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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities and Exchange Act of 1934**

**Date of Report: February 26, 2018
(Date of earliest event reported)**

Invitae Corporation
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-36847
(Commission File Number)

27-1701898
(I.R.S. employer
identification number)

1400 16th Street, San Francisco, California 94103
(Address of principal executive offices, including zip code)

(415) 374-7782
(Registrant's telephone number, including area code)

N/A
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On February 26, 2018, Invitae Corporation (“Invitae”), together with its subsidiaries PatientCrossroads, Inc., Good Start Genetics, Inc., Ommdom Inc., Combimatrix Corporation and Combimatrix Molecular Diagnostics, Inc., entered into a First Amendment to Loan and Security Agreement (the “2018 Amendment”) with Oxford Finance LLC (the “Lender”) which amended that certain Loan and Security Agreement entered into as of March 15, 2017 between Invitae, PatientCrossroads, Inc. and the Lender (the “2017 Loan Agreement”). Pursuant to the 2017 Loan Agreement, Invitae borrowed an initial term loan of \$40 million and, subject to certain conditions, Invitae is eligible to borrow a second term loan of \$20 million during the first quarter of 2018. As amended by the 2018 Amendment, Invitae is eligible under the 2017 Loan Agreement to borrow an additional term loan of up to \$20 million during the second quarter of 2018, subject to certain conditions, and subsidiaries of Invitae (Good Start Genetics, Inc., Ommdom Inc., Combimatrix Corporation and Combimatrix Molecular Diagnostics, Inc.) are added to the 2017 Loan Agreement as additional borrowers (together with Invitae, the “Borrowers”).

Term loans under the 2017 Loan Agreement as amended by the 2018 Amendment bear interest at a floating rate equal to an index rate plus 7.73%, where the index rate is the greater of 0.77% or the 30-day U.S. Dollar London Interbank Offered Rate (LIBOR) as reported in the Wall Street Journal, with the floating rate resetting monthly subject to a floor of 8.5%. The Borrowers can make monthly interest-only payments until May 1, 2019 (or, subject to certain conditions, May 1, 2020), and thereafter monthly payments of principal and interest are required to fully amortize the borrowed amount by a final maturity date of March 1, 2022. A fee of 5% of each funded draw is due at the earlier of prepayment or loan maturity, a facility fee of 0.5% is due upon funding for each draw, a prepayment fee of between 1% and 3% of the outstanding balance will apply in the event of a prepayment, and a non-utilization fee of 1% is due on June 29, 2018 with respect to any portion of the \$20 million in available term loan during the second quarter of 2018 which is not borrowed. Concurrent with each term loan, Invitae will grant to the Lender a warrant to acquire shares of Invitae’s common stock equal to the quotient of 3% of the funded amount divided by a per share exercise price equal to the lower of the average closing price for the previous ten days of trading (calculated on the day prior to funding) or the closing price on the day prior to funding. In connection with the initial term loan, Invitae granted the Lender a warrant to purchase 116,845 shares of common stock at an exercise price of \$10.27 per share. The warrants have a term of ten years from the date of issuance and include a cashless exercise provision.

Obligations of the Borrowers under the 2017 Loan Agreement as amended by the 2018 Amendment are subject to quarterly covenants to achieve certain revenue levels and accessioned test volumes as well as additional covenants, including limits on the ability of Borrowers to dispose of assets, undergo a change in control, merge with or acquire other entities, incur debt, incur liens, pay dividends or other distributions to holders of Invitae’s capital stock, repurchase stock and make investments, in each case subject to certain exceptions. Obligations of the Borrowers under the 2017 Loan Agreement as amended by the 2018 Amendment are secured by a security interest on substantially all of the assets of the Borrowers, excluding intellectual property.

The foregoing description of the 2017 Loan Agreement, the 2018 Amendment and the warrants is qualified in its entirety by reference to the full text of the 2017 Loan Agreement, the 2018 Amendment and the Form of Warrant to Purchase Common Stock, copies of which are filed (or incorporated by reference) as Exhibits 10.1, 10.2 and 10.3, respectively, to this report.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant.

