



Current Agreements

Dealdoc

Licensing agreement for patent relating to the diagnosis of rejection in organ transplant recipients using cfDNA

Stanford University
ImmuMetrix

Jan 27 2014

Licensing agreement for patent relating to the diagnosis of rejection in organ transplant recipients using cfDNA

Companies:	Stanford University ImmuMetrix
Announcement date:	Jan 27 2014
Deal value, US\$m:	n/d

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Details

Announcement date:	Jan 27 2014
Start date:	Jan 27 2014
Industry sectors:	Academic Diagnostic
Exclusivity:	Exclusive
Asset type:	Technology
Therapy areas:	Hospital care » Transplantation Diagnostics » Molecular diagnostics
Technology types:	Screening
Deal components:	Licensing
Geographic focus:	Worldwide

Financials

Deal value, US\$m:	n/d
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Termsheet

Not available.

Press Release

Not available.

Filing Data

S1 abstract - 2014

The intellectual property rights of ImmuMetrix include an exclusive license from Stanford University to a patent relating to the diagnosis of rejection in organ transplant recipients using cfDNA.

In connection with our acquisition of ImmuMetrix, we expect to succeed to an exclusive license from Stanford University to a patent relating to the diagnosis of rejection in organ transplant recipients using cfDNA.

This patent has an expiration date of November 5, 2030.

Contract

AMENDED AND RESTATED EXCLUSIVE AGREEMENT

This Amended and Restated Agreement ("Restated Agreement") between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY ("Stanford"), an institution of higher education having powers under the laws of the State of California, and ImmuMetrix, Inc. ("ImmuMetrix"), a corporation having a principal place of business at 3183 Porter Drive, Palo Alto, CA, is effective on the 27th day of January, 2014, ("Restatement Effective Date").

1 BACKGROUND

Stanford has an assignment of an invention for a rapid, inexpensive, non-invasive method to monitor organ transplant recipients for life-threatening graft rejection. It is entitled "Non-invasive diagnosis of graft rejection in organ transplant patients," was invented in the laboratory of Dr. Stephen Quake, a Howard Hughes Medical Institute ("HHMI") investigator at Stanford, and is described in Stanford Docket S09-367. The invention was made in the course of research supported by the National Institutes of Health and HHMI. Stanford wants to have the invention perfected and marketed as soon as possible so that resulting products may be available for public use and benefit.

Effective as of August 19, 2011 ("Original Sequencing Effective Date"), Stanford and ImmuMetrix, LLC entered into the Exclusive License Agreement ("Sequencing Agreement") pursuant to which ImmuMetrix, LLC obtained from Stanford a world-wide exclusive license under the Licensed Patents for use in research and diagnostic fields using sequencing, as more completely set forth in the Sequencing Agreement. Additionally, effective as of February 10, 2012 ("Original PCR Effective Date"), Stanford and ImmuMetrix, LLC entered into the Exclusive License Agreement ("PCR Agreement") pursuant to which ImmuMetrix, LLC obtained from Stanford a world-wide exclusive license under the Licensed Patents for use in research and diagnostic fields using PCR assays, as more completely set forth in the PCR Agreement.

As described, and consented to by Stanford, in that certain letter from ImmuMetrix, LLC to Stanford dated March 26, 2013, ImmuMetrix, LLC assigned to ImmuMetrix, Inc. all rights and obligations under the Sequencing Agreement and the PCR Agreement.

Now, the parties desire to amend the terms of the Sequencing Agreement and the PCR Agreement and restate the Sequencing Agreement and PCR Agreement in their entirety on the terms and conditions as set forth in this Restated Agreement.

2 DEFINITIONS

2.1 "Agreement" means collectively, (i) the Sequencing Agreement as in effect from the Original Sequencing Agreement Effective Date until the Restatement Effective Date, (ii) the PCR Agreement as in effect from the Original PCR Effective Date until the Restatement Effective Date and (iii) this Restated Agreement, which pursuant to Section 20.6 below, replaces the Sequencing Agreement and the PCR Agreement in their entirety as of the Restatement Effective Date.

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2.2 "Fully Diluted Basis" means the total number of shares of ImmuMetrix's issued and outstanding common stock, assuming:

- (A) the conversion of all issued and outstanding securities convertible into common stock;
- (B) the exercise of all issued and outstanding warrants or options, regardless of whether then exercisable; and
- (C) the issuance, grant, and exercise of all securities reserved for issuance pursuant to any ImmuMetrix stock or stock option plan then in effect.

2.3 "HHMI Indemnitees" means HHMI and its trustees, officers, employees, and agents.

2.4 "Licensed Field of Use" means any and all fields of use.

2.5 "Licensed Patent" means any domestic or foreign patent application or patent that claims priority to, or common priority with, any application listed in Appendix C. Any claim of an unexpired Licensed Patent is presumed to be valid unless it has been held to be invalid by a final judgment of a court of competent jurisdiction from which no appeal can be or is taken. "Licensed Patent" excludes any continuation-in-part (CIP) patent application or patent, provided however that neither party shall file any such patent applications that claim priority to any patent applications that are licensed under this Agreement without the prior written consent of the other party.

2.6 "Licensed Product" means a product or part of a product in the Licensed Field of Use the making, using, importing or selling of which, absent this license, infringes, induces infringement, or contributes to infringement of a Valid Claim of a Licensed Patent. For clarity, discovery or development of a product using Licensed Patents or technology or rights licensed hereunder does not cause such product to be a Licensed Product.

2.7 "Licensed Territory" means worldwide.

2.8 "Net Sales" means all gross revenue derived through ImmuMetrix or sublicensees from sales of Licensed Product. Net Sales excludes the following items (but only as they pertain to the making, using, importing or selling of Licensed Products, are included in gross revenue, and are

separately billed):

(A) import, export, excise and sales taxes, and custom duties;

(B) costs of insurance, packing, and transportation from the place of manufacture to the customer's premises or point of installation;

(C) costs of installation at the place of use; and credit for returns, allowances, or trades.

