)	
RX3974	Illumina, Inc. Form 10-Q for the Quarterly Period Ended July 4, 2021	8/5/2021					3.43(b)	
RX3975	Illumina, Inc. Form 10-Q for the Quarterly Period Ended March 29, 2020	4/30/2020					3.43(b)	
RX3976	Illumina, Inc. Form 10-Q for the Quarterly Period Ended June 28, 2020	8/6/2020					3.43(b)	
RX3977	Illumina, Inc. Form 10-Q for the Quarterly Period Ended September 27, 2020	10/29/2020					3.43(b)	
RX3978	Illumina, Inc. Form 10-Q for the Quarterly Period Ended March 31, 2019	4/25/2019					3.43(b)	
RX3979	Illumina, Inc. Form 10-Q for the Quarterly Period Ended June 30, 2019	7/30/2019					3.43(b)	
RX3980	Illumina, Inc. Form 10-Q for the Quarterly Period Ended September 29, 2019	10/24/2019					3.43(b)	
RX3981	Illumina, Inc. Form 10-Q for the Quarterly Period Ended April 1, 2018	4/25/2018					3.43(b)	
RX3982	Illumina, Inc. Form 10-Q for the Quarterly Period Ended July 1, 2018	7/31/2018					3.43(b)	
RX3983	Illumina, Inc. Form 10-Q for the Quarterly Period Ended September 30, 2018	10/23/2018					3.43(b)	
RX3984	Illumina, Inc. Form 10-Q for the Quarterly Period Ended April 2, 2017	5/5/2017					3.43(b)	
RX3985	Illumina, Inc. Form 10-Q for the Quarterly Period Ended July 2, 2017	8/2/2017					3.43(b)	
RX3986	Illumina, Inc. Form 10-Q for the Quarterly Period Ended October 1, 2017	10/25/2017					3.43(b)	
RX3987	Illumina, Inc. Form 10-Q for the Quarterly Period Ended April 3, 2016	5/9/2016					3.43(b)	
RX3988	Illumina, Inc. Form 10-Q for the Quarterly Period Ended July 3, 2016	8/1/2016					3.43(b)	
RX3989	Illumina, Inc. Form 10-Q for the Quarterly Period Ended October 2, 2016	11/7/2016					3.43(b)	
RX3990	Illumina, Inc. Form 10-Q for the Quarterly Period Ended March 29, 2015	5/1/2015					3.43(b)	
RX3991	Illumina, Inc. Form 10-Q for the Quarterly Period Ended June 28, 2015	7/31/2015					3.43(b)	
RX3992	Illumina, Inc. Form 10-Q for the Quarterly Period Ended September 27, 2015	11/2/2015					3.43(b)	
RX3993	Remarks of Joshua D. Wright, Section 5 Revisited: Time for the FTC to Define the Scope of Its Unfair Methods of Competition Authority	2/26/2015					3.43(b)	
RX3999	Leah Nylen & Betsy Woodruff Swan, FTC Staffers told to back out of public appearances, Politico, https://www.politico.com/news/2021/07/06/ftc-staffers-public-appearances-498386	7/6/2021					3.43(b)	
RX4000	Merger Review: How Mergers are Reviewed https://www.ftc.gov/news-events/media-resources/mergers-and-competition/merger-review	10/31/2018					3.43(b)	
RX4002	Proposed Consent Order, In re Illumina, Inc. and GRAIL, Inc.	11/8/2021					3.43(b)	
RX4003	Website: Illumina Oncology contract terms						3.43(b)	
RX4004	MGI Introduces DNBSEQ-T10x4RS Genetic Sequencing System at the ICG-15, https://www.cmocro.com/news_detail/MGI+Introduces+DNBSEQ-T10%26times%3B4RS+Genetic+Sequencing+Syste/541048/index.html	10/26/2020					3.43(b)	
RX4005	Natera Aiming to Translate Success in Colorectal Cancer Diagnostics Into Other Areas, Genomeweb, https://www.genomeweb.com/molecular-diagnostics/natera-aiming-translate-success-colorectal-cancer-diagnostics-other-areas?utm_source=addthis_shares#.YZKD__TnEFy.link	11/5/2021					3.43(b)	
RX4006	Natera, Inc. Q3 2021 Earnings Call Transcript	11/4/2021					3.43(b)	
RX4007	Exact Sciences Corporation Q3 2021 Earnings Call Transcript	11/2/2021					3.43(b)	
RX4008	Christine Wilson, Reflections on the 2020 Draft Vertical Merger Guidelines and Comments from Stakeholders, Remarks at the DOJ Workshop on Draft Vertical Mergers	3/11/2020					3.43(b)	
RX4009	Website: Galleri FAQs, https://www.galleri.com/support/faqs (as of Nov. 15, 2021)						3.43(b)	
RX4010	Singular Genomics Expands Early-Access Program for New DNA Sequencing Instrument, Genomeweb, https://www.genomeweb.com/sequencing/singular-genomics-expands-early-access-program-new-dna-sequencing-instrument?utm_source=addthis_shares#.YZKruVx7a2p.link	11/10/2021					3.43(b)	
RX4011	Bryan Koenig, For DOJ and FTC, Clearing Deals Remains A Gray Area, Law360	3/20/2020					3.43(b)	
RX4012	Timothy J. Muris, Comments on The FTC-DOJ Clearance Process Before the Antitrust Modernization Commission (Nov. 3, 2005)	11/3/2005					3.43(b)	
RX4013	Urska Velikonja, Are the SEC's Administrative Law Judges Biased? An Empirical Investigation, 92 Wash. L. Rev. 315 (2017)	2017					3.43(b)	
RX4014	Malcolm B. Coate & Andrew N. Kleit, Does it Matter that the Prosecutor is also the Judge? The Administrative Complaint Process at the Federal Trade Commission, 19 Managerial & Decision Econ. 1, 9 (1998)	1998					3.43(b)	
RX4015	Zev J. Eigen & Yair Listokin, Do Lawyers Really Believe Their Own Hype and Should They? A Natural Experiment, 41 J. Legal Stud. 239, 263-64 (2012)	2012					3.43(b)	

Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
RX4016	Edward H. Fleischman, Toward Neutral Principles: The SEC's Discharge of Its Tri-Functional Administrative Responsibilities, 42 Cath. U. L. Rev. 251, 260-61 (1993)	1993					3.43(b)	
RX4017	Antitrust Modernization Commission, Report and Recommendations, April 2007	4/2007					3.43(b)	
RX4018	Press Release, Statement of FTC Acting Bureau of Competition Director Maribeth Petrizzi on Bureau's Motion to Dismiss Request for Preliminary Relief in Illumina/GRAIL Case (May 20, 2021)	5/20/2021					3.43(b)	
RX4019	HSR Annual Report, FY1993	1993					3.43(b)	
RX4020	HSR Annual Report, FY1994	1994					3.43(b)	
RX4021	HSR Annual Report, FY1995	1995					3.43(b)	
RX4022	HSR Annual Report, FY1996	1996					3.43(b)	
RX4023	HSR Annual Report, FY1997	1997					3.43(b)	
RX4024	HSR Annual Report, FY1998	1998					3.43(b)	
RX4025	HSR Annual Report, FY1999	1999					3.43(b)	
RX4026	HSR Annual Report, FY2000	2000					3.43(b)	
RX4027	HSR Annual Report, FY2001	2001					3.43(b)	
RX4028	HSR Annual Report, FY2002	2002					3.43(b)	
RX4029	HSR Annual Report, FY2003	2003					3.43(b)	
RX4030	HSR Annual Report, FY2004	2004					3.43(b)	
RX4031	HSR Annual Report, FY2005	2005					3.43(b)	
RX4032	HSR Annual Report, FY2006	2006					3.43(b)	
RX4033	HSR Annual Report, FY2007	2007					3.43(b)	
RX4034	HSR Annual Report, FY2008	2008					3.43(b)	
RX4035	HSR Annual Report, FY2009	2009					3.43(b)	
RX4036	HSR Annual Report, FY2010	2010					3.43(b)	
RX4037	HSR Annual Report, FY2011	2011					3.43(b)	
RX4038	HSR Annual Report, FY2012	2012					3.43(b)	
RX4039	HSR Annual Report, FY2013	2013					3.43(b)	
RX4040	HSR Annual Report, FY2014	2014					3.43(b)	
RX4041	HSR Annual Report, FY2015	2015					3.43(b)	
RX4042	HSR Annual Report, FY2016	2016					3.43(b)	
RX4043	HSR Annual Report, FY2017	2017					3.43(b)	
RX4044	HSR Annual Report, FY2018	2018					3.43(b)	
RX4045	HSR Annual Report, FY2019	2019					3.43(b)	
RX4046	HSR Annual Report, FY2020	2020					3.43(b)	
RX5000	Document Subpoena: Ariosa Diagnostics, Inc.	4/6/2021					3.43(b)	
RX5001	WITHDRAWN							
RX5002	WITHDRAWN							
RX5003	Document Subpoena: CellMax, Inc.	4/19/2021					3.43(b)	
RX5004	Document Subpoena: Dr. Charles Hill (Part III)	5/28/2021					3.43(b)	
RX5005	Document Subpoena: Dr. Charles Hill (District Court)	5/7/2021					3.43(b)	
RX5006	Document Subpoena: Element Biosciences, Inc.	4/16/2021					3.43(b)	
RX5007	Document Subpoena: Emory Healthcare (Part III)	5/28/2021					3.43(b)	
RX5008	Document Subpoena: Emory Healthcare (District Court)	5/7/2021					3.43(b)	
RX5009	Document Subpoena: Exact Sciences (Part III)	5/28/2021					3.43(b)	
RX5010	Document Subpoena: Exact Sciences (District Court)	4/7/2021					3.43(b)	
RX5011	Document Subpoena: Foundation Medicine, Inc. (FMI)	4/8/2021					3.43(b)	
RX5012	Document Subpoena: Freenome Holdings, Inc. (Part III)	5/28/2021					3.43(b)	
RX5013	Document Subpoena: Freenome Holdings, Inc. (District Court)	4/7/2021					3.43(b)	
RX5014	Document Subpoena: GenapSys, Inc.	4/16/2021					3.43(b)	
RX5015	Document Subpoena: Guardant Health, Inc. (Part III)	5/28/2021					3.43(b)	
RX5016	Document Subpoena: Guardant Health, Inc. (District Court)	4/7/2021					3.43(b)	
RX5017	Document Subpoena: HelioHealth	6/4/2021					3.43(b)	
RX5018	Document Subpoena: LabCorp (Part III)	5/24/2021					3.43(b)	
RX5019	Document Subpoena: Labcorp (District Court)	5/7/2021					3.43(b)	
RX5020	Document Subpoena: Luminex Corporation (Part III)	5/24/2021					3.43(b)	
RX5021	Document Subpoena: Luminex Corporation (District Court)	4/16/2021					3.43(b)	
RX5022	Document Subpoena: Natera, Inc. (Part III)	5/28/2021					3.43(b)	
RX5023	Document Subpoena: Natera, Inc. (District Court)	4/7/2021					3.43(b)	
RX5024	Document Subpoena: Omniome, Inc.	4/16/2021					3.43(b)	
RX5025	Document Subpoena: Pacific Biosciences of California, Inc. (PacBio)	4/16/2021					3.43(b)	
RX5026	Document Subpoena: Personal Genome Diagnostics, Inc. (PGDx, Part III)	5/28/2021					3.43(b)	
RX5027	Document Subpoena: Personal Genome Diagnostics, Inc. (PGDx, District Court)	4/8/2021					3.43(b)	
RX5028	Document Subpoena: PreventionGenetics, LLC	4/19/2021					3.43(b)	
RX5029	Document Subpoena: Progenity, Inc.	4/15/2021					3.43(b)	
RX5030	Document Subpoena: PrognomiQ, Inc.	4/14/2021					3.43(b)	
RX5031	Document Subpoena: Quest Diagnostics, Inc. (Part III)	5/24/2021					3.43(b)	
RX5032	Document Subpoena: Quest Diagnostics, Inc. (District Court)	5/7/2021					3.43(b)	
RX5033	Document Subpoena: Roche Sequencing Solutions, Inc.	4/6/2021					3.43(b)	
RX5034	Document Subpoena: Seer, Inc.	4/14/2021					3.43(b)	
RX5035	Document Subpoena: Singlera Genomics Inc. (Part III)	5/28/2021					3.43(b)	