The information required by this Item 2.03 is incorporated by reference from Item 1.01 above.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
10.1	<u>Loan and Security Agreement dated as of March 15, 2017 between Oxford Capital, LLC, Invitae Corporation and PatientCrossroads, Inc. (incorporated by reference to Exhibit 10.13 to Invitae Corporation's Amendment No. 1 to Annual Report on Form 10-K filed on June 23, 2017).</u>
10.2	<u>First Amendment to Loan and Security Agreement entered into as February 26, 2018 between Oxford Finance LLC and Invitae Corporation together with its subsidiaries PatientCrossroads, Inc., Good Start Genetics, Inc., Ommdom Inc., Combimatrix Corporation and Combimatrix Molecular Diagnostics, Inc.</u>
10.3	<u>Form of Warrant to Purchase Common Stock between Oxford Capital, LLC and Invitae Corporation (incorporated by reference to Exhibit 10.14 to Invitae Corporation's Annual Report on Form 10-K filed on March 16, 2017).</u>

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: February 27, 2018

INVITAE CORPORATION

By: /s/ Shelly D. Guyer

Name: Shelly D. Guyer

Title: Chief Financial Officer

**FIRST AMENDMENT TO
LOAN AND SECURITY AGREEMENT**

THIS **FIRST AMENDMENT** to Loan and Security Agreement (this “**Amendment**”) is entered into as of February 26, 2018, by and between **OXFORD FINANCE LLC**, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (“**Oxford**”), as collateral agent (in such capacity, “**Collateral Agent**”), the Lenders listed on Schedule 1.1 of the Loan Agreement (as defined below) or otherwise party thereto from time to time including Oxford in its capacity as a Lender (each a “**Lender**” and collectively, the “**Lenders**”) and **INVITAE CORPORATION**, a Delaware corporation and **PATIENTCROSSROADS, INC.**, a California corporation (individually and collectively, jointly and severally, “**Existing Borrower**”), **GOOD START GENETICS, INC.**, a Delaware corporation (“**Good Start**”), **OMMDOM INC.**, a Delaware corporation (“**Ommdom**”), **COMBIMATRIX CORPORATION**, a Delaware corporation (“**CombiMatrix**”) and **COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.**, a California corporation (“**CombiMatrix Diagnostics**”) and, together with Good Start, Ommdom and CombiMatrix, each a “**New Borrower**” and collectively “**New Borrowers**”, and together with Existing Borrower, individually and collectively, jointly and severally, “**Borrower**”), each with offices located at 1400 16th Street, San Francisco, CA 94103.

RECITALS

A. Collateral Agent, Lenders and Existing Borrower have entered into that certain Loan and Security Agreement dated as of March 15, 2017 (as amended from time to time, the “**Loan Agreement**”).

B. Lenders have extended credit to Borrower for the purposes permitted in the Loan Agreement.

C. Borrower has requested that Collateral Agent and Lenders (i) add each New Borrower as a “Borrower” under the Loan Agreement and (ii) make certain other revisions to the Loan Agreement as more fully set forth herein.

D. Collateral Agent and Lenders have agreed to amend certain provisions of the Loan Agreement, but only to the extent, in accordance with the terms, subject to the conditions and in reliance upon the representations and warranties set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meanings given to them in the Loan Agreement.

2. Joinder.

2.1 New Borrower. Each New Borrower hereby is added as a “Borrower” under the Loan Agreement. All references in the Agreement to “Borrower” shall hereafter mean and include the Existing Borrower and each New Borrower individually and collectively, jointly and severally; and each New Borrower shall hereafter have all rights, duties and obligations of “Borrower” thereunder.

2.2 Joinder to Loan Agreement. Each New Borrower hereby joins the Loan Agreement and each of the Loan Documents (other than the Warrants), and agrees to comply with and be bound by all of the terms, conditions and covenants of the Loan Agreement and Loan Documents (other than the Warrants), as if it were originally named a “Borrower” therein. Without limiting the generality of the preceding sentence, each New Borrower agrees that it will be jointly and severally liable, together with Existing Borrower, for the payment and performance of all obligations and liabilities of Borrower under the Loan Agreement, including, without limitation, the Obligations. Each Borrower may, acting singly, request Credit Extensions pursuant to the Loan Agreement.

Each Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions pursuant to the Loan Agreement. Each Borrower hereunder shall be obligated to repay all Credit Extensions made pursuant to the Loan Agreement, regardless of which Borrower actually receives said Credit Extension, as if each Borrower hereunder directly received all Credit Extensions.