2.9

"Nonroyalty Sublicensing Consideration" means any consideration received by ImmuMetrix from a sublicensee as consideration for and allocable to the grant of a Sublicense under rights

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under the Licensed Patents in the Licensed Field of Use such as up front fees, annual fees, and milestone fees, without limitation, but excluding any consideration for an earned royalty that is calculated based on sales of Licensed Product, investments in ImmuMetrix stock or debt, payment or reimbursement of R&D expenses calculated on a fully burdened basis, supply of Licensed Products or other products or materials to such sublicensee, reimbursement for patent prosecution costs and patent maintenance expenses, licensing of patents or other intellectual property other than Licensed Patents, and the sale of all or substantially all of the business or assets of ImmuMetrix (or its assignee) whether by merger, sale of stock or assets or otherwise.

2.10 "Stanford Indemnitees" means Stanford and Stanford Hospitals and Clinics, and their respective trustees, officers, employees, students, and agents.

2.11 "Sublicense" means any agreement between ImmuMetrix and a third party that contains a grant to Stanford's Licensed Patents regardless of the name given to the agreement by the parties; however, an agreement to make, have made, use or sell Licensed Products on behalf of ImmuMetrix is not considered a Sublicense.

2.12 "Technology" means the Licensed Patents and that additional information or materials listed in Appendix D that will be provided by Stanford to ImmuMetrix. Technology may or may not be confidential in nature.

2.13 "Valid Claim" means a claim contained in an issued and unexpired patent or a pending patent application which has not been held unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and which has not been admitted to be invalid or unenforceable through abandonment, reissue, disclaimer or otherwise. Notwithstanding the foregoing, if a claim of a pending patent application within the Licensed Patents has not issued as a claim of an issued patent within the Licensed Patents, within five (5) years after the filing date from which such claim takes priority, such pending claim shall not be a Valid Claim for purposes of this Agreement.

3 GRANT

3.1 Grant. Subject to the terms and conditions of this Agreement, Stanford grants ImmuMetrix (a) an exclusive license under the Licensed Patent in the Licensed Field of Use to make, have made, use, import, offer to sell and sell Licensed Product in the Licensed Territory and (b) a non-exclusive license under the Technology in the Licensed Field of Use to research, develop, make, have made, use, import, offer to sell and sell Licensed Product and otherwise exploit Technology in the Licensed Territory.

3.2 Term. The license terminates when the last of the Licensed Patents expires, provided that ImmuMetrix's non-exclusive license under the Technology set forth in Section 3.1(b) shall survive such expiration with respect to Technology in ImmuMetrix's possession.

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3.3 Retained Rights. Stanford retains the right, on behalf of itself and all other non-profit academic research institutions, to practice the Licensed Patent and use Technology for any non-profit purpose, including sponsored research and collaborations. ImmuMetrix agrees that, notwithstanding any other provision of this Agreement, it has no right to enforce the Licensed Patent against any such institution. Stanford and any such other institution have the right to publish any information included in the Technology or a Licensed Patent. ImmuMetrix acknowledges that HHMI has retained an irrevocable, perpetual, worldwide, royalty-free, nonexclusive, nontransferable license to the Licensed Patents and Technology.

3.4 Specific Exclusion. Stanford does not:

(A) grant to ImmuMetrix any other licenses, implied or otherwise, to any patents or other rights of Stanford other than those rights granted under Licensed Patent, regardless of whether the patents or other rights are dominant or subordinate to any Licensed Patent, or are required to exploit

any Licensed Patent or Technology;

(B) commit to ImmuMetrix to bring suit against third parties for infringement, except as described in Article 14; and

(C) agree to furnish to ImmuMetrix any technology or technological information other than the Technology or to provide ImmuMetrix with any assistance.

4 SUBLICENSING

4.1 Permitted Sublicensing. ImmuMetrix may grant and authorize sublicenses in the Licensed Field of Use only if at the time of such grant ImmuMetrix or its sublicensee is developing or selling Licensed Products. Sublicenses with any exclusivity must include diligence requirements commensurate with the diligence requirements of Appendix A. Stanford agrees that ImmuMetrix may apportion a commercially reasonable percentage of sublicensing payments made to Stanford pursuant to Section 4.6, provided however that ImmuMetrix provides Stanford with the proposed apportionment and justification prior ImmuMetrix's payment pursuant to Section 8.1. Stanford and ImmuMetrix agree to meet to discuss such proposed apportionment if in Stanford's opinion the apportionment does not reasonably reflect the value of the Licensed Patents.

4.2 Required Sublicensing. If ImmuMetrix is unable or unwilling to serve or develop a potential market or market territory for which there is a company willing to be a sublicensee, ImmuMetrix will, at Stanford's request, negotiate in good faith a Sublicense with any such sublicensee. Stanford would like licensees to address unmet needs, such as those of neglected patient populations or geographic areas, giving particular attention to improved therapeutics, diagnostics and agricultural technologies for the developing world.

4.3 Sublicense Requirements. Any Sublicense granted under this Agreement:

(A) is subject to this Agreement;

(B) will prohibit sublicensee from paying royalties to an escrow or other similar account;

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(C) will expressly include the provisions of Articles 8, 9, 10, 12, and Section 19.4 for the benefit of Stanford and/or HHMI, as the case may be; and

(D) will require the transfer of all the sublicensee's applicable obligations to ImmuMetrix with respect to the sublicense, including the payment of royalties specified in the Sublicense (up to the earned royalty rates set forth in Article 7)), to Stanford or its designee, if this Agreement is terminated. If the sublicensee is a spin-out from ImmuMetrix, ImmuMetrix must guarantee the sublicensee's performance with respect to the payment of Stanford's share of Sublicense royalties.

4.4 Copy of Sublicenses and Sublicensee Royalty Reports. ImmuMetrix will submit to Stanford a copy of each Sublicense, any subsequent amendments and all copies of sublicensees' royalty reports. Beginning with the first Sublicense, the Chief Financial Officer or equivalent will certify annually regarding the name and number of sublicensees.

4.5 Litigation by Sublicensee. Any Sublicense must include the following clauses:

(A) In the event sublicensee brings an action seeking to invalidate any Licensed Patent:

(1) sublicensee will double the payment paid to the ImmuMetrix during the pendency of such action. Moreover, should the outcome of such action determine that any claim of a patent challenged by the sublicensee is both valid and infringed by a Licensed Product, sublicensee will pay triple times the payment paid under the original Sublicense;

(2) sublicensee will have no right to recoup any royalties paid before or during the period challenge;

(3) any dispute regarding the validity of any Licensed Patent shall be litigated in the courts located in Santa Clara County, and the parties agree not to challenge personal jurisdiction in that forum;

(4) sublicensee shall not pay royalties into any escrow or other similar account.