Exhibit No.	Description	Date	BegBates	EndBates	Also Referenced As	Admissibility Objections	Admissibility	Admitted at Trial
RX5036	Document Subpoena: Singlera Genomics Inc. (District Court)	4/12/2021					3.43(b)	
RX5037	Document Subpoena: Singular Genomics Systems, Inc. (Part III)	5/24/2021					3.43(b)	
RX5038	Document Subpoena: Singular Genomics Systems, Inc. (District Court)	5/7/2021					3.43(b)	
RX5039	Document Subpoena: SomaLogic, Inc.	4/16/2021					3.43(b)	
RX5040	Document Subpoena: StageZero Life Sciences, Inc.	4/14/2021					3.43(b)	
RX5041	Document Subpoena: Thermo Fisher Scientific Inc.	4/14/2021					3.43(b)	
RX5042	Document Subpoena: Third Rock Ventures, LLC (Part III)	5/28/2021					3.43(b)	
RX5043	Document Subpoena: Third Rock Ventures, LLC (District Court)	4/12/2021					3.43(b)	
RX5044	Document Subpoena: Thrive Earlier Detection Corp. (Part III)	5/28/2021					3.43(b)	
RX5045	Document Subpoena: Thrive Earlier Detection Corp. (District Court)	4/9/2021					3.43(b)	
RX5046	Document Subpoena: Ultima Genomics, Inc. (Part III)	5/24/2021					3.43(b)	
RX5047	Document Subpoena: Ultima Genomics, Inc. (District Court)	4/21/2021					3.43(b)	

EXHIBIT C

Exhibit No.	Description	Date	BegBates	EndBates	Admissibility Objections	Admissibility
PX7138	Trial Depo Transcript: Fiona Scott Morton (CC Expert)	9/16/2021	PX7138-001	PX7138-144		Trial Deposition
PX7139	Trial Depo Transcript: Amol Navathe (CC Expert)	10/1/2021	PX7139-001	PX7139-071		Trial Deposition
PX7140	Trial Depo Transcript: Dov Rothman (CC Expert)	9/22/2021	PX7140-001	PX7140-040		Trial Deposition
RX4047	Letter from N. Berry to R. Brand, Circulogene Theranostics, Inc. re: Open Offer	10/6/2021	FTC_ILMN_00154074	FTC_ILMN_00154076	Document other than trial deposition improperly proposed for addition to JX4, Untimely, Hearsay, Completeness, Foundation, Party document produced after close of fact discovery and live hearing	3.43(b)
RX4048	Press Release: Singular Genomics Launches the G4 Sequencing Campaign	12/16/2021				3.43(b)
RX6000	Videotaped Trial Depo & Transcript: Dennis Carlton (RC Expert)	10/1/2021	RX6000-1	RX6000-86		Trial Deposition
RX6001	Videotaped Trial Depo & Transcript: Patricia Deverka (RC Expert)	9/29/2021	RX6001-1	RX6001-82		Trial Deposition
RX6002	Videotaped Trial Depo & Transcript: Margaret Guerin-Calvert (RC Expert)	9/30/2021	RX6002-1	RX6002-69		Trial Deposition
RX6003	Videotaped Trial Depo & Transcript: Robert Rock (RC Expert)	9/28/2021	RX6003-1	RX6003-44		Trial Deposition
RX6004	Videotaped Trial Depo & Transcript: Michael Katz (RC Expert)	11/1/2021	RX6004-1	RX6004-78		Trial Deposition

EXHIBIT D

Exhibit No.	Description	Date	BegBates	EndBates	Admissibility Objections	Admissibility
RX4049	Declaration of Michael L. Metzker, Ph.D., in Support of Defendants' Opposition to Illumina's Motion for Permanent Injunction, *Illumina, Inc. v. BGI Genomics, Co.* , 20-cv-01465-WHO (N.D. Cal. filed Feb. 1, 2022), ECF No. 644-12	2/1/2022	RX4049-1	RX4049-22	Hearsay, Reliability, Improper expert opinion	3.43(b)
RX4050	Pacific Biosciences of California, JP Morgan Conference Presentation Transcript	1/13/2022	RX4050-1	RX4050-14		3.43(b)
RX4051	Letter from N. Berry to Y. Yin, Alamar Biosciences, Inc. re: Open Offer	12/14/2021	RX4051-1	RX4051-18	Hearsay, Relevance, Produced after close of fact discovery and live hearing	3.43(b)
RX4052	Letter from N. Berry to A. Elliott, Ambry Genetics Corp., re: Open Offer	1/26/2022	RX4052-1	RX4052-41	Hearsay, Relevance, Produced after close of fact discovery and live hearing	3.43(b)
RX4053	Email from M. Gallant to R. Ball re: Helio Open Offer	2/2/2022	RX4053-1	RX4053-2	Hearsay, Relevance, Produced after close of fact discovery and live hearing	3.43(b)

EXHIBIT E

From:	Sharonmoyee Goswami
To:	Musser, Susan; Joseph, Matthew
Cc:	Mohr, Stephen A.; Gonen, David; Fulliton, Samuel; Naegele, Dylan; Gaskin, Lauren; Harrell, Wells; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team
Subject:	RE: Document Productions Proposal
Date:	Monday, August 16, 2021 11:16:07 PM

Susan:
Thank you for your patience. Illumina believes it will be in a position to produce its documents no later than Wednesday and anticipates a production of approximately 2,600 to 2,700 documents. Given the size of the production, we anticipate Complaint Counsel will have sufficient time to complete its review prior to the hearing. Nevertheless, Illumina is willing to extend Complaint Counsel's deadline to identify additional exhibits from this production as long as necessary, provided Respondents are informed of any exhibits to be used with witnesses consistent with the parties' agreement on exhibits (which Respondents will send their comments to shortly).
Best,
Sharon

Sharonmoyee Goswami
Cravath, Swaine & Moore LLP
825 Eighth Avenue, New York, NY 10019
T +1-212-474-1928
sgoswami@cravath.com

From: Musser, Susan <smusser@ftc.gov>
Sent: Monday, August 16, 2021 2:48 PM
To: Sharonmoyee Goswami <sgoswami@cravath.com>; Joseph, Matthew <mjoseph1@ftc.gov>
Cc: Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Subject: RE: Document Productions Proposal

Sharon:

Circling up on the below. Can you please provide the additional detail requested?

Thank you,

Susan

From: Musser, Susan
Sent: Friday, August 13, 2021 7:34 PM
To: Sharonmoyee Goswami <sgoswami@cravath.com>; Joseph, Matthew <mjoseph1@ftc.gov>
Cc: Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell,

Wells <jharrell@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Subject: RE: Document Productions Proposal

Sharon:

Can you please provide additional information regarding the volume of documents you anticipate producing and further explanation regarding why Illumina is unable to produce documents (the majority of which) it has had over a month to process and review? As you know, trial in this case starts on August 24. Complaint Counsel will not be able to process, load, review, and object to Respondents' documents prior to trial if Illumina produces its documents on August 20. As such, Complaint Counsel will be prejudiced by this delay and Illumina's decision not to abide by our agreement. Complaint Counsel reserves all rights, including but not limited to: (a) exclude these documents and any testimony thereto; or (b) to supplement its exhibit list after it has had opportunity to review these documents.

We produced our documents today in accordance with the agreed-upon schedule.