2.3 Subrogation and Similar Rights . Each Borrower waives (a) any suretyship defenses available to it under the Code or any other applicable law, including, without limitation, the benefit of California Civil Code Section 2815 permitting revocation as to future transactions and the benefit of California Civil Code Sections 1432, 2809, 2810, 2819, 2839, 2845, 2847, 2848, 2849, 2850, and 2899 and 3433, and (b) any right to require Collateral Agent or any Lender to: (i) proceed against any Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Collateral Agent and or any Lender may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Borrower's liability. Notwithstanding any other provision of this Amendment, the Loan Agreement, the Loan Documents or any other related documents, each Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of Collateral Agent and the Lenders under this Amendment and the Loan Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by Borrower with respect to the Obligations in connection with this Amendment, the Loan Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by Borrower with respect to the Obligations in connection with this Amendment, the Loan Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Borrower in contravention of this Section, such Borrower shall hold such payment in trust for Collateral Agent and the Lenders and such payment shall be promptly delivered to Collateral Agent for application to the Obligations, whether matured or unmatured.

2.4 Grant of Security Interest . Each New Borrower hereby grants Collateral Agent, for the ratable benefit of the Lenders, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Collateral Agent, for the ratable benefit of the Lenders, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof. Each New Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral, subject only to Permitted Liens that are permitted by the terms of the Loan Agreement to have priority to Collateral Agent's Lien. Each New Borrower hereby authorizes Collateral Agent to file financing statements or take any other action required to perfect Collateral Agent's security interests in the Collateral, without notice to New Borrower, with all appropriate jurisdictions to perfect or protect Collateral Agent's interest or rights under the Loan Documents, including a notice that any disposition of the Collateral, except to the extent permitted by the terms of the Loan Agreement, by New Borrower, or any other Person, shall be deemed to violate the rights of Collateral Agent under the Code.

2.5 Representations and Warranties . Each New Borrower hereby represents and warrants to Collateral Agent and each Lender that all representations and warranties in the Loan Documents made on the part of Existing Borrower are true and correct on the date hereof with respect to Existing Borrower and New Borrower, with the same force and effect as if New Borrower were named as "Borrower" in the Loan Documents in addition to Existing Borrower.

3. Amendments to Loan Agreement.

3.1 Section 2.2(a) (Term Loans - Availability) . Section 2.2(a) of the Loan Agreement hereby is amended and restated in its entirety as follows:

"(a) Availability . (i) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, to make a single term loan to Borrower on the Effective Date in an aggregate amount of Forty Million Dollars (\$40,000,000.00) according to each Lender's Term Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a " **Term A Loan** ", and collectively as the " **Term A Loans** "). After repayment, no Term A Loan may be re-borrowed.

(ii) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, during the Second Draw Period, to make a single term loan to Borrower in an aggregate amount of Twenty Million Dollars (\$20,000,000.00) according to each Lender's Term Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a " **Term B Loan** ", and collectively as the " **Term B Loans** "). After repayment, no Term B Loan may be re-borrowed.

(iii) Subject to the terms and conditions of this Agreement, the Lenders agree, severally and not jointly, during the Third Draw Period, to make a single term loan to Borrower in an aggregate amount of not less than Ten Million Dollars (\$10,000,000.00) but not more than Twenty Million Dollars (\$20,000,000.00) and only in increments of One Million Dollars (\$1,000,000.00) according to each Lender's Term Loan Commitment as set forth on Schedule 1.1 hereto (such term loans are hereinafter referred to singly as a " **Term C Loan** ", and collectively as the " **Term C Loans** "); each Term A Loan, Term B Loan or Term C Loan is hereinafter referred to singly as a " **Term Loan** " and the Term A Loans, the Term B Loans and the Term C Loans are hereinafter referred to collectively as the " **Term Loans** "). After repayment, no Term C Loan may be re-borrowed."

3.2 Section 2.5 (Facility Fee and Non-Utilization Fee) . Section 2.5 of the Loan Agreement hereby is amended by (a) amending and restating in its entirety Section 2.5(a) and (b) inserting a new Section 2.5(f), as follows:

"(a) Facility Fee . A fully earned, non-refundable facility fee of up to Four Hundred Thousand Dollars (\$400,000.00) to be shared between the Lenders pursuant to their respective Commitment Percentages payable as follows: (i) Two Hundred Thousand Dollars (\$200,000.00) of the facility fee shall be due and payable on the Effective Date, (ii) One Hundred Thousand Dollars (\$100,000.00) of the facility fee shall be due and payable on the Funding Date of the Term B Loan, and (iii) up to One Hundred Thousand Dollars (\$100,000.00) of the facility fee in an amount equal to (A) the original principal amount of the Term C Loan multiplied by (B) one half of one percent (0.50%) shall be due and payable on the Funding Date of the Term C Loan;

...