(B) Sublicensee will provide written notice to Stanford at least three months prior to bringing an action seeking to invalidate a Licensed Patent. Sublicensee will include with such written notice an identification of all prior art it believes invalidates any claim of the Licensed Patent.

Notwithstanding the foregoing, in the event a sublicensee files a counterclaim asserting invalidity of one or more Licensed Patents in response to an actual suit by Stanford, such sublicensee shall not be deemed to have brought an action to invalidate a Licensed Patent and this Section 4.5 shall not apply.

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4.6 Sharing of Sublicensing Income. ImmuMetrix will pay Stanford the following percent of all Nonroyalty Sublicensing Consideration, excluding earned royalties (ImmuMetrix shall guarantee earned royalties for sales by sublicensees as if the sales were made by ImmuMetrix):

(A) [***]% of Nonroyalty Sublicensing Consideration before and [***]% of Nonroyalty Consideration after demonstration, that cell free DNA of a transplanted organ, other than a human heart, may be detected in the blood or other bodily fluids or tissues of the host, and that the cell free DNA concentration increases during a transplant rejection event as identified by other established clinical means, but before occurrence of an event listed in clause (B) below;

(B) [***]% of Nonroyalty Sublicensing Consideration after the earlier of (i) commercial launch as indicated by a first sale or (ii) expenditure after the Restatement Effective date of \$[***] for the research, development, regulatory approval and/or commercialization, in either case of a Licensed Product by ImmuMetrix directly or through its Affiliates, sublicensees and/or other contractors, but before occurrence of the event listed in clause (C) below; or

(C) [***]% of Nonroyalty Sublicensing Consideration after annual sales of Licensed Product by ImmuMetrix, its Affiliates and/or its sublicensees reach \$[***].

4.7 Royalty-Free Sublicenses. If ImmuMetrix pays all royalties due Stanford from a sublicensee's Net Sales, ImmuMetrix may grant that sublicensee a royalty-free or non-cash:

(A) Sublicense or

(B) cross-license.

5 GOVERNMENT RIGHTS

This Agreement is subject to Title 35 Sections 200-204 of the United States Code. Among other things, these provisions provide the United States Government with nonexclusive rights in the Licensed Patent. They also impose the obligation that Licensed Product sold or produced in the United States be "manufactured substantially in the United States." ImmuMetrix will ensure all obligations of these provisions are met.

6 DILIGENCE

6.1

Milestones. Because the invention is not yet commercially viable as of the Original Sequencing Effective Date, ImmuMetrix, directly or through its Affiliates, sublicensees and/or other contractors, will diligently develop, manufacture, and sell and/or otherwise commercialize Licensed Product and will diligently develop markets for Licensed Product. In addition, ImmuMetrix, directly or through its Affiliates, sublicensees and/or other contractors, will meet the milestones shown in Appendix A, and notify Stanford in writing as each milestone is met. Notwithstanding the foregoing and 15.2(A)(3), Stanford shall not unreasonably withhold its consent to any revision of the milestones described in Appendix A when requested in writing by ImmuMetrix to the extent such request is supported by evidence of technical difficulties or delays, including in clinical studies or regulatory

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processes, outside of ImmuMetrix's reasonable control. Additionally, ImmuMetrix shall be entitled to extend the due date of any one and any subsequent milestones described on Appendix A by [***] year upon payment to Stanford of [***] Dollars (\$[***]) (a "[***]-Year Extension"), but only once for each milestone. ImmuMetrix shall have the right to extend such due dates from time to time for additional [***]-Year Extensions in accordance with the foregoing, but only after discussion and agreement by Stanford, such agreement not to be unreasonably withheld. Any such extension of a milestone due date shall also extend the due date for all subsequent related milestones by [***] year.

6.2 Progress Report. By March 1 of each year, ImmuMetrix will submit a written annual report to Stanford covering the preceding calendar year. The report will include information sufficient to enable Stanford to satisfy reporting requirements of the U.S. Government and for Stanford to ascertain progress by ImmuMetrix toward meeting this Agreement's diligence requirements. Each report will describe, where relevant: ImmuMetrix's progress toward commercialization of Licensed Product, including work completed, key scientific discoveries, summary of work-in-progress, current schedule of anticipated events or milestones, market plans for introduction of Licensed Product, and significant corporate transactions involving Licensed Product.

6.3 Clinical Trial Notice. ImmuMetrix will notify Stanford prior to commencing any clinical trials at Stanford.

6.4 Completed Milestones. Stanford acknowledges and agrees that ImmuMetrix has met the milestones numbered 1 through 6 set forth in Appendix A.

7 ROYALTIES

7.1 Issue Royalty. Stanford and ImmuMetrix acknowledge and agree that in consideration of the grant of the license hereunder, ImmuMetrix has paid to Stanford a noncreditable, nonrefundable license issue royalty of \$[***] upon signing the PCR Agreement and a noncreditable, nonrefundable license issue royalty of \$[***] upon signing the Sequencing Agreement and no addition issue royalty, except as set forth in Section 7.16 hereof, shall be due upon the signing of this Restated Agreement.

7.2 License Maintenance Fee. ImmuMetrix will pay Stanford a yearly license maintenance fee as follows:

- (A) \$[***] upon the first anniversary of the Restated Agreement;
- (B) \$[***] upon the second anniversary of the Restated Agreement; and
- (C) \$[***] upon the third and each subsequent anniversary of the Restated Agreement during the term of this Restated Agreement.

Yearly maintenance payments are nonrefundable, but they are creditable each year as described in Section 7.6.

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7.3 Milestone Payments. ImmuMetrix will pay Stanford the following milestone payments with respects of the first Licensed Product:

- (a) Initiation of any clinical trial \$[***]
- (b) First commercial sale \$[***]
- (c) FDA or ex-US equiv. approval \$[***]
- (d) Sales > \$[***] \$[***]
- (e) Patent Issuance \$[***]
- (f) Net Sales of Licensed Product exceeds \$[***] \$[***]

7.4 Earned Royalty. ImmuMetrix will pay Stanford earned royalties (Y%) on Net Sales as follows:

ImmuMetrix or its sublicensee will pay Stanford a [***]% royalty on Net Sales of each Licensed Product sold.