Best,

Susan

From: Sharonmoyee Goswami <sgoswami@cravath.com>
Sent: Thursday, August 12, 2021 2:38 PM
To: Joseph, Matthew <mjoseph1@ftc.gov>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Subject: RE: Document Productions Proposal

Matt,

Pursuant to the parties' communications on mutually refreshing productions, Illumina has been working to finalize its refresh production to produce to the FTC. Unfortunately, due to the volume of documents Illumina needed to collect, review and process, along with the numerous other deadlines in this action, however, Illumina will not be in a position to make this final refresh production by August 13. We are working diligently to prepare the production and can ensure that Illumina will make its final production no later than August 20, 2021. We understand if the FTC seeks to make its final production on the same day.

Best,

Sharon

Sharonmoyee Goswami
Cravath, Swaine & Moore LLP
825 Eighth Avenue, New York, NY 10019
T +1-212-474-1928
sgoswami@cravath.com

From: Molly Jamison <mjamison@cravath.com>
Sent: Thursday, July 1, 2021 10:58 PM
To: Joseph, Matthew <mjoseph1@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: RE: Document Productions Proposal

Thanks, Matt. Illumina agrees that it will not request a refresh of the FTC's communications with the EC provided the FTC agree not to seek Illumina's EC communications, including any documents responsive to RFP 13.

Thanks,
Molly

Molly M. Jamison
Cravath, Swaine & Moore LLP
825 Eighth Ave.
New York, NY 10014
(212) 474-1110

From: Joseph, Matthew <mjoseph1@ftc.gov>
Sent: Thursday, July 1, 2021 10:29 PM
To: Molly Jamison <mjamison@cravath.com>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: RE: Document Productions Proposal

Hi Molly,

The FTC agrees to Illumina's proposal. We will wait to hear back from you on the EC communications.

Thanks,
Matt

Matthew E. Joseph (*he/his*) | **Federal Trade Commission**
Attorney, Bureau of Competition | Mergers I
400 7th Street SW, Washington, DC 20024
O: (202) 326-2876 | M: (202) 227-8356 | Mjoseph1@ftc.gov

From: Molly Jamison <mjamison@cravath.com>
Sent: Wednesday, June 30, 2021 12:17 PM
To: Joseph, Matthew <mjoseph1@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: RE: Document Productions Proposal

Matt,

Based on its work collecting and reviewing documents for its refresh of documents through April 16, Illumina no longer believes that preparing refresh productions in two tranches is feasible or efficient for the parties. The breadth of RFP No. 12 alone requires significant review for Illumina to collect, process and produce within three weeks. Illumina proposes consolidating our proposed Fact Discovery and Pre-Hearing Productions into one production as described below:

In exchange for the FTC providing all communications with third parties through July 9 and communications with third parties on any party's final witness list through July 23 (to be produced by August 13), Illumina will agree to collect and produce nonprivileged documents, defined as email messages, audio files, instant messages, chats and text messages, that are responsive to RFP Nos. 2, 4, 6 and 12 subject to Illumina's responses and objections and any subsequent clarification by Illumina in correspondence, through July 9 and communications with third parties on any party's final witness list responsive to RFP Nos. 4 and 12 subject to Illumina's responses and objections and any subsequent clarification by Illumina in correspondence, through July 23 (to be produced by August 13).

In the above refresh production, Illumina will produce documents from the custodians previously identified in Illumina's April 26 responses and objections for RFP Nos. 2, 4, 6 and 12. For RFP Nos. 4 and 6, Illumina will also agree to produce responsive third party communications (again, subject to Illumina's responses and objections and any subsequent clarification by Illumina in correspondence) from any Illumina employee, to the extent they exist.

Concerning the FTC's request related to communications with the EC, Illumina is considering the FTC's proposal and will follow up with its position.

Please confirm if the FTC agrees to this proposal.

Thanks,

Molly

Molly M. Jamison
Cravath, Swaine & Moore LLP
825 Eighth Ave.
New York, NY 10014
(212) 474-1110

From: Joseph, Matthew <mjoseph1@ftc.gov>
Sent: Thursday, June 24, 2021 10:59 PM
To: Molly Jamison <mjamison@cravath.com>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: RE: Document Productions Proposal

Molly,

Thank you for your email. Please see below and let us know if Illumina agrees to this proposal.

Fact Discovery Production: Regarding the specifications listed below, we are willing to agree that Illumina need only refresh specifications 2, 4, 6, and 12. Regarding specification 13, we will agree not to request a refresh production regarding EC communications so long as Illumina also agrees not to require a refresh production on non-privilege EC communications for the same period.

Pre-Hearing Production: We agree to Illumina's Pre-Hearing Production proposal below.

For clarity, the FTC also agrees to the following portion of your proposal: "For both the fact discovery and pre-hearing productions, Illumina will produce documents from the custodians previously identified in Illumina's April 26 responses and objections for RFP Nos. 2, 4, 6 and 12. For RFP Nos. 4 and 6, Illumina will also agree to produce responsive third party communications from any Illumina employee, to the extent they exist."

Thanks,
Matt

Matthew E. Joseph (*he/his*) | **Federal Trade Commission**
Attorney, Bureau of Competition | Mergers I
400 7th Street SW, Washington, DC 20024
O: (202) 326-2876 | M: (202) 227-8356 | Mjoseph1@ftc.gov

From: Molly Jamison <mjamison@cravath.com>

Sent: Saturday, June 19, 2021 6:13 PM
To: Joseph, Matthew <mjoseph1@ftc.gov>; LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: RE: Document Productions Proposal

Matt,

Thank you for your email. We have reviewed the FTC's proposal and agree to the following:

Fact Discovery Productions: In exchange for the FTC providing all communications with third parties through June 18 (to be produced by July 9), Illumina will agree to collect and produce nonprivileged documents, defined as email messages, audio files, instant messages, chats and text messages, that are responsive to RFP Nos. 2, 4, 6 and 12 subject to Illumina's responses and objections and any subsequent clarification by Illumina in correspondence, for the same time period.

Pre-Hearing Productions: In exchange for the FTC providing all communications with third parties named on either party's Final Witness List through August 3 (to be produced by August 17), Illumina will agree to collect and produce communications, defined as email messages, audio files, instant messages, chats and text messages, with third parties named on either party's Final Witness List that are responsive to RFP Nos. 4 and 12, subject to Illumina's responses and objections and any subsequent clarification by Illumina in correspondence, for the same time period.

For both the fact discovery and pre-hearing productions, Illumina will produce documents from the custodians previously identified in Illumina's April 26 responses and objections for RFP Nos. 2, 4, 6 and 12. For RFP Nos. 4 and 6, Illumina will also agree to produce responsive third party communications from any Illumina employee, to the extent they exist. Illumina does not agree that Illumina's communications with foreign governmental or regulatory bodies are relevant to the administrative proceeding and will not be producing documents responsive to RFP 13 for any time period.

Please confirm if the FTC agrees to this proposal.

Thanks,
Molly

Molly M. Jamison
Cravath, Swaine & Moore LLP
825 Eighth Ave.
New York, NY 10014
(212) 474-1110

From: Joseph, Matthew <mjoseph1@ftc.gov>
Sent: Friday, June 11, 2021 4:20 PM
To: LWVALORANTITRUST.LWTEAM@lw.com; Illumina Trial Team <IlluminaTrialTeam@cravath.com>
Cc: Musser, Susan <smusser@ftc.gov>; Mohr, Stephen A. <smohr@ftc.gov>; Gonen, David <dgonen@ftc.gov>; Fulliton, Samuel <sfulliton@ftc.gov>; Naegele, Dylan <dnaegele@ftc.gov>; Gaskin, Lauren <lgaskin@ftc.gov>; Harrell, Wells <jharrell@ftc.gov>
Subject: Document Productions Proposal

Thank you for conferring with us on future document productions. Below is a proposal for the post-April 16 productions leading up to the administrative trial. The productions shall be consistent with any applicable Instructions and Definitions, including any modifications and representations agreed thereto. For both the Fact Discovery Productions and the Pre-Hearing Productions, the FTC proposes to limit the definition of "documents" to include email messages (and any attachments); audio files; instant messages; text messages; or chat messages.

Fact Discovery Productions

- The FTC offers to provide all of its communications with third parties through June 18 and produce them three weeks later (July 9) in exchange for the following:
    - Respondents collect refreshes through June 18 and produce them three weeks later (July 9) for the following RFPs:
        - Grail RFP Nos. 2, 3, 7, 12, and 13.
        - ILMN RFP Nos. 2, 4, 6, 12, and 13.

Pre-Hearing Productions

- The FTC offers to provide all of its communications with third parties named on either party's Final Witness List through August 3 and produce them two weeks later and one week before the administrative trial (August 17) in exchange for the following:
    - Respondents collect refreshes through August 3 and produce them two weeks later and one week before the administrative trial (August 17) for the following RFPs:
        - GRAIL RFP Nos. 12 (modified to require only communications with third parties named on either party's Final Witness List) and 13.
        - ILMN RFP Nos. 4 & 12 (both 4 & 12 modified to require only communications with third parties named on either party's Final Witness List), and 13.
- The FTC proposes a two-week production turnaround due to the smaller scope of the Pre-Hearing Productions.

Thanks,
Matt

Matthew E. Joseph (*he/his*) | **Federal Trade Commission**
Attorney, Bureau of Competition | Mergers I
400 7th Street SW, Washington, DC 20024
O: (202) 326-2876 | M: (202) 227-8356 | Mjoseph1@ftc.gov

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EXHIBIT F

From: McNeil, Betty
To: Sharonmoyee Goswami; Jesse Weiss; Marguerite.Sullivan@lw.com; Illumina Trial Team; LWVALORANTITRUST.LWTEAM@lw.com
Cc: Musser, Susan; Mohr, Stephen A.; Widnell, Nicholas; Lippard, Wade; McCollough, James; Simons, Bridget
Subject: In re Illumina & Grail (No. 9401)
Date: Sunday, August 29, 2021 9:01:00 PM
Attachments: 2021.08.29 CC"s Proposed JX3.xlsx
2021.08.29 CC"s Proposed JX3.pdf

Counsel,

Please find attached Complaint Counsel's Proposed JX3. Complaint Counsel's Proposed JX3 includes all supplemental exhibits identified by Complaint Counsel and Respondents, with the exception of duplicates. In addition, the attached excel sheet includes Complaint Counsel's objections to Respondents' supplemental exhibits.