(f) Non-Utilization Fee . The Non-Utilization Fee, which will be fully-earned if the Third Draw Period commences, when due hereunder, to be shared between the Lenders pursuant to their respective Term C Loan Commitment Percentages. The term " **Non-Utilization Fee** " means a nonrefundable fee, in an amount equal to (i) the difference between Twenty Million Dollars (\$20,000,000.00) and the original principal amount of the Term C Loan multiplied by (ii) one percent (1.0%), and due on the earlier to occur of (a) June 29, 2018 and (b) the occurrence of an Event of Default; provided, however, no fee shall be due and payable if the original principal amount of the Term C Loans is Twenty Million Dollars (\$20,000,000.00). For the avoidance of doubt, the Non-Utilization Fee shall be an amount equal to Two Hundred Thousand Dollars (\$200,000.00) if no Term C Loan is made during the Third Draw Period."

3.3 Section 6.10 (Performance to Plan; Accessioned Test Volumes and Revenues) . Section 6.10 of the Loan Agreement hereby is amended and restated in its entirety to read as follows:

" **6.10 Performance to Plan; Accessioned Test Volumes and Revenues** . Borrower's consolidated accessioned test volumes and revenues, tested quarterly on a trailing six (6)-month basis, shall be at least eighty seven and one half of one percent (87.5%) of consolidated projected accessioned test volumes and revenues as set forth in (a) with respect to the Borrower's fiscal year commencing January 1, 2018, the financial projections delivered by Borrower to Lenders on January 30, 2018 and (b) with respect to each fiscal year thereafter, a set of annual projections (the " **Performance to Plan Projections** ") delivered by Borrower to Collateral Agent and each Lender where such annual projections are based upon the Annual Projections delivered by Borrower to Lenders for such fiscal year as modified pursuant to substantially the same methodology that was used in order to create the financial projections referred to in clause (a); provided, however, (i) the Performance to Plan Projections shall be subject to the approval of the Collateral Agent and Lenders and (ii) the Performance to Plan Projections shall be delivered by Borrower no later than the date that the underlying Annual Projections are required to be delivered pursuant to Section 6.2(a)(iii)."

3.4 Section 8.2(a) (Covenant Defaults) . Section 8.2(a) of the Loan Agreement hereby is amended by changing the title of Section 6.10 referenced therein to “(Performance to Plan; Accessioned Test Volumes and Revenues)”.

3.5 Section 10 (Notices) . Section 10 of the Loan Agreement is amended by replacing the notice address for DLA Piper LLP (US) as follows:

“DLA Piper LLP (US)
500 8th Street, NW
Washington, DC 20004
Attn: Eric Eisenberg
Fax: (202) 799-5211
Email: eric.eisenberg@dlapiper.com”

3.6 Section 13 (Definitions) . The following terms and their definitions hereby are added or amended and restated in their entirety, as applicable, to Section 13.1 of the Loan Agreement as follows:

“ **Amortization Date** ” is, May 1, 2019; provided that, if Borrower (i) remains in compliance with the Performance to Plan; Accessioned Test Volumes and Revenues covenant, as provided in Section 6.10 hereof, through the March 31, 2019 testing date and (ii) no Event of Default has occurred, then the Amortization Date shall be May 1, 2020.

“ **Non-Utilization Fee** ” is defined in Section 2.5(f) hereof.

“ **Obligations** ” are all of Borrower’s obligations to pay when due any debts, principal, interest, Lenders’ Expenses, the Prepayment Fee, the Final Payment, the Non-Utilization Fee, and other amounts Borrower owes the Lenders now or later, in connection with, related to, following, or arising from, out of or under, this Agreement or, the other Loan Documents (other than the Warrants), or otherwise, and including interest accruing after Insolvency Proceedings begin (whether or not allowed) and debts, liabilities, or obligations of Borrower assigned to the Lenders and/or Collateral Agent, and the performance of Borrower’s duties under the Loan Documents (other than the Warrants).