Earned royalties paid to third parties will offset Stanford earned royalties at a rate [***]% for each [***]% that ImmuMetrix pays to third parties provided that the third party technology for which ImmuMetrix pays earned royalties is reasonably useful and the earned royalty rate ImmuMetrix pays them is commercially reasonable for the type of technology and such license is reasonably useful to make, use and sell the Licensed Product, licensed hereunder. In no event shall the royalty be reduced by more than [***]%.

In the event that a Licensed Product is sold in combination with one or more other products or components for which no royalty would be due hereunder if sold separately ("Other Product(s)"), Net Sales from such sales shall be calculated by multiplying the net selling price of the combination product by the fraction $A/(A + B)$, where A is the average gross selling price during the applicable calendar quarter of the Licensed Product sold separately and B is the average gross selling price during the applicable calendar quarter of the Other Product(s). In the event that separate sales of the Licensed Product and/or of the Other Product(s) were not made during the applicable calendar quarter, then the Net Sales on the combination product shall be as reasonably as mutually agreed upon by Stanford and ImmuMetrix in good faith, between such Licensed Product and such Other Product(s), based upon their relative importance and proprietary protection. In the event that Stanford reasonably believes that the average gross selling price during the applicable calendar quarter of the Licensed Product sold separately and the Other Product(s) sold separately do not accurately reflect the relative importance and proprietary protection of the Licensed Product and such Other Product(s) for the purposes of determining Net Sales of a combination product, Stanford may provide ImmuMetrix notice thereof and the parties thereafter shall reasonably discuss and agree in good faith upon an alternative allocation with respect thereto. If the parties cannot so agree, the matter will be resolved by arbitration in accordance with Article 17.

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For clarity, ImmuMetrix's right to offset earned royalties for third party technology as set forth above shall not apply with respect to third party technology reasonably useful to make, use and sell a Licensed Product that is a combination product for which Net Sales is calculated as set forth in the preceding paragraph to the extent such third party technology is only useful for the making, using or selling the Other Product(s) in such combination product separately.

7.5 Earned Royalty if ImmuMetrix or Sublicensee Challenges the Patent. Notwithstanding the above, should ImmuMetrix bring an action seeking to invalidate any Licensed Patent, ImmuMetrix will pay royalties to Stanford at the rate of $[***] \times Y$ percent ($[***] \times Y\%$) of the Net Sales of all Licensed Products sold during the pendency of such action. Moreover, should the outcome of such action determine that any claim of a patent challenged by ImmuMetrix is both valid and infringed by a Licensed Product, ImmuMetrix will pay royalties at the rate of $[***] \times Y$ percent ($[***] \times Y\%$) of the Net Sales of all Licensed Products sold. Notwithstanding the foregoing, in the event ImmuMetrix files a counterclaim asserting invalidity of one or more Licensed Patents in response to an actual suit by Stanford, ImmuMetrix shall not be deemed to have brought an action to invalidate a Licensed Patent and this Section 7.5 shall not apply.

7.6 Creditable Payments. The license maintenance fee for a year may be offset against earned royalty payments due on Net Sales occurring in that year.

For example:

(A) if ImmuMetrix pays Stanford a $[\$***]$ maintenance payment for year Y, and according to Section 7.4 $[\$***]$ in earned royalties are due Stanford for Net Sales in year Y, ImmuMetrix will only need to pay Stanford an additional $[\$***]$ for that year's earned royalties.

(B) if ImmuMetrix pays Stanford a $[\$***]$ maintenance payment for year Y, and according to Section 7.4 $[\$***]$ in earned royalties are due Stanford for Net Sales in year Y, ImmuMetrix will not need to pay Stanford any earned royalty payment for that year. ImmuMetrix will not be able to offset the remaining $[\$***]$ against a future year's earned royalties.

7.7 Obligation to Pay Royalties. A royalty is due Stanford under this Agreement for any activity conducted under the licenses granted. For convenience's sake, the amount of that royalty is calculated using Net Sales. Nonetheless, if certain Licensed Products are made, used, imported, or offered for sale before the date this Agreement terminates, and those Licensed Products are sold after the termination date, ImmuMetrix will pay Stanford an earned royalty for its exercise of rights based on the Net Sales of those Licensed Products.

7.8 No Escrow. ImmuMetrix shall not pay royalties into any escrow or other similar account.

7.9 Currency. ImmuMetrix will calculate the royalty on sales in currencies other than U.S. Dollars using the appropriate foreign exchange rate for the currency quoted by the Wall Street Journal on the close of business on the last banking day of each calendar quarter. ImmuMetrix will make royalty payments to Stanford in U.S. Dollars.

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7.10 Non-U. S. Taxes. ImmuMetrix will pay all non-U.S. taxes related to royalty payments. These payments are not deductible from any payments due to Stanford.

7.11 Interest. Any payments not made when due will bear interest at the lower of (a) the Prime Rate published in the Wall Street Journal plus 200 basis points or (b) the maximum rate permitted by law.

7.12 $[***]\%$ Purchase Right. In any private offering of ImmuMetrix's equity securities for cash (or in satisfaction of debt issued for cash), Stanford may purchase for cash up to $[***]\%$ of the securities issued in such offering. This right will expire following the first round of bona fide equity investment in ImmuMetrix from a single or group of investors which includes at least one venture capital, professional angel, corporate or other similar institutional investor and which either (i) is at least $[\$***]$ in size or (ii) involves the sale to outside investors of at least $[***]\%$ of the shares outstanding after such round on a Fully-Diluted Basis, but will apply to all shares to be issued in such round.

7.13 Future Offerings. In any private offering of ImmuMetrix's equity securities in exchange for cash (or in satisfaction of debt issued for cash), Stanford may purchase for cash that number of the securities issued in such offering as is necessary for Stanford to maintain its pro rata ownership interest in ImmuMetrix on a Fully-Diluted Basis. This right is in addition to Stanford's rights under Section 7.12. If both Section 7.12 and this Section 7.13 apply to an offering, the provision granting Stanford the greater purchase rights will govern.