To the extent it is necessary, we are happy to meet and confer on JX3 tomorrow morning.

Best,
Jean

Betty Jean McNeil
Attorney
U.S. Federal Trade Commission
Bureau of Competition | Mergers I
T: 202-326-2856 | E: bmcneil@ftc.gov

EXHIBIT G

CONFIDENTIAL – REDACTED IN ENTIRETY

PX0393

Illustration by Catherine Tai

China's gene giant harvests data from millions of women

A prenatal test used worldwide sends gene data of pregnant women to the company that developed it with China's military. The U.S. sees a security risk.

By KIRSTY NEEDHAM and CLARE BALDWIN | Filed July 7, 2021, noon GMT

A Chinese gene company selling prenatal tests around the world developed them in collaboration with the country's military and is using them to collect genetic data from millions of women for sweeping research on the traits of populations, a Reuters review of scientific papers and company statements found.

U.S. government advisors warned in March that a vast bank of genomic data that the company, BGI Group, is amassing and analyzing with artificial intelligence could give China a path to economic and military advantage. As science pinpoints new links between genes and human traits, access to the biggest, most diverse set of human genomes is a strategic edge. The technology could propel China to dominate global pharmaceuticals, and also potentially lead to genetically enhanced soldiers, or engineered pathogens to target the U.S. population or food supply, the advisors said.

Reuters has found that BGI's prenatal test, one of the most popular in the world, is a source of genetic data for the company, which has worked with the Chinese military to improve "population quality" and on genetic research to combat hearing loss and altitude sickness in soldiers.

BGI says it stores and re-analyzes left-over blood samples and genetic data from the prenatal tests, sold in at least 52 countries to detect abnormalities such as Down syndrome in the fetus. The tests – branded NIFTY for "Non-Invasive Fetal TrisomY" – also capture genetic information about the mother, as well as personal details such as her country, height and weight, but not her name, BGI computer code viewed by Reuters shows.

So far, more than 8 million women have taken BGI's prenatal tests globally. BGI has not said how many of the women took the test abroad, and said it only stores location data on women in mainland China.

A BGI Group building in Beijing. REUTERS/Carlos Garcia Rawlins

The tests are a private procedure for the women who take them, a component in their routine prenatal care. But the studies show that they yield increasingly potent information for research.

One BGI study, for instance, used a military supercomputer to re-analyze NIFTY data and map the prevalence of viruses in Chinese women, look for indicators of mental illness in them, and single out Tibetan and Uyghur minorities to find links between their genes and their characteristics.

The scale of BGI's accumulation of prenatal data, and its collaboration with the military in prenatal and neonatal research, have not been previously reported. The company has published at least a dozen joint studies on the tests with the People's Liberation Army (PLA) since 2010, trialling and improving the tests or analyzing the data they provided, the Reuters review found.

DNA data collected from prenatal tests on women outside China has also been stored in China's government-funded gene database, one of the world's largest, the company confirmed. BGI, in which the Shenzhen city government and Beijing's largest state investment vehicle took stakes in 2014, runs that gene bank.

Reuters found no evidence BGI violated patient privacy agreements or regulations. However, the privacy policy on the NIFTY test's website says data collected can be shared when it is "directly relevant to national security or national defense security" in China.

Video - NIFTY gene harvest

Beijing made clear in a 2019 regulation that genetic data can be a national security matter, and since 2015 it has restricted foreign researchers from accessing gene data on Chinese people. In contrast, the United States and Britain give foreign researchers access to genetic data, as part of open science policies.

BGI said in a statement it "has never been asked to provide – nor provided – data from its NIFTY tests to Chinese authorities for national security or national defense security purposes."

Other companies selling such prenatal tests also re-use data for research. But none operate on the scale of BGI, scientists and ethicists say, or have BGI's links to a government or its track record with a national military.

News BGI developed the prenatal tests with the PLA comes as international scrutiny is increasing over China's use of civilian technology for military modernization. NATO has warned China's assertive behavior is a systemic challenge, and Beijing has drawn sanctions for alleged human rights violations in Xinjiang and stepped up a national security crackdown in Hong Kong.

The findings offer new insight into how BGI is using vast computing power to unlock genomic secrets. Previously, Reuters revealed how the company rapidly expanded its gene-sequencing labs globally and gained a role in other nations' health systems, and how it worked with China's military on research ranging from mass testing for respiratory pathogens to brain science.

RELATED CONTENT

COVID opens new doors for China's gene giant

China gene firm providing worldwide COVID tests worked with Chinese military

The Reuters examination also sheds new light on concerns expressed by a U.S. expert panel, the U.S. National Security Commission on Artificial Intelligence (NSCAI), led by former Google chief executive Eric Schmidt. The panel said in March that the United States should recognize China's strides towards global leadership in biotechnology and AI as a new kind of national security threat, and boost funding for its own research to counter China's state-driven effort.

China's Ministry of Foreign Affairs said the reporting in this article reflected "groundless accusations and smears" of U.S. agencies. The PLA did not respond. China has released new privacy and data security laws that offer greater protection of personal data, but also allow Chinese national security authorities to access that data.

BGI did not respond to questions on its military collaboration or the national security threats that the United States says its research poses. "At no stage throughout the testing or research process does BGI have access to any identifiable personal data or the ability to match that data with personal records," the company said. Signed consent is obtained in advance, BGI said, and its data privacy protocols meet strict international standards.

A 2016 Chinese regulation requires samples and genetic sequences from the tests on Chinese women to be kept for at least three years, after which the women can request that the data is deleted. For women overseas, BGI told Reuters it destroys samples and deletes paper records and electronic data after a maximum of five years.

Some of BGI's research has medical benefits, and BGI has cut the cost of gene sequencing so more universities, companies and hospitals worldwide can access sequencing technology, a key driver in the growing field of genomics. Genetics is the study of individual genes; genomics looks at all of a person's genes, including how they interact with each other and the environment.

"Whilst BGI is a Chinese-based company, we consider ourselves part of the global race towards ending the COVID-19 pandemic and a key international contributor to the advancement of public health outcomes around the world," the company said, adding it collaborates with a large number of academic and research organizations not just in China, but also the United States, United Kingdom and Europe.

> "When you can combine large amounts of genomic data – including mothers and their unborn children – with their medical data and history, it is really powerful."
>
> Anna Puglisi, former U.S. counterintelligence officer

BGI is one of about half a dozen major providers of the tests, more generally known as non-invasive prenatal tests (NIPT), which women take about 10 weeks into a pregnancy to capture DNA from the placenta in the woman's bloodstream. Its tests are marketed in at least 13 European Union countries, including Germany, Spain and Denmark, as well as in Britain, Canada, Australia, Thailand, India and Pakistan. They are not sold in the United States.

However, the company is a pivotal player in a genomics race between China and the United States. In its latest annual report, it said it "has been working hard to promote Chinese technology, Chinese experience and Chinese standards to 'go global.'"

BGI grew as a result of Chinese government policies, said Anna Puglisi, a senior fellow at Georgetown's Center for Security and Emerging Technology, who worked until 2020 as the U.S. government's National Counterintelligence Officer for East Asia. "The Chinese state can really

compel, in their national security law, companies to work with them," she said, referring to a 2017 law requiring all Chinese organizations to assist national intelligence efforts.

8.4 million

Number of women who have taken the test

Being able to understand how physical characteristics relate to a gene – and thus figuring out what genes actually do – "really is the cutting edge of genomics," said Puglisi, who worked on biosecurity issues in the U.S. government.

"When you can combine large amounts of genomic data – including mothers and their unborn children – with their medical data and history, it is really powerful."

The data offer insight into foreign populations as well as China's own. Computer instructions that BGI uses to process the NIFTY data show it collects a wide range of information about customers besides their genetic code. This includes the women's country, medical history and the sex of the fetus, according to the instructions, reviewed by Reuters on a programmers' forum online.

Reuters reviewed more than 100 documents, from research papers to marketing materials, to determine the scope of data being captured by BGI through its prenatal tests, how it is using this in its research and its military collaboration. Reuters also interviewed more than two dozen scientists and experts in genetic law, including researchers who worked with the company, as well as four women, in Poland, Spain and Thailand, who took the tests.

The women, who signed consent forms stating that their genetic data would be stored and used for research, said they did not realize their genetic information could end up in China. For example, one of them, a 32-year-old office administrator in Poland, signed a BGI form agreeing to have her sample sent to Hong Kong and her genetic data retained, but the form did not say where it would be held, or make clear that BGI's headquarters and research base are in Shenzhen.

The woman, Emilia, spoke on the condition that only her first name be used. She said that if she had known that, and understood the extent of BGI's secondary research, she would have chosen a different test.

"I want to know what is happening with such sensitive data about me, such as my genome and that of my child," she said. "This could be a very important matter when choosing a test. For me it would be."

It was also unclear to the other women where their data was stored.

Office building administrator Emilia, who took the NIFTY test before she had her child, holds a copy of the consent form in Warsaw, Poland. REUTERS/Kuba Stezycki

The U.S. National Counterintelligence and Security Center (NCSC) told Reuters in response to this report that it had "serious concerns" over how genetic data is "collected, transmitted, stored and used" by China's government and companies.

The NCSC, which issues public warnings on intelligence threats to the United States, has said China's collection of healthcare data from America poses serious risks, not only to privacy, but also to U.S. economic and national security.

It urged health institutions to carefully assess risks associated with sharing such data with Chinese companies, and for patients to be told about the "value and sensitivity" of their genetic information – and the risks associated with turning it over. Women taking the NIFTY test outside China should be concerned about the privacy terms that allow data to be shared with Chinese national security agencies, the center said.