“ **Performance to Plan Projections** ” is defined in Section 6.10 hereof.

“ **Term C Loan** ” is defined in Section 2.2(a)(iii) hereof.

“ **Third Draw Period** ” is the period commencing on April 2, 2018 and ending on the earlier of (i) June 29, 2018 and (ii) the occurrence of an Event of Default; provided, however, (A) that the Third Draw Period shall not commence if an Event of Default has occurred and is continuing on April 2, 2018 and (B) in its request for a Term C Loan, Borrower shall provide written evidence satisfactory to Collateral Agent that Borrower is in compliance with its obligations under Section 6.10.

3.7 General . Each reference to the phrase “[n]either Borrower” in the Loan Agreement hereby is replaced with “[n]o Borrower.”

3.8 Section 12.12 (Borrower Liability) . The first sentence of Section 12.12 (Borrower Liability) hereby is amended and restated as follows: “Each Borrower may, acting singly, request Credit Extensions hereunder.”

3.9 Schedule 1.1 of the Loan Agreement hereby is replaced in its entirety with Schedule 1.1 attached hereto.

4. Limitation of Joinder and Amendment.

4.1 The joinder and amendments set forth in **Sections 2 and 3** above, are effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document, or (b) otherwise prejudice any right or remedy which Collateral Agent or any Lender may now have or may have in the future under or in connection with any Loan Document.

4.2 This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

5. Representations and Warranties. To induce Collateral Agent and Lenders to enter into this Amendment, Borrower hereby represents and warrants to Collateral Agent and Lenders as follows:

5.1 Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in which case they are true and correct as of such date), and (b) no Event of Default has occurred and is continuing;

5.2 Borrower has the power and authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

5.3 The organizational documents of Existing Borrower delivered to Collateral Agent and Lenders on the Effective Date and of New Borrower, on the date of this Amendment, are true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

5.4 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, have been duly authorized;

5.5 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (a) any law or regulation binding on or affecting Borrower, (b) any contractual restriction with a Person binding on Borrower, (c) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (d) the organizational documents of Borrower;

5.6 The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower; and

5.7 This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

6. Post-Closing Covenants .

6.1 Within thirty (30) days after the date of this Amendment, Borrower shall either (a) cause each Collateral Account that is required to be subject to a Control Agreement pursuant to Section 6.6(b) of the Loan Agreement to be subject to a Control Agreement in form and substance reasonably acceptable to Collateral Agent or (b) provide Collateral Agent with evidence that Borrower has closed such Collateral Account.

6.2 Within forty-five (45) days after the date of this Amendment, Borrower shall deliver a bailee waiver or landlord waiver, as applicable, in form and substance reasonably acceptable to Collateral Agent, for each location required by the terms of Section 6.11 of the Loan Agreement to have such bailee waiver or landlord waiver. Borrower acknowledges and agrees that its failure to comply with this Section 6 shall be an Event of Default under Section 8.2(a) of the Loan Agreement.

6.3 Within thirty (30) days after the date of this Amendment, CombiMatrix International Holding Corporation, a Delaware corporation, shall have dissolved and all of its assets shall have been transferred to Borrower.

6.4 Within ten (10) days after the date of this Amendment, Borrower shall deliver to Collateral Agent evidence, in form and substance reasonably acceptable to Collateral Agent, of its having filed lien terminations with the USPTO with respect to all patents and trademarks owned by CombiMatix having recorded security interests in favor of Nanogen, Inc.

6.5 Within five (5) Business Days after the date of this Amendment, Borrower shall deliver to Collateral Agent evidence, in form and substance reasonably acceptable to Collateral Agent, a completed Perfection Certificate for INVITAE CORPORATION.

7. Counterparts. This Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

8. Effectiveness. This Amendment shall be deemed effective upon the due execution and delivery to Collateral Agent and Lenders of the following:

- (i) this Amendment by each party hereto;
- (ii) a Corporate Borrowing Certificate from each Borrower;
- (iii) duly filed UCC Financing Statements, identifying each New Borrower as a Debtor;
- (iv) the certificate(s) for the Shares of each New Borrower, together with Assignment(s) Separate from Certificate, duly executed in blank;
- (v) Amended and Restated Secured Promissory Notes (Term A Loan), duly executed by each Borrower, substantially in the form of Exhibit A attached hereto;
- (vi) a completed Perfection Certificate for each New Borrower;
- (vii) the good standing certificates for each New Borrower certified by the Secretary of State (or equivalent agency) of such New Borrower's jurisdiction of organization and each jurisdiction in which such New Borrower is qualified to conduct business, each as of a date no earlier than thirty (30) days prior to the date of this Amendment; and
- (viii) Borrower's payment of all Lenders' Expenses incurred through the date of this Amendment.