7.14

Purchase Terms and Procedure, Exceptions; Public Offering. In any offering subject to Section 7.12 or 7.13, (i) Stanford's purchase right shall be on the same terms as the other investors in the financing in question, except that Stanford shall not have any board representation or board meeting attendance rights, (ii) ImmuMetrix will give Stanford notice of the terms of the offering, including the names of the investors and the amounts to be invested by each, and Stanford may elect to exercise its right of purchase, in whole or in part, by notice given to ImmuMetrix

within 20 days after receipt of ImmuMetrix's notice and (iii) if Stanford elects not to purchase, or fails to give an election notice within such period, Stanford's purchase right will not apply to the offering if (and only if and to the extent) it is consummated within 90 days on the same or less favorable (to the investor) terms as stated in ImmuMetrix's notice to Stanford. Stanford's rights under Sections 7.12 and 7.13 will not apply to the issuance of stock: (i) to employees and other service providers pursuant to a plan approved by ImmuMetrix's Board of Directors; (ii) as additional consideration in lending or leasing transactions, or (iii) to any person or entity pursuant to an arrangement that the ImmuMetrix's Board of Directors determines in good faith is a strategic partnership, licensing transaction or other arrangement which is not primarily for the purpose of raising capital. In the event of the closing of a firm commitment underwritten public offering, the rights granted in Sections 7.12 and 7.13 will terminate (in addition to any earlier termination pursuant to their terms) immediately before such closing. The rights granted in Section 7.13 will also terminate upon a bona-fide acquisition of ImmuMetrix by a third party if the

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acquisition is deemed by ImmuMetrix's Board of Directors to be in the best interest of its stockholders and the acquisition results in the termination of all such similar rights held by its stockholders in connection with the acquisition.

7.15 Repurchase Obligation. If Stanford is to conduct any clinical trial on behalf of ImmuMetrix or any agent of ImmuMetrix, ImmuMetrix will repurchase all Stanford's equity interest in ImmuMetrix prior to beginning such trial, if requested by Stanford. The repurchase price for any such equity interest will be the fair market value for that equity at the time ImmuMetrix and Stanford enter into a definitive agreement under which any such clinical research will be performed. Fair market value of publicly traded equity instruments will be determined by taking the average of the closing price for such equity over the five days preceding such date. Fair market value of non-public equity instruments will be at least as high as the greater of:

(A) the last value placed on any such equity in ImmuMetrix through an arms-length transaction regarding the issuance or sale of any equity in ImmuMetrix; or

(B) the last value placed on any such equity by ImmuMetrix's Board of Directors in connection with any transaction other than this repurchase of shares from Stanford.

7.16 Equity Interest. As further consideration for the license granted hereunder and the restatement of the Sequencing Agreement and the PCR Agreement into this Restated Agreement, ImmuMetrix shall, subject to the approval of ImmuMetrix's Board of Directors and Stanford's execution and delivery to ImmuMetrix of ImmuMetrix's standard form of stock purchase agreement attached hereto as Appendix E, grant to Stanford [***] shares of common stock in ImmuMetrix. When issued, those shares will represent [***]% of the common stock in ImmuMetrix on a Fully Diluted Basis. ImmuMetrix agrees to provide Stanford with a capitalization table upon which the above calculation is made. ImmuMetrix will, subject to each inventor's execution and delivery to ImmuMetrix of ImmuMetrix's standard form of stock purchase agreement attached hereto as Appendix E, issue [***]% of all shares granted to Stanford pursuant to this Section 7.16 directly to and in the name of the inventors listed allocated as stated below:

A) Stephen Quake — [***] shares

B) Thomas Snyder — [***] shares

C) Hannah Valentine- [***] shares

8 ROYALTY REPORTS, PAYMENTS, AND ACCOUNTING

8.1

Quarterly Earned Royalty Payment and Report. Beginning with the first sale of a Licensed Product by ImmuMetrix or a sublicensee, ImmuMetrix will submit to Stanford a written report (even if there are no sales) and an earned royalty payment within 30 days after the end of each calendar quarter. This report will be in the form of Appendix B and will state the number, description, and aggregate Net Sales of Licensed Product during the completed calendar quarter. The report will include an overview of the process and documents relied

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upon to permit Stanford to understand how the earned royalties are calculated. With each report ImmuMetrix will include any earned royalty payment due Stanford for the completed calendar quarter (as calculated under Section 7.4).

8.2 No Refund. In the event that a validity or non-infringement challenge of a Licensed Patent brought by ImmuMetrix is successful, ImmuMetrix will have no right to recoup any royalties paid before or during the period challenge.

8.3 Termination Report. ImmuMetrix will pay to Stanford all applicable royalties and submit to Stanford a written report within 90 days after the license terminates. ImmuMetrix will continue to submit earned royalty payments and reports to Stanford after the license terminates, until all Licensed Products made or imported under the license have been sold.

8.4 Accounting. ImmuMetrix will maintain records showing manufacture, importation, sale, and use of a Licensed Product for 7 years from the date of sale of that Licensed Product. Records will include general-ledger records showing cash receipts and expenses, and records that include: production records, customers, invoices, serial numbers, and related information in sufficient detail to enable Stanford to determine the royalties payable under this Agreement.

8.5 Audit by Stanford. ImmuMetrix will allow Stanford or its designee to examine ImmuMetrix's records to verify payments made by ImmuMetrix under this Agreement.

8.6 Paying for Audit. Stanford will pay for any audit done under Section 8.5. But if the audit reveals an underreporting of earned royalties due Stanford of 5% or more for the period being audited, ImmuMetrix will pay the audit costs.

8.7 Self-audit. ImmuMetrix will conduct an independent audit of sales and royalties at least every 2 years if annual sales of Licensed Product are over \$5,000,000. The audit will address, at a minimum, the amount of gross sales by or on behalf of ImmuMetrix during the audit period, the amount of funds owed to Stanford under this Agreement, and whether the amount owed has been paid to Stanford and is reflected in the records of ImmuMetrix. ImmuMetrix will submit the auditor's report promptly to Stanford upon completion. ImmuMetrix will pay for the entire cost of the audit.

9 EXCLUSIONS AND NEGATION OF WARRANTIES

9.1 Negation of Warranties. Stanford provides ImmuMetrix the rights granted in this Agreement AS IS and WITH ALL FAULTS. Stanford makes no representations and extends no warranties of any kind, either express or implied. Among other things, Stanford disclaims any express or implied warranty:

(A) of merchantability, of fitness for a particular purpose,

(B) of non-infringement or

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(C) arising out of any course of dealing.

9.2 No Representation of Licensed Patent. ImmuMetrix also acknowledges that Stanford does not represent or warrant:

(A) the validity or scope of any Licensed Patent, or

(B) that the exploitation of Licensed Patent or Technology will be successful.