"Non-invasive prenatal testing kits marketed by Chinese biotech firms serve an important medical function, but they can also provide another mechanism for the People's Republic of China and Chinese biotech companies to collect genetic and genomic data from around the globe," the center said.

The "Millionome Database"

Shenzhen-based BGI shot to global prominence last year after selling or donating millions of COVID-19 test kits and gene-sequencing labs outside China. U.S. security agencies warned this was part of an effort to collect large amounts of foreign genetic material. BGI said this year it has built 80 COVID-19 labs in 30 countries, which it plans to repurpose for reproductive health screening.

It says its COVID-19 tests do not collect patient DNA.

But its prenatal tests do.

Inside BGI's offices in mainland China, huge screens update in real time as samples harvested from the tests of pregnant Chinese women are uploaded to the China National GeneBank, according to a scientist who has been inside the Shenzhen facility and photographs published in Chinese state media. The screens also show the location of the women.

BGI told Reuters the project – known as the "Chinese Millionome Database" – does not contain data of women outside mainland China.

However, online records reviewed by Reuters show that the genetic data of at least 500 women who have taken the NIFTY test, including some outside China, are stored in the government-funded China National GeneBank.

This example of a consent form was used in Denmark in 2017. REUTERS/Sarah Slobin

The GeneBank website acknowledges the "NIFTY database" as among its "rich sources of biological data."

BGI patented its tests in 2011 and began marketing them abroad in 2013. Within three years, more than 2,000 healthcare providers globally were selling them, according to BGI marketing materials. In 2019, the last full year before the COVID-19 pandemic, BGI reported that 42% of its sales of 2.8 billion yuan ($433 million) came from its reproductive health division. Prenatal tests are the major contributor.

As gene sequencing technology has expanded worldwide, so has the scope of NIPT tests on offer. BGI's now reveal 84 genetic conditions that affect the pregnancy of women under 40, and sex chromosome disorders that can cause learning delays.

The tests sequence about a tenth of the mother's genome, said Dennis Lo, the Hong Kong scientist who pioneered the technique independently in 1997.

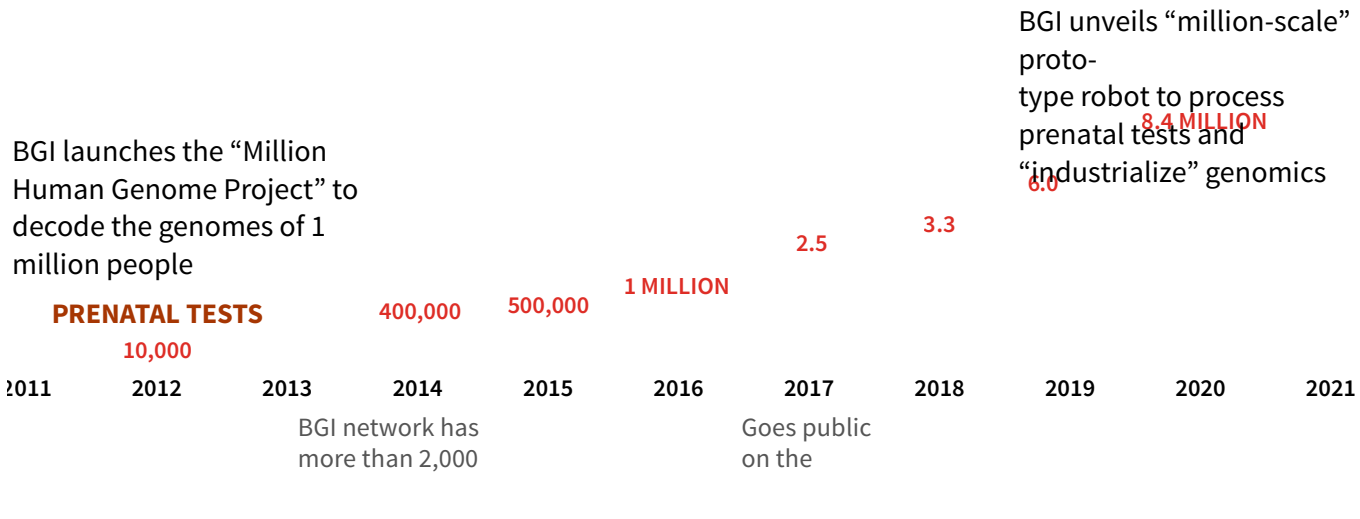
"And so you can imagine if you got a tenth of the genome sequence and you pull it from millions of people – let's say 10 million every year – I think that would be quite powerful."

Lo said the technology would unlock patterns of genetic variations in populations around the world. NIPT tests can also show if the mother has any chromosome anomalies, cancer, an autoimmune disease, a recent organ transplant or blood transfusion, Lo said.

In the future, he said, it may be possible to reconstruct what a person looks like from an NIPT test.

Large genomic datasets can be used to design disease therapies, yet they also expose genetic vulnerabilities in a population; an adversary could exploit a susceptibility to disease in a targeted genetic attack, a report to the U.S. Director of National Intelligence by science and medical experts warned last year.

The report also raised privacy concerns, saying it had "been demonstrated that individuals can be identified from even a portion of their DNA."



As BGI's testing has grown, so has its secondary research. Two years ago, BGI researchers wrote in a scientific paper that they had re-analyzed 1.93 million NIPT tests processed in BGI labs between 2016 and 2017. They found 542 women with anomalies that could indicate cancer.

Those women, including customers in mainland China, Hong Kong, Slovenia, Spain and Taiwan, were then contacted for research purposes. Reuters found the women's genetic data in the China National GeneBank, recorded under seven-digit sample identifiers.

The study said 41 of the women were diagnosed with cancer by their physicians, separately from the BGI research, which was published in Genetics in Medicine.

The study marked a massive mobilization of the genetic information in BGI's possession. BGI marketing statements show the firm had processed 2.5 million NIPT tests in total by the end of 2017. That meant that during the period of the study, which encompassed nearly 2 million tests, it had re-used most of the NIPT tests it processed.

Last year, BGI announced that it would "industrialize" genomics, and in April, it said a "million-scale" prototype robot, capable of sequencing a million whole genomes a year for population genomics, was now being used to process NIFTY tests.

"Military Medicine Innovation Project"

BGI has worked with Chinese military researchers to study the genomes of fetuses and newborns since at least 2010, when it signed a research cooperation agreement with the People's Liberation Army General Hospital in Beijing, a hospital document shows.

The hospital is at the forefront of Chinese genetic research on deafness, and its head of obstetrics, Lu Yanping, was developing a prenatal test for deafness and Down syndrome. In April 2011, Lu began a clinical trial of NIFTY with BGI on 3,000 women in the hospital clinic, a published study shows. Neither Lu nor the hospital responded to requests for comment.

In August 2010 BGI started work with another military institution, the Third Military Medical University in Chongqing. Liang Zhiqing, vice chairman of the PLA's Institute of Obstetrics and Gynecology, and BGI researchers have published at least five joint studies based on data from women who took the test at the university's prenatal clinic.

Liang's work was funded by the Chinese government as a "Military Medicine Innovation Project," and the samples were sequenced in a BGI "joint laboratory" at the university, according to a paper in the European Journal of Medical Genetics. Liang did not respond to a request for comment.

The university and BGI ran conferences on preventing birth defects and "improving population quality," conference promotion shows. The PLA was closely involved in a foundation to prevent birth defects, led by a key figure in the implementation of China's One Child Policy, from 2011.

A BGI executive was among the experts at its first meeting, which heard that "birth defects not only affect the health and quality of life of children, but also the quality of the country's population and manpower." A plan to promote screening for 48 genetic and metabolic diseases was approved.

Military Medicine

Five of the documents that Reuters found that show BGI and Chinese military hospitals conducted joint studies on non-invasive prenatal tests (NIPT) and genetic research:

- Study in Prenatal Diagnosis, July 2018
- Research letter in Prenatal Diagnosis, 2012
- Study in Science China, 2018
- Chinese Obstetrics Gynecology Online, 2019
- Study in PLOS Digital Health, 2015

Kirsty Needham

The People's Liberation Army General Hospital in Beijing. REUTERS/Thomas Peter

Soldiers of the PLA Marine Corps training in Bayingol, Xinjiang, in 2016. REUTERS/Stringer/File Photo

BGI's research with the PLA on the NIFTY test has continued. In 2019, Lu was credited by Chinese medical journals with detecting a single-gene disease – fetal achondroplasia, which causes dwarfism – through NIPT, in a clinical trial with BGI at the PLA General Hospital. BGI later released a new NIFTY single-gene test that detects the condition.

BGI researchers also conducted studies on novel NIPT methods in 2019 and 2020 with the military hospitals.

As well as prenatal research, BGI has collaborated with the military hospitals on genetic research programs designed to enhance soldiers' performance.

It worked with the PLA General Hospital to identify genes linked to hearing loss: The hospital uses stem cells and gene therapy in research on combating deafness in soldiers caused by weapons training, papers in military medical journals show.

And BGI published studies with the Third Military Medical University in Chongqing exploring whether drugs interacting with genes could protect Han Chinese, the country's majority ethnic group, from brain injury at high altitudes. Those studies refer to soldiers stationed in Tibet and Xinjiang, high plateau regions which border India's Ladakh, where fighting broke out last June.

"An untapped resource"

For more than a decade, scientists worldwide have searched for a cost-effective way to study the genetic profiles of a whole population of people. A handful of efforts reached tens of thousands of participants, but anything larger stalled on cost and logistics, BGI researchers wrote in a 2018 scientific paper published in Cell.

Left-over samples and test data from prenatal tests meant BGI could run studies on an unprecedented scale.

In the Cell paper, BGI researchers said they had performed the largest study of Chinese population genetics ever – which they undertook with 141,000 re-used prenatal tests. The tests, they said, "provide an untapped resource" to understand how people's genes relate to their characteristics, and to their susceptibility to viruses.

This, they said, could offer "considerable mapping power."