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I N W ITNESS W HEREOF , the parties hereto have caused this Amendment to be duly executed and delivered as of the date first written above.

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By: /s/ Colette Featherly
Name: Colette Featherly
Title: Senior Vice President

BORROWER:

INVITAE CORPORATION

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: COO and Secretary

PATIENTCROSSROADS, INC.

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: CFO, Treasurer and Secretary

GOOD START GENETICS, INC.

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: COO and Secretary

COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: COO and Secretary

COMBIMATRIX CORPORATION

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: Secretary

OMMDOM INC.

By: /s/ Lee Bendekgey
Name: Lee Bendekgey
Title: COO and Secretary

[Signature Page to First Amendment to Loan and Security Agreement]

SCHEDULE 1.1

Lenders and Commitments

Term A Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 40,000,000.00	100.00%
TOTAL	\$ 40,000,000.00	100.00%

Term B Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 20,000,000.00	100.00%
TOTAL	\$ 20,000,000.00	100.00%

Term C Loans

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 20,000,000.00	100.00%
TOTAL	\$ 20,000,000.00	100.00%

Aggregate (all Term Loans)

<u>Lender</u>	<u>Term Loan Commitment</u>	<u>Commitment Percentage</u>
OXFORD FINANCE LLC	\$ 80,000,000.00	100.00%
TOTAL	\$ 80,000,000.00	100.00%

EXHIBIT A

Amended and Restated Secured Promissory Notes (Term Loan A)

(see attached)

AMENDED AND RESTATED SECURED PROMISSORY NOTE
(Term A Loan)

\$12,500,000.00

Dated: February 26, 2018

FOR VALUE RECEIVED, the undersigned, INVITAE CORPORATION, a Delaware corporation and PATIENTCROSSROADS, INC., a California corporation (individually and collectively, jointly and severally, “**Existing Borrower**”) and GOOD START GENETICS, INC., a Delaware corporation (“**Good Start**”), OMMDOM, INC., a Delaware corporation (“**Ommdom**”) and COMBIMATRIX CORPORATION, a Delaware corporation (“**CombiMatrix**”, together with Good Start and Ommdom, each a “**New Borrower**” and collectively “New Borrowers”, and together with Existing Borrower, individually and collectively, jointly and severally, “**Borrower**”), each with offices located at 1400 16th Street, San Francisco, CA 94103, HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC (“**Lender**”) the principal amount of TWELVE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$12,500,000.00) or such lesser amount as shall equal the outstanding principal balance of the Term A Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term A Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated March 15, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term A Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Amended and Restated Secured Promissory Note (this “**Note**”). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term A Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term A Loan, interest on the Term A Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys’ fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower’s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

This Note is intended to and does completely amend and restate, without novation, that certain Secured Promissory Note in the original principal amount of TWELVE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$12,500,000.00) issued on March 15, 2017, by Existing Borrower in favor of Lender.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

INVITAE CORPORATION

By _____
Name: _____
Title: _____

PATIENTCROSSROADS, INC.

By _____
Name: _____
Title: _____

GOOD START GENETICS, INC.

By _____
Name: _____
Title: _____

OMMDOM INC.

By _____
Name: _____
Title: _____

COMBIMATRIX CORPORATION

By _____
Name: _____
Title: _____

COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.

By _____
Name: _____
Title: _____

*Oxford Finance LLC
Amended and Restated Secured Promissory Note No. 1
\$ 12, 5 00,000.00 Original Issue Term A Loan*

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

**Principal
Amount**

Interest Rate

**Scheduled
Payment Amount**

Notation By

AMENDED AND RESTATED SECURED PROMISSORY NOTE
(Term A Loan)