10 INDEMNITY

10.1 Indemnification.

(A) ImmuMetrix will indemnify, hold harmless, and defend all Stanford Indemnitees against any claim of any kind arising out of or related to the exercise of any rights granted ImmuMetrix under this Agreement or the breach of this Agreement by ImmuMetrix.

(B) HHMI Indemnitees will be indemnified, defended by counsel acceptable to HHMI, and held harmless by ImmuMetrix from and against any claim, liability, cost, expense, damage, deficiency, loss, or obligation, of any kind or nature (including, without limitation, reasonable attorneys' fees and other costs and expenses of defense) (collectively, "Claims"), based upon, arising out of, or otherwise relating to this Agreement, including without limitation any cause of action relating to product liability. The previous sentence will not apply to any Claim that is determined with finality by a court of competent jurisdiction to result solely from the gross negligence or willful misconduct of an HHMI Indemnitee.

10.2 No Indirect Liability. Stanford is not liable for any special, consequential, lost profit, expectation, punitive or other indirect damages in connection with any claim arising out of or related to this Agreement, whether grounded in tort (including negligence), strict liability, contract, or otherwise.

10.3 Workers' Compensation. ImmuMetrix will comply with all statutory workers' compensation and employers' liability requirements for activities performed under this Agreement.

10.4

Insurance. Upon the first use of Licensed Products with human samples, including but not limited to testing or clinical trials but excluding tests with human tissues obtained from tissue banks or discarded human tissues under an IRB approved study, ImmuMetrix will maintain Comprehensive General Liability Insurance, including Product Liability insurance, with a reputable and financially secure insurance carrier to cover the activities of ImmuMetrix and its sublicensees. The insurance will provide minimum limits of liability of \$2,000,000 and will include all Stanford Indemnitees and HHMI Indemnitees as additional insureds. Insurance must cover claims incurred, discovered, manifested, or made during or after the expiration of this Agreement and must be placed with carriers with ratings of at least A- as rated by A.M. Best. Within 15 days after Stanford's request and after the first use of

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Licensed Products with human samples as described above, ImmuMetrix will furnish a Certificate of Insurance evidencing primary coverage and additional insured requirements. ImmuMetrix will provide to Stanford 30 days prior written notice of cancellation or material change to this insurance coverage. ImmuMetrix will advise Stanford in writing that it maintains excess liability coverage (following form) over primary insurance for at least the minimum limits set forth above. All insurance of ImmuMetrix will be primary coverage; insurance of the Stanford Indemnitees and the HHMI Indemnitees will be excess and noncontributory.

11 EXPORT

ImmuMetrix and its affiliates and sublicensees shall comply with all United States laws and regulations controlling the export of licensed commodities and technical data. (For the purpose of this paragraph, "licensed commodities" means any article, material or supply but does not include information; and "technical data" means tangible or intangible technical information that is subject to US export regulations, including blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions.) These laws and regulations may include, but are not limited to, the Export Administration Regulations (15 CFR 730-774), the International Traffic in Arms Regulations (22 CFR 120-130) and the various economic sanctions regulations administered by the US Department of the Treasury (31 CFR 500-600).

Among other things, these laws and regulations prohibit or require a license for the export or retransfer of certain commodities and technical data to specified countries, entities and persons. ImmuMetrix hereby gives written assurance that it will comply with, and will cause its affiliates and sublicensees to comply with all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its affiliates or sublicensees, and that it will indemnify, defend and hold Stanford harmless for the consequences of any such violation.

12 MARKING

Before any Licensed Patent issues, ImmuMetrix will mark Licensed Product with the words "Patent Pending." Otherwise, ImmuMetrix will mark Licensed Product with the number of any issued Licensed Patent.

13 NAMES AND MARKS

IMMUMETRIX WILL NOT IDENTIFY STANFORD OR HHMI IN ANY PROMOTIONAL STATEMENT, OR OTHERWISE USE THE NAME OF ANY STANFORD OR HHMI FACULTY MEMBER, EMPLOYEE, OR STUDENT, OR ANY TRADEMARK, SERVICE MARK, TRADE NAME, OR SYMBOL OF STANFORD OR STANFORD HOSPITALS AND CLINICS, OR HHMI, INCLUDING THE STANFORD OR HHMI NAME, UNLESS IMMUMETRIX HAS RECEIVED STANFORD'S OR HHMI'S PRIOR WRITTEN CONSENT, AS THE CASE MAY BE, PERMISSION MAY BE WITHHELD AT STANFORD'S OR HHMI'S SOLE DISCRETION.

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14 PROSECUTION AND PROTECTION OF PATENTS

14.1 Patent Prosecution. Following the Original Sequencing Effective Date, Stanford will be responsible for preparing, filing, and prosecuting broad patent claims (including any interference or reexamination actions) for Stanford's benefit in the Licensed Territory and for maintaining all Licensed Patents. Stanford will notify ImmuMetrix before taking any substantive actions in prosecuting the claims, and Stanford will have final approval on how to proceed with any such actions.

14.2 Patent Costs. Within 30 days after receiving a statement from Stanford, ImmuMetrix will reimburse Stanford for all Licensed Patent's patenting expenses, including any interference or reexamination matters, ("Patent Costs") incurred by Stanford after the Restatement Effective Date. In all instances, Stanford will pay the fees prescribed for large entities to the United States Patent and Trademark Office.

14.3 Infringement Procedure. Each party will promptly notify the other if it believes a third party infringes a Licensed Patent or if a third party files a declaratory judgment action relating to the Licensed Patents. During the term of this Agreement and if ImmuMetrix is developing Licensed Product, ImmuMetrix may have the right to institute a suit against this third party as provided in Sections 14.4 - 14.8.

14.4 ImmuMetrix Suit. ImmuMetrix, itself or through a designee, has the first right to institute suit, or defend any action for declaratory judgment, relating to the Licensed Patents and may name Stanford, subject to the requirements of this Section 14.4, as a party for standing purposes. If ImmuMetrix decides to institute suit, it will notify Stanford in writing. ImmuMetrix will bear the entire cost of the litigation. Stanford may be named as a party in a suit initiated by ImmuMetrix (other than in accordance with Section 14.5) only if:

(A) ImmuMetrix's and Stanford's counsel recommend that such action is necessary in their reasonably opinion to achieve standing or a court has required or will require such joinder to pursue the action.