The researchers were able to see genes associated with bipolar disease, schizophrenia, immune response and resistance to malaria. They were able to link genes to height and percentage of body fat as well as to a diet high in animal fat.

And they were able to track viruses including hepatitis B – which they found to be relatively common among the Chinese population – and two types of herpes virus, which they said were more prevalent among Europeans. "We ... reveal a different viral sequencing distribution spectrum compared to Europeans," the researchers wrote.

A biology professor at the University of California, Berkeley, Rasmus Nielsen, advised BGI researchers on how to extract information from the prenatal test data for the study.

"It's amazing that this is even possible," he told a Berkeley newsletter in 2018. "You can take these massive samples and do association-mapping to see what the genetic variants are that explain human traits."

A technician in a genetic testing laboratory of BGI in Kunming, Yunnan province, in 2018. REUTERS/Stringer/File Photo

The researchers were also able to trace genetic distinctions between the country's dominant Han Chinese ethnic group and minorities including Uyghurs and Tibetans, and look at population movements and intermarriage caused by Chinese government policy since 1949. This data was later released to other Chinese researchers studying how "significantly different" genetic variations in Uyghurs affected their response to drugs, a 2019 scientific paper shows.

China's collection and analysis of the DNA of its Uyghur Muslim population – including systematic collections of samples from residents in Xinjiang – has drawn sharp criticism. The United States sanctioned two BGI subsidiaries last year for what it called China's "abusive DNA collection and analysis schemes to repress its citizens." BGI denied it was involved in any human rights abuses in Xinjiang. China's foreign ministry said health check-ups of Uyghurs there did not collect biological information such as DNA.

UC Berkeley's Nielsen told Reuters he no longer worked with BGI. He chose to end a decade-long collaboration soon after the 2018 study was published in Cell, because changes to Chinese law restricted foreign researchers working with Chinese genomic data, he said.

"Things are really changing in China," Nielsen told Reuters. "Science used to be free."

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By Kirsty Needham and Clare Baldwin
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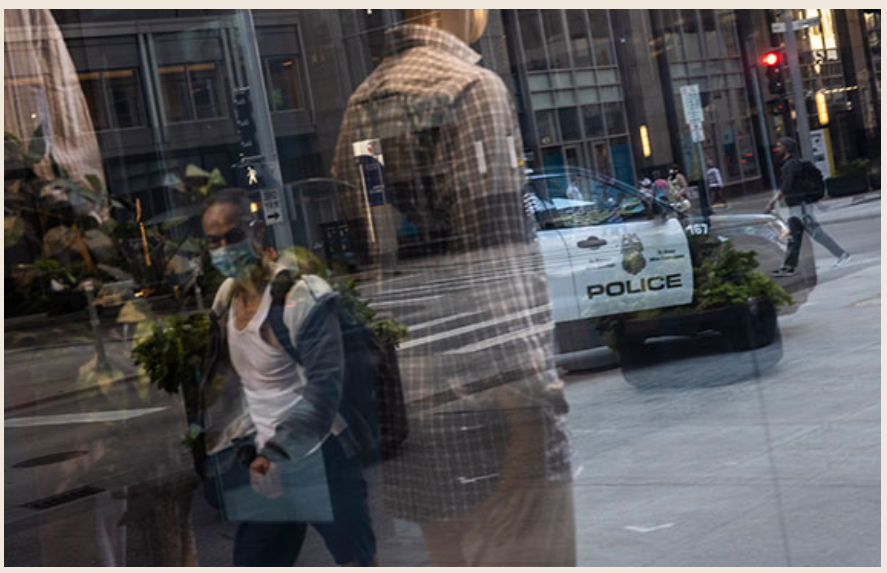

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Minneapolis police made an abrupt shift after the killing of a Black man: making fewer traffic stops, drug and gun checks. Citizens are asking: Where are the police?

PX0394

Commerce Department Adds Eleven Chinese Entities Implicated in Human Rights Abuses in Xinjiang to the Entity List

Trade enforcement

FOR IMMEDIATE RELEASE
Monday, July 20, 2020

Office of Public Affairs
(202) 482-4883
publicaffairs@doc.gov

The Department of Commerce's Bureau of Industry and Security (BIS) added to the Entity List 11 Chinese companies implicated in human rights violations and abuses in the implementation of the People's Republic of China's (PRC) campaign of repression, mass arbitrary detention, forced labor, involuntary collection of biometric data, and genetic analyses targeted at Muslim minority groups from the Xinjiang Uyghur Autonomous Region (XUAR). Today's action will result in these companies facing new restrictions on access to U.S.-origin items, including commodities and technology. This action will supplement BIS's two tranches of Entity List designations in October 2019 and June 2020, actions that together added 37 parties engaged in or enabling PRC's repression in Xinjiang.

"Beijing actively promotes the reprehensible practice of forced labor and abusive DNA collection and analysis schemes to repress its citizens," said Secretary of Commerce Wilbur Ross. "This action will ensure that our goods and technologies are not used in the Chinese Communist Party's despicable offensive against defenseless Muslim minority populations."

The Entity List is a tool utilized by BIS to restrict the export, reexport, and transfer (in-country) of items subject to the Export Administration Regulations (EAR) to persons (individuals, organizations, companies) reasonably believed to be involved, or to pose a significant risk of becoming involved, in activities contrary to the national security or foreign policy interests of the United States. Additional

license requirements apply to exports, re-exports, and transfers (in-country) of items subject to the EAR to listed entities, and the availability of most license exceptions is limited.

The entities to be added to the Entity List in connection with the practice of forced labor involving Uyghurs and other Muslim minority groups in the XUAR are:

- Changji Esquel Textile Co. Ltd.
- Hefei Bitland Information Technology Co. Ltd.
- Hefei Meiling Co. Ltd.
- Hetian Haolin Hair Accessories Co. Ltd.
- Hetian Taida Apparel Co., Ltd.
- KTK Group
- Nanjing Synergy Textiles Co. Ltd.
- Nanchang O-Film Tech
- Tanyuan Technology Co. Ltd.

The entities to be added to the Entity List in connection with conducting genetic analyses used to further the repression of Uyghurs and other Muslim minorities in XUAR are:

- Xinjiang Silk Road BGI
- Beijing Liuhe BGI

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PX2829

To: Graff, Richard[rgraff@illumina.com]
From: Mansolillo, Linda[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F30BA2FFE0144BA8B97354FC44835536-LMANSOLILLO]
Sent: Mon 7/15/2019 9:01:07 AM Pacific Daylight Time
Subject: FW: Providence St Joseph Health System Illumina Executive Strategy Session (INTERNAL) UPDATES

THIS makes working here a great place. Little thank you from leadership matter. **

Linda Mansolillo, MBA, MLS (ASCP)
Strategic Account Manager
Cell: 858-291-9098
Email: lmansolillo@illumina.com

From: Garret Hampton <ghampton@illumina.com>
Date: Friday, July 12, 2019 at 7:20 PM
To: "Mansolillo, Linda" <lmansolillo@illumina.com>
Subject: Re: Providence St Joseph Health System Illumina Executive Strategy Session (INTERNAL) UPDATES

This is great progress and terrific potential with PSJH; I personally really appreciate your leadership in sheparding them along this path (as well as all you do for the Quest relationship). I would love to join as I am in the office that day; I think Kathy D, Phil F, Pankaj S (head of SW and I in core) would be great choices – doesn't have to be both Kathy and Phil, either would be fine based on schedules. In terms of 1M WGS, someone live Ryan Taft (VP CG Research) would be another valuable addition. Hope this helps and thanks again

---

From: "Mansolillo, Linda" <lmansolillo@illumina.com>
Date: Friday, July 12, 2019 at 6:23 PM
To: "Hampton, Garret" <ghampton@illumina.com>
Subject: Providence St Joseph Health System Illumina Executive Strategy Session (INTERNAL) UPDATES

Dear Garret, please find a message I sent to the team yesterday. The PSJH leadership team is coming to our HQ likely on August 19th. I wanted to ask you who on your team should be in the meeting to ensure we can help with the items below, particularly the big ask for a true collaboration and partnership for their 1M genomes alongside Microsoft and other soon to be named partnersJ have some ideas, but defer to you. Thanks for your guidance for one of the most exciting things I have had the pleasure to work on.

The team and I have incredibly exciting updates to share about our continued collaboration with PSJH. We are working to set up a VIP at our HQ in August, and I will be following up with the agenda and be reaching out to many of you to attend.

What they are asking: Illumina join as a collaborative partner as they move to Health 2.0

PSJH Near Term Projects- live by January 1 2020

- Population health testing in family practice for their patients- using arrays
- WGS Pilot 500-10000 on the same patient population

**PJSH Long Term Project 1M WGS – and yes you read that this right **

- They are currently engaged in active conversations with other companies (Pharma, technology, data)
- Vision:
  - **PSJH:** provide services, runs panels**,** infrastructure
  - **Illumina**: technology partn**er**
  - **Pharma or other as partner:** Access to data

NEWS

- Microsoft Signs Up Providence Hospital Chain as Cloud, AI Customer
  - To help the hospital chain track electronic health data such as surgery outcomes and cancer therapies.
  - "All of us as patients want our doctors and nurses to be as smart as possible when they're making decisions," said Providence Chief Executive Officer Rod Hochman. "This is bringing information to them at the point of care that they need to make decisions. That will manifest itself in better outcomes."
- https://www.bloomberg.com/news/articles/2019-07-08/microsoft-signs-up-providence-hospital-chain-as-cloud-ai-customer

Please let me know if you have any questions!

Warmest Regards

Linda

Linda Mansolillo, MBA, MLS (ASCP)
Strategic Account Manager
Cell: 858-291-9098
Email: lmansolillo@illumina.com

PX2830

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PX2832

To: Seaton, Jonathan[jseaton@illumina.com]
Cc: Eidel, Jeff[jeidel@illumina.com]
From: Brown, Mimmi[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=69868E1638C9403D96916DFF0C87DA8D-MBROWN]
Sent: Wed 9/13/2017 9:35:18 AM Pacific Standard Time
Subject: RE: Value Based Agreement approach to Average Risk NIPT

Hi Jonathan,

Would you like to me to schedule a call with Rick, and would you like anyone else on the call with you?