\$12,500,000.00

Dated: February 26, 2018

FOR VALUE RECEIVED, the undersigned, INVITAE CORPORATION, a Delaware corporation and PATIENTCROSSROADS, INC., a California corporation (individually and collectively, jointly and severally, “**Existing Borrower**”) and GOOD START GENETICS, INC., a Delaware corporation (“**Good Start**”), OMMDOM, INC., a Delaware corporation (“**Ommdom**”) and COMBIMATRIX CORPORATION, a Delaware corporation (“**CombiMatrix**”, together with Good Start and Ommdom, each a “**New Borrower**” and collectively “**New Borrowers**”, and together with Existing Borrower, individually and collectively, jointly and severally, “**Borrower**”), each with offices located at 1400 16th Street, San Francisco, CA 94103, HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC (“**Lender**”) the principal amount of TWELVE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$12,500,000.00) or such lesser amount as shall equal the outstanding principal balance of the Term A Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term A Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated March 15, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term A Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Amended and Restated Secured Promissory Note (this “**Note**”). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term A Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term A Loan, interest on the Term A Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys’ fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower’s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

This Note is intended to and does completely amend and restate, without novation, that certain Secured Promissory Note in the original principal amount of TWELVE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$12,500,000.00) issued on March 15, 2017, by Existing Borrower in favor of Lender.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

INVITAE CORPORATION

By _____
Name: _____
Title: _____

PATIENTCROSSROADS, INC.

By _____
Name: _____
Title: _____

GOOD START GENETICS, INC.

By _____
Name: _____
Title: _____

OMMDOM INC.

By _____
Name: _____
Title: _____

COMBIMATRIX CORPORATION

By _____
Name: _____
Title: _____

COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.

By _____
Name: _____
Title: _____

*Oxford Finance LLC
Amended and Restated Secured Promissory Note No. 2
\$ 12, 5 00,000.00 Original Issue Term A Loan*

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

**Principal
Amount**

Interest Rate

**Scheduled
Payment Amount**

Notation By

AMENDED AND RESTATED SECURED PROMISSORY NOTE – TERM A LOAN
(Original Term A Loan – original face amount of \$10,000,000.00)

\$10,000,000.00

Dated: February 26, 2018

FOR VALUE RECEIVED, the undersigned, INVITAE CORPORATION, a Delaware corporation and PATIENTCROSSROADS, INC., a California corporation (individually and collectively, jointly and severally, “**Existing Borrower**”) and GOOD START GENETICS, INC., a Delaware corporation (“**Good Start**”), OMMDOM, INC., a Delaware corporation (“**Ommdom**”) and COMBIMATRIX CORPORATION, a Delaware corporation (“**CombiMatrix**”, together with Good Start and Ommdom, each a “**New Borrower**” and collectively “**New Borrowers**”, and together with Existing Borrower, individually and collectively, jointly and severally, “**Borrower**”), each with offices located at 1400 16th Street, San Francisco, CA 94103, HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC (“**Lender**”) the principal amount of TEN MILLION DOLLARS (\$10,000,000.00) or such lesser amount as shall equal the outstanding principal balance of the Term A Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term A Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated March 15, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term A Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Amended and Restated Secured Promissory Note (this “**Note**”). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term A Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term A Loan, interest on the Term A Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys’ fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower’s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

This Note is intended to and does completely amend and restate, without novation, that certain Secured Promissory Note in the original principal amount of TEN MILLION DOLLARS (\$10,000,000.00) issued on March 15, 2017, by Existing Borrower in favor of Lender.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

INVITAE CORPORATION

By _____
Name: _____
Title: _____

PATIENTCROSSROADS, INC.

By _____
Name: _____
Title: _____

GOOD START GENETICS, INC.

By _____
Name: _____
Title: _____

OMMDOM INC.

By _____
Name: _____
Title: _____

COMBIMATRIX CORPORATION

By _____
Name: _____
Title: _____

COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.

By _____
Name: _____
Title: _____

*Oxford Finance LLC
Amended and Restated Secured Promissory Note No. 3
\$ 10,000,000.00 Original Issue Term A Loan*

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

Principal
Amount

Interest Rate

Scheduled
Payment Amount

Notation By

AMENDED AND RESTATED SECURED PROMISSORY NOTE
(Term A Loan)