(B) Stanford is not the first name party in the action; and

(C) The pleadings and any public statements about the action state that ImmuMetrix is pursuing the action and that ImmuMetrix has the right to join Stanford as a party.

14.5 Joint Suit. If Stanford and ImmuMetrix so agree, they may institute suit jointly. If so, they will:

(A) prosecute the suit in both their names;

(B) bear the out-of-pocket costs equally;

(C) share any recovery or settlement equally; and

(D) agree how they will exercise control over the action.

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14.6 Stanford Suit. If ImmuMetrix does not initiate an enforcement action within 120 days of a request by Stanford to do so or ImmuMetrix does not elect to control a declaratory judgment action within 90 days of receiving notice that such action has been filed, Stanford may institute and prosecute a suit so long as it conforms with the requirements of this Section. Stanford will diligently pursue the suit and will bear the entire cost of the litigation, including expenses and counsel fees incurred by ImmuMetrix. Stanford will keep ImmuMetrix reasonably apprised of all developments in the suit, and will seek ImmuMetrix's input and approval on any substantive submissions or positions taken in the litigation regarding the scope, validity and enforceability of the Licensed Patent. Stanford will not prosecute, settle or otherwise compromise any such suit in a manner that adversely affects ImmuMetrix's interests without ImmuMetrix's prior written consent.

14.7 Recovery. If ImmuMetrix sues under Section 14.4, then any recovery in excess of any unrecovered litigation costs and fees will be shared with Stanford as follows:

(A) any payment for past sales will be deemed Net Sales, and ImmuMetrix will pay Stanford royalties at the rates specified in Section 7.4;

(B) any payment for future sales will be deemed a payment under a Sublicense, and royalties will be shared as specified in Article 4.

(C) ImmuMetrix and Stanford will negotiate in good faith appropriate compensation to Stanford for any non-cash settlement or non-cash cross-license.

14.8 Abandonment of Suit. If either Stanford or ImmuMetrix commences a suit and then wants to abandon the suit, it will give timely notice to the other party. The other party may continue prosecution of the suit after Stanford and ImmuMetrix agree on the sharing of expenses and any recovery in the suit.

14.9 Cooperation. The non-controlling party shall, at the reasonable request and expense of the party controlling any enforcement or declaratory action under this Article 14, fully cooperate with the controlling party, including making available relevant records, papers, information, samples, specimens, and the like. The party controlling the enforcement or declaratory action shall keep the non-controlling party reasonably informed of the progress of such action, and the non-controlling party shall have the right to participate in such enforcement or declaratory action with counsel of its own choice at its own expense.

15 TERMINATION

15.1 Termination by ImmuMetrix. ImmuMetrix may terminate this Agreement by giving Stanford written notice at least 30 days in advance of the effective date of termination selected by ImmuMetrix.

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15.2 Termination by Stanford.

(A) Stanford may also terminate this Agreement if ImmuMetrix:

- (1) is delinquent on any report or payment;
- (2) is not diligently developing and commercializing Licensed Product;
- (3) misses a milestone described in Appendix A;
- (4) is in breach of any provision; or
- (5) provides any false report.

(B) Termination under this Section 15.2 will take effect 30 days after written notice by Stanford specifying the nature of the default or breach unless ImmuMetrix remedies the problem in that 30-day period. Notwithstanding the foregoing, if ImmuMetrix disputes any such default or breach in writing within such 30-day period, Stanford shall not have the right to terminate this Agreement unless and until the arbitrator determines in a written decision delivered to the parties under Section 17 below, that such default or breach occurred, and ImmuMetrix fails to cure such default or breach within 30 days after such determination. Each party shall use reasonable efforts to conclude such arbitration within thirty (30) days of the initiation of such arbitration.

15.3 Surviving Provisions. Surviving any termination or expiration are:

- (A) ImmuMetrix's obligation to pay royalties accrued or accruable;
- (B) any claim of ImmuMetrix or Stanford, accrued or to accrue, because of any breach or default by the other party;
- (C) the provisions of Articles 8, 9, 10 and 19.4 and any other provision that by its nature is intended to survive; and
- (D) any sublicense granted hereunder, provided that the sublicensee agrees in writing to be bound by the applicable terms of this Agreement.

16 ASSIGNMENT

16.1 Permitted Assignment by ImmuMetrix. Subject to Section 16.3, ImmuMetrix may assign this Agreement as part of a sale or change of control, regardless of whether such a sale or change of control occurs through an asset sale, stock sale, merger or other combination, or any other transfer of:

- (A) ImmuMetrix's entire business; or
- (B) that part of ImmuMetrix's business that exercises all rights granted under this Agreement.

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***Confidential material redacted and filed separately with the Securities and Exchange Commission.

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16.2 Any Other Assignment by ImmuMetrix. Any other attempt to assign this Agreement by ImmuMetrix is null and void.

16.3 Conditions of Assignment. Prior to any assignment, the following conditions must be met:

- (A) ImmuMetrix must give Stanford 30 days prior written notice of the assignment, including the new assignee's contact information; and
- (B) the new assignee must agree in writing to Stanford to be bound by this Agreement; and
- (C) Stanford must have received a \$[***] assignment fee.

16.4 After the Assignment. Upon a permitted assignment of this Agreement pursuant to Article 16, ImmuMetrix will be released of liability under this Agreement and the term "ImmuMetrix" in this Agreement will mean the assignee.

16.5 Bankruptcy. In the event of a bankruptcy, assignment is permitted only to a party that can provide adequate assurance of future performance, including diligent development and sales, of Licensed Product.

17 DISPUTE RESOLUTION

17.1 Dispute Resolution by Arbitration. Apart from any controversy or claim pertaining to HHMI's rights under Article 10 or otherwise under this Agreement, any dispute between the parties regarding any payments made or due under this Agreement will be settled by arbitration in accordance with the Licensing Agreement Arbitration Rules of the American Arbitration Association. The parties are not obligated to settle any other dispute that may arise under this Agreement by arbitration.

17.2 Request for Arbitration. Either party may request such arbitration. Stanford and ImmuMetrix will mutually agree in writing on a third party arbitrator within 30 days of the arbitration request. The arbitrator's decision will be final and nonappealable and may be entered in any court having jurisdiction.