Thanks,
Mim

From: Nida, Rick
Sent: Wednesday, September 13, 2017 9:33 AM
To: Seaton, Jonathan <jseaton@illumina.com>
Cc: Brown, Mimmi <mbrown@illumina.com>; Eidel, Jeff <jeidel@illumina.com>
Subject: Value Based Agreement approach to Average Risk NIPT

Hi Jonathan,
I am writing to you as Jeff's out-of-office message suggests. We (Market Access- Ammar Qadan/me and Market Development-Gautam Kollu) have been talking to Harvard Pilgrim Health Plan (an integrated health system) about the idea of doing a Value-based Agreement for average risk NIPT. This project is in its early stages we have loosely agreed upon ideas about how to do this and Harvard Pilgrim is interested in moving these ideas forward, Harvard Pilgrim would like to get this done in September. We have been updating Jeff Hawkins and Kathy Davy, Gustav Karlberg and others have been pulled into socialize and develop support internally. Last week Jeff Hawkins gave us the green light to pursue this, he said he would support and pay for it. With that hurdle cleared, we would need bring Business Development in to help develop the deal/agreement with the goal of getting an agreement done in September so that the project can start on January 1, 2018 the lead time is an important factor for maximizing impact. We also would like your recommendation on who in legal to bring into this project. A quick call would be a good next step, I can work with Mimmi to set that up if that works for you.
Thanks,
Rick

PS: Congratulations Jeff!

Rick Nida
Global Market Access
Illumina
MOBILE: 650.421.5877
EMAIL: rnida@illumina.com

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PX2869

To: Fellis, Joel[jfellis@illumina.com]
From: Moriarty, Dominic[/O=ILLUMINA/OU=ILLUMINA/CN=RECIPIENTS/CN=DMORIARTY]
Sent: Fri 1/27/2017 10:10:42 AM Pacific Standard Time
Subject: RE: Custom products

That's a good point. The kit is in SFDC but linked to the GRAIL account so it cannot be sold to anyone else, we do not have a confidentiality agreement re this however. The kit is also very quirky in that it does not have the mix of components we would recommend for a user, in reality, it was poorly defined by GRAIL despite our recommendations, probably with the expectation that they could modify it many times as a subsidiary of ILMN.
The pricing is also tied to the same list price per Gb as other HSX kits so there should not be a price benefit to a customer were they to become aware of the kit.
Regards,
Dom

From: Fellis, Joel
Sent: Friday, January 27, 2017 10:00 AM
To: Moriarty, Dominic
Subject: RE: Custom products

Hi Dom,

Yeah, I don't have any issue keeping it around for now, particularly since we are providing a similar kit to Helix and GeL and believe this will phase itself out.

Now that they are or will be a truly separate company, do we need to worry about confidentiality? I would hate for them to openly discuss this kit. I also wonder if this will now be managed through more normal sales channels? I don't really want the Bay Area TAMs to know about this kit either given they manage other X accounts.

Cheers,
Joel

From: Moriarty, Dominic
Sent: Friday, January 27, 2017 9:37 AM
To: Fellis, Joel <jfellis@illumina.com>
Subject: RE: Custom products

Thanks, we did the custom kit for GRAIL as a subsidiary of ILMN but that of course will change. To kill the kit would be unfair in my opinion but I think it will reach a natural end in 2018 as they migrate their installed base and as we launch our HT ctDNA kit to a broader list of customers who will want to use our platform for Liquid Biopsy. My proposal is to leave the kit as is until there is an alternative OR until we feel that the kit may be conferring an advantage to GRAIL relative to others in that space. We are not obliged to offer a custom kit to GRAIL but I do not want to knock them back by retracting a kit that they have come to depend on for scale up.
Does that make sense to you?
I'd love to get your thoughts on this if you have a chance for a quick chat as it could be an issue for some folks.
Best,
Dom

From: Fellis, Joel
Sent: Thursday, January 26, 2017 8:47 PM
To: Moriarty, Dominic
Subject: RE: Custom products

Hi Dom,

Well, in addition to Grail, we do this for Helix and GeL.Outside of that, I don't think we've done any custom core consumable kits for any external customers. There have been an instance or two were we've sold non-catalog sub-components, but nothing that created a custom kit, e.g., we sell the Broad the HiSeq 4000 dual index primer cocktail, which they use on HiSeq X.

It is possible that we may have done something like this with library prep (exome kit) for the Broad a few years back, but I suspect that we just sold them bits and pieces (sub-components) vs. making anything new for them. You could ask Giovanna Prout about this.

We also make custom panels for customers all the time.Giovanna would also know about that as she used to manage that group.

Cheers,
Joel

From: Moriarty, Dominic
Sent: Thursday, January 26, 2017 11:32 AM
To: Fellis, Joel <jfellis@illumina.com>
Subject: Custom products

Hi Joel,
Do you know if we provide any custom kit configurations to our larger customers? We have prepared a unique kit for GRAIL to accommodate high throughput sequencing for ctDNA and I need to think about retaining that once they go to a 3rd party relationship. Understanding if we make any such accommodations for the BROAD or HLI etc would be helpful.
Let me know.
Thanks,
Dom

Dominic Moriarty
Director, Business Operations
illumina, Inc. | SF Bay Area
510- 305-5029 | dmoriarty@illumina.com

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PX2878

To: Mandell, Jeff[jmandell@illumina.com]; Barnard, Steve[SBarnard@illumina.com]; Boyanov, Boyan[bboyanov@illumina.com]; Rogert, Cande[MRogert@illumina.com]; Peisajovich, Sergio[speisajovich@illumina.com]
From: Moon, John[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A40B5942ED454DA98047ABDC20571153-JMOON]
Sent: Wed 1/13/2021 1:53:00 PM Pacific Standard Time
Subject: RE: WSJ Article

From: Tousi, Susan <stousi@illumina.com>
Sent: Wednesday, January 13, 2021 1:16 PM
To: ILMN-Role-PD-Leadership Team <ILMN-Role-PD-LeadershipTeam@illumina.com>
Subject: FW: WSJ Article
Importance: High

Hi Team,

Very interesting BGI COVID story in WSJ today.

Best,
Susan

WSJ NEWS EXCLUSIVE

Chinese Covid-19 Tests Were Pushed by Federal Agencies Despite Security Warnings

U.S. intelligence officials have said publicly that BGI products pose privacy risks

By
Warren P. Strobel
Justin Scheck
Bradley Hope
Jan. 13, 2021 5:30 am ET

At least two federal agencies worked to distribute Covid-19 tests from a Chinese genetics company, despite warnings about security risks from U.S. intelligence and security officials, according to interviews and documents obtained by The Wall Street Journal.

In the early days of the virus, BGI Group or people trying to distribute its products approached at least 11 states in a sometimes aggressive push to get the products into government-run laboratories or set up entire labs, according to people who received the approaches and documents.

BGI, China's leading genetics company, enlisted a foundation tied to a former U.S. president and used a company linked to the United Arab Emirates' top spy to promote its efforts. A prominent New York real-estate lawyer threatened to complain to California's governor if state health officials there didn't use BGI's tests.

Some of the company's testing supplies were used in Nevada, according to the head of the state's Covid-19 task force. BGI has tried in the past to get into the U.S. market and has sold testing equipment to U.S. private labs that advertise their work for government clients.

In March, an FBI special agent who monitors biotech threats for the Department of Health and Human Services told an HHS advisory committee that government agencies should be wary of doing business with the company, which, he said, had a history of misusing personal data. The agent, Ed You, echoed warnings from other law-enforcement, security and military-intelligence officials.

They say gene-sequencing machines that BGI was trying to sell to U.S. labs can be used to catalog patients' DNA, raising privacy risks. The Covid-19 test kits that federal agencies promoted don't pose the same risk, but intelligence officials say they are concerned that BGI will parlay the testing kits into a bigger role in the laboratories.

"BGI has undoubtedly taken advantage of the Covid-19 pandemic to expand its reach around the world, including the United States," Bill Evanina, director of the U.S. government's National Counterintelligence and Security Center, said.

A BGI spokesperson said that in the U.S. the company has sold only its Covid-19 tests authorized by the Food and Drug

Administration. "BGI has never proposed or established any clinical laboratories for genome sequencing or Covid-19 testing," the spokesperson said. BGI laboratories were proposed in Nevada and California, but by a representative for a BGI partner. "It is necessary to understand BGI does not have access to either patient samples or test data," the spokesman said.

Counterintelligence official Bill Evanina, shown in 2017, said BGI's work with a Mideast partner has raised concerns.
PHOTO: JOSHUA ROBERTS/REUTERS

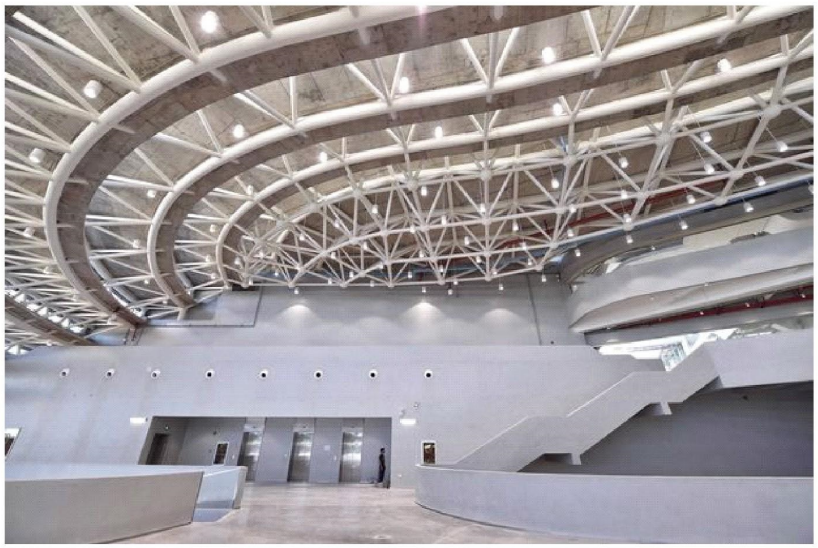
A senior U.S. official who has been tracking BGI said the company has grown quickly in part by providing equipment at low or no cost. In some cases, that official says, genomics data collected by the equipment gets stored on systems made by Huawei Technologies Co., a Chinese company that the U.S. government has called a security risk. "It's not about market share for economic gain. It's about market share for the sake of data," the official said. Huawei has repeatedly denied that it is a security risk.