\$5,000,000.00

Dated: February 26, 2018

FOR VALUE RECEIVED, the undersigned, INVITAE CORPORATION, a Delaware corporation and PATIENTCROSSROADS, INC., a California corporation (individually and collectively, jointly and severally, “**Existing Borrower**”) and GOOD START GENETICS, INC., a Delaware corporation (“**Good Start**”), OMMDOM, INC., a Delaware corporation (“**Ommdom**”) and COMBIMATRIX CORPORATION, a Delaware corporation (“**CombiMatrix**”, together with Good Start and Ommdom, each a “**New Borrower**” and collectively “New Borrowers”, and together with Existing Borrower, individually and collectively, jointly and severally, “**Borrower**”), each with offices located at 1400 16th Street, San Francisco, CA 94103, HEREBY PROMISES TO PAY to the order of OXFORD FINANCE LLC (“**Lender**”) the principal amount of FIVE MILLION DOLLARS (\$5,000,000.00) or such lesser amount as shall equal the outstanding principal balance of the Term A Loan made to Borrower by Lender, plus interest on the aggregate unpaid principal amount of such Term A Loan, at the rates and in accordance with the terms of the Loan and Security Agreement dated March 15, 2017 by and among Borrower, Lender, Oxford Finance LLC, as Collateral Agent, and the other Lenders from time to time party thereto (as amended, restated, supplemented or otherwise modified from time to time, the “**Loan Agreement**”). If not sooner paid, the entire principal amount and all accrued and unpaid interest hereunder shall be due and payable on the Maturity Date as set forth in the Loan Agreement. Any capitalized term not otherwise defined herein shall have the meaning attributed to such term in the Loan Agreement.

Principal, interest and all other amounts due with respect to the Term A Loan, are payable in lawful money of the United States of America to Lender as set forth in the Loan Agreement and this Amended and Restated Secured Promissory Note (this “**Note**”). The principal amount of this Note and the interest rate applicable thereto, and all payments made with respect thereto, shall be recorded by Lender and, prior to any transfer hereof, endorsed on the grid attached hereto which is part of this Note.

The Loan Agreement, among other things, (a) provides for the making of a secured Term A Loan by Lender to Borrower, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events.

This Note may not be prepaid except as set forth in Section 2.2(c) and Section 2.2(d) of the Loan Agreement.

This Note and the obligation of Borrower to repay the unpaid principal amount of the Term A Loan, interest on the Term A Loan and all other amounts due Lender under the Loan Agreement is secured under the Loan Agreement.

Presentment for payment, demand, notice of protest and all other demands and notices of any kind in connection with the execution, delivery, performance and enforcement of this Note are hereby waived.

Borrower shall pay all reasonable fees and expenses, including, without limitation, reasonable attorneys’ fees and costs, incurred by Lender in the enforcement or attempt to enforce any of Borrower’s obligations hereunder not performed when due.

This Note shall be governed by, and construed and interpreted in accordance with, the internal laws of the State of California.

The ownership of an interest in this Note shall be registered on a record of ownership maintained by Lender or its agent. Notwithstanding anything else in this Note to the contrary, the right to the principal of, and stated interest on, this Note may be transferred only if the transfer is registered on such record of ownership and the transferee is identified as the owner of an interest in the obligation. Borrower shall be entitled to treat the registered holder of this Note (as recorded on such record of ownership) as the owner in fact thereof for all purposes and shall not be bound to recognize any equitable or other claim to or interest in this Note on the part of any other person or entity.

This Note is intended to and does completely amend and restate, without novation, that certain Secured Promissory Note in the original principal amount of FIVE MILLION DOLLARS (\$5,000,000.00) issued on March 15, 2017, by Existing Borrower in favor of Lender.

IN WITNESS WHEREOF, Borrower has caused this Note to be duly executed by one of its officers thereunto duly authorized on the date hereof.

BORROWER:

INVITAE CORPORATION

By _____
Name: _____
Title: _____

PATIENTCROSSROADS, INC.

By _____
Name: _____
Title: _____

GOOD START GENETICS, INC.

By _____
Name: _____
Title: _____

OMMDOM INC.

By _____
Name: _____
Title: _____

COMBIMATRIX CORPORATION

By _____
Name: _____
Title: _____

COMBIMATRIX MOLECULAR DIAGNOSTICS, INC.

By _____
Name: _____
Title: _____

*Oxford Finance LLC
Amended and Restated Secured Promissory Note No. 4
\$5,000,000.00 Original Issue Term A Loan*

LOAN INTEREST RATE AND PAYMENTS OF PRINCIPAL

Date

**Principal
Amount**

Interest Rate

**Scheduled
Payment Amount**

Notation By