BGI, formerly known as Beijing Genomics Institute, is based in the Chinese city of Shenzhen and specializes in gene sequencing. The company plays an important role in China's efforts to be a global leader in genomics. BGI administers the China National Gene Bank, a giant genomic database funded by the Chinese government.

The U.S. Commerce Department sanctioned two of BGI's subsidiaries earlier this year, saying they provided technology to collect and catalog the DNA profiles of China's persecuted Uighur population. In a response to the sanctions, BGI said one of the subsidiaries, Beijing Liuhe BGI, did no work that includes "personally identifiable information or violations of privacy or human rights" and that the second, Xinjiang Silk Road BGI, hadn't conducted any actual business.

Since the start of the pandemic, China has sent medical equipment and doctors to numerous countries to spread its influence and deflect criticism of its early handling of the coronavirus, according to U.S. officials.

While U.S. intelligence officials tried to keep BGI's products out of the country, other parts of the government were doing the opposite. The FDA granted emergency-use authorization to BGI Americas, the company's U.S. subsidiary, for its Covid-19 test. The FDA declined to comment.



BGI administers the China National Gene Bank, a giant genomic database funded by the Chinese government.
PHOTO: MAO SIQIAN/ZUMA PRESS

Gene-sequencing equipment at the China National Gene Bank in 2016.
PHOTO: MAO SIQIAN/ZUMA PRESS

Abu Dhabi, the Gulf emirate, sent BGI testing equipment to federal agencies, according to documents obtained by the Journal. The head of the infectious-disease program at HHS offered the company's Covid-19 test kits to New Mexico, according to emails between HHS and New Mexico authorities. The state declined, the emails show. A senior official of the Federal Emergency Management Agency also offered tests to states.

Spokespeople for both agencies said the equipment wasn't purchased directly from BGI. An email written by an aide to the HHS official in charge of infectious diseases said the BGI test kits were "received from the UAE." An HHS spokeswoman said no one at the department knew how it got the test kits.

In Nevada, the head of the state's Covid-19 task force was trying to address a shortage in testing capacity when he read about "pop-up labs" made by BGI and a company linked to the Abu Dhabi government. Jim Murren, who had been chief executive of casino operator MGM Resorts International before taking over the task force, called Marty Edelman, a New York real-estate lawyer with close ties to the Abu Dhabi government, to see if the emirate could help. He and his colleagues discussed whether it "might be a really intelligent option for the state," Mr. Murren said in an interview.

"The Emirate would front much of the capital, and fly everything described at their cost," Mr. Murren wrote in an email to the head of a local health-care chain that Nevada officials provided to the Journal. Abu Dhabi, Mr. Murren added, "wants to prove the deployment in

Las Vegas so they can roll out in other states, and countries—hence the very low cost and opportunity for us."

Jim Murren, as CEO of MGM Resorts International, spoke at a meeting with President Trump in March about the pandemic.
PHOTO: DREW ANGERER/GETTY IMAGES

BGI's Abu Dhabi partner, a data and artificial-intelligence company called Group 42, is linked to Sheikh Tahnoon bin Zayed, a member of the emirate's ruling family and its intelligence chief. BGI and Group 42 were testing Emiratis for Covid-19. The two companies are also working on a project to collect genetic data of U.A.E. citizens to "generate the highest quality, most comprehensive genome data," the Abu Dhabi government said in 2019. The Associated Press previously reported details of the talks between Nevada and Group 42. BGI said it was aware that Group 42 had made approaches to Nevada about testing labs, but played no role in the proposals.

Mr. Evanina said counterintelligence officials knew about the growing interaction between BGI and Group 42. "We're aware of these efforts and concerned about them," he said. He noted that the two jointly offered free Covid-19 testing to a U.S. Embassy in the Middle East, and were refused.

SHARE YOUR THOUGHTS

How can the U.S. government ensure security around importing and distributing Covid-19 tests? Join the conversation below.

Nevada ended up getting Covid-19 test equipment including nasal swabs from BGI, but not the testing machines. "There was no capacity for anyone to do anything that would be nefarious," Mr. Murren said.

The Journal contacted all 50 state health departments about approaches from BGI. At least 11 states, from Alabama to South Dakota, said they got offers for BGI-manufactured tests or testing laboratories that could be constructed rapidly.

Lobbyists in Ohio, Rhode Island and Massachusetts shared pitches from BGI with each other but failed to interest state governments, according to emails. In Arkansas, BGI contacted Gov. Asa Hutchinson with the help of the George H.W. Bush Foundation for U.S.-China Relations, emails reviewed by the Journal show.

Euhwa Tran, the foundation's chief operating officer, said that the organization was responding to a request from Mr. Hutchison's office and was unaware of concerns about foreign testing equipment or BGI.

Real-estate lawyer Marty Edelman pressed California health officials to use BGI's Covid-19 equipment.
PHOTO: THOS ROBINSON/GETTY IMAGES FOR JACKIE ROBINSON FOUNDATION

Mr. Edelman, the same lawyer who pitched Nevada on the Abu Dhabi-BGI offer, pushed to get BGI equipment into California in early April. He contacted Gov. Gavin Newsom's office, and was connected with Bob Kocher, a physician and venture capitalist on the state's Covid-19 task force. Other states that were approached to use BGI products, but didn't purchase them, include Indiana, Kansas, North Carolina, Ohio and Pennsylvania.

Mr. Edelman pitched the BGI machines in a phone call and let drop that he knew the governor's wife. "We don't need them," Dr. Kocher replied. Mr. Edelman told Dr. Kocher that he and his colleagues were "idiots," Dr. Kocher said. "He yelled at me saying I'm making a terrible mistake for California, that he'll tell the governor that we're not taking seriously an offer to help, and we're jeopardizing California's public health."

Mr. Edelman referred questions to a Group 42 spokesman. The spokesman said that in March, Group 42 tried to help California with Covid-19 testing kits.

"Mr. Edelman did not say or insinuate anything negative about anyone in any circumstance, nor was he a participant in any loud conversations," the spokesman said. "Mr. Edelman's sole interaction with Gov. Newsom's wife was at a New York event many years ago," he added.

Dr. Kocher forwarded the pitch to the White House, which in response sent a warning from the Air Force Office of Special Investigations. The equipment, it said, could be a security risk. The Washington Post previously reported BGI's efforts in California.

###

From: Hastings, Christina <chastings@illumina.com>
Sent: Wednesday, January 13, 2021 10:02 AM
To: Beal, Samantha <sbeal@illumina.com>; Lopez, Lizelda <llopez3@illumina.com>
Subject: FW: WSJ Article

Team – are you able to download the full article for us?

Christina Hastings
Head of Communications Business Partners | GQO & PD
illumina, Inc.

From: Tousi, Susan <stousi@illumina.com>
Sent: Wednesday, January 13, 2021 9:48 AM
To: Panattoni, Robin <rpanattoni@illumina.com>; Hastings, Christina <chastings@illumina.com>

Subject: Fwd: WSJ Article

Hi Robin, Christina,

I can't see the full article because I don't have a subscription. Could you check if we have a Corp account or else I'll subscribe individually.

Best,
Susan

Susan Tousi
SVP, Chief Product Officer
Illumina, Inc.
5200 Illumina Way
San Diego, CA 92122
E-mail: stousi@illumina.com
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Admin Partner:
Robin Panattoni
rpanattoni@illumina.com

From: Samad, Sam <ssamad@illumina.com>
Sent: Wednesday, January 13, 2021 8:25:58 AM
To: Dadswell, Charles <cdadswell@illumina.com>; deSouza, Francis <fdesouza@illumina.com>; Tousi, Susan <stousi@illumina.com>; Aravanis, Alex <aaravanis@illumina.com>; Febbo, Phil <pfebbo@illumina.com>; Reeves, Kathryne <kreeves@illumina.com>
Cc: Cunningham, Juliet <jcunningham1@illumina.com>
Subject: WSJ Article

Not sure if you all saw this today. Front page.
https://www.wsj.com/articles/chinese-covid-19-tests-were-pushed-by-federal-agencies-despite-security-warnings-11610533802?mod=hp_lead_pos6

Sam

Sam Samad
Chief Financial Officer
Illumina

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of **Illumina, Inc.,** **a corporation,** **and** **GRAIL, Inc.,** **a corporation.** **Respondents.**	**DOCKET NO. 9401**

[PROPOSED] ORDER

Having considered the motion, it is hereby ORDERED:

Complaint Counsel's Motion for Leave to Amend its Exhibit List and To Admit Certain Additional Exhibits, dated March 1, 2022, is GRANTED. Complaint Counsel's exhibits listed on JX3 and JX4 should be admitted into evidence.

ORDERED:

D. Michael Chappell
Chief Administrative Law Judge

Dated:

CERTIFICATE OF SERVICE

I hereby certify that on March 2, 2022, I filed the foregoing document electronically using the FTC's E-Filing System, which will send notification of such filing to:

April Tabor
Secretary
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-113
Washington, DC 20580
ElectronicFilings@ftc.gov

The Honorable D. Michael Chappell
Administrative Law Judge
Federal Trade Commission
600 Pennsylvania Ave., NW, Rm. H-110
Washington, DC 20580

I also certify that I caused the foregoing document to be served via email to:

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s/ Susan A. Musser
Susan A. Musser

Counsel Supporting the Complaint