17.3 Discovery. The parties will be entitled to discovery as if the arbitration were a civil suit in the California Superior Court. The arbitrator may limit the scope, time, and issues involved in discovery.

17.4 Place of Arbitration. The arbitration will be held in Stanford, California unless the parties mutually agree in writing to another place.

17.5 Patent Validity. Any dispute regarding the validity of any Licensed Patent shall be litigated in the courts located in Santa Clara County, California, and the parties agree not to challenge personal jurisdiction in that forum.

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18 NOTICES

18.1 Legal Action. ImmuMetrix will provide written notice to Stanford at least three months prior to bringing an action seeking to invalidate any Licensed Patent or a declaration of non-infringement. ImmuMetrix will include with such written notice an identification of all prior art it believes invalidates any claim of the Licensed Patent.

18.2 All Notices. All notices under this Agreement are deemed fully given when written, addressed, and sent as follows:

All general notices to ImmuMetrix are mailed to:

ImmuMetrix, Inc.

Attention: CEO/President

Address:

Email:

With a copy (which shall not constitute notice) to:

Wilson Sonsini Goodrich & Rosati PC

Attention: Kenneth A. Clark, Esq.

Address: 650 Page Mill Road

Palo Alto, CA 94304

Email: kclark@wsgr.com

All financial invoices to ImmuMetrix (i.e., accounting contact) are e-mailed to:

Name: Bruce Hironaka

Email:

All progress report invoices to ImmuMetrix (i.e., technical contact) are e-mailed to:

Name: Bruce Hironaka

Email:

All general notices to Stanford are e-mailed or mailed to:

Office of Technology Licensing

All payments to Stanford are mailed to:

Stanford University

Office of Technology Licensing

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All progress reports to Stanford are e-mailed or mailed to:

Office of Technology Licensing

Either party may change its address with written notice to the other party.

19 MISCELLANEOUS

19.1 Waiver. No term of this Agreement can be waived except by the written consent of the party waiving compliance.

19.2 Choice of Law. This Agreement and any dispute arising under it is governed by the laws of the State of California, United States of America, applicable to agreements negotiated, executed, and performed within California.

19.3 Exclusive Forum. The state and federal courts having jurisdiction over Stanford, California, United States of America, provide the exclusive forum for any court action between the parties relating to this Agreement. ImmuMetrix submits to the jurisdiction of such courts, and waives any claim that such a court lacks jurisdiction over ImmuMetrix or constitutes an inconvenient or improper forum.

19.4 Third Party Beneficiary. HHMI is not a party to this Agreement and has no liability to any licensee or user of any technology covered by this Agreement, but HHMI is an intended third-party beneficiary of this Agreement and certain of its provisions are for the benefit of and are enforceable by HHMI in its own name.

19.5 Headings. No headings in this Agreement affect its interpretation.

19.6 Electronic Copy. The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

19.7 Entire Agreement. This Restated Agreement (including the exhibits attached hereto) constitutes the entire agreement between the parties relating to its subject matter and supersedes all prior and contemporaneous agreements, understandings or representations, written or oral, between Stanford and ImmuMetrix with respect to such subject matter, including without limitation, the PCR Agreement and the Sequencing Agreement.

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The parties execute this Agreement in duplicate originals by their duly authorized officers or representatives.

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Signature

/s/ Katherine Ku

Name

Katharine Ku

Title

Director Office of Technology Licensing

Date

February 3, 2014

ImmuMetrix, Inc.

Signature.

/s/ Bruce Hironaka

Name

Bruce Hironaka

Title

President

Date

February 4, 2014

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***Confidential material redacted and filed separately with the Securities and Exchange Commission.

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Appendix A

1. [***]

2. [***]

3. [***]

4. [***]

5. [***]

6. [***]

7. [***]

8. [***]

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Appendix B - Sample Reporting Form

Stanford Docket No. S

This report is provided pursuant to the license agreement between Stanford University and (ImmuMetrix Name)

License Agreement Effective Date:

Name(s) of Licensed Products being reported:

Report Covering Period

Yearly Maintenance Fee

\$

Number of Sublicenses Executed

Gross Revenue

\$

Net Sales

\$

Royalty Calculation

Royalty Subtotal

\$

Credit

\$

Royalty Due

\$

Comments:

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Appendix C — Licensed Patents

Country

Title

Serial

Number File Date Publication

Number

Australia NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 2010315084 05-Nov-2010 2010315084

Canada NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 2,779,750 05-Nov-2010 2779750

China (People's Republic) NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 20108006046

9.4 05-Nov-2010 102712954

European Patent Convention NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 10829142.8
05-Nov-2010 2496720

Hong Kong NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 13102099.1 05-Nov-2010 1175268

Japan NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 2012-538027 05-Nov-2010 2013509883

Patent

Cooperation Treaty

NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS US2010/0556

04 05-Nov-2010 2011057061

United Kingdom NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 1209978.4 05-Nov-2010
2488289

United States of America NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 61/280,674
06-Nov-2009 N/A

United States of America NON-INVASIVE DIAGNOSIS OF GRAFT REJECTION IN ORGAN TRANSPLANT PATIENTS 13/508,318 19-Jul-2012
20120295810

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Appendix D- Technology

1. Algorithms and software code

2. sample preparation, per and sequencing protocols
3. raw sequencing data to date of license execution
4. patient records to date of license execution subject to IRB approval if needed
5. unpublished data and manuscripts
6. plasma, blood and tissue samples collected to date to permit ImmuMetrix to independently reproduce the results Stanford has obtained
7. any other information or technology provided by Stanford to ImmuMetrix.

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Appendix E- Stock Purchase Agreement

IMMUMETRIX, INC.

COMMON STOCK PURCHASE AGREEMENT

This Common Stock Purchase Agreement (the "Agreement") is entered into by and between ImmuMetrix, Inc. (the "Company") and (the "Purchaser") as of , 2013 (the "Effective Date").

1 Sale of Shares. The Company will issue and sell to the Purchaser shares of the Company's fully paid and nonassessable Common Stock (the "Shares") pursuant to Section 7.16 of that certain Amended and Restated Exclusive Agreement dated by and between the Purchase and the Company (the "License Agreement").

2 Closing; Delivery.

2.1 Closing. The closing of the purchase and sale of the Shares to the Purchaser hereunder shall be held at the offices of Wilson Sonsini Goodrich and Rosati, 650 Page Mill Road, Palo Alto, California 94304-1050 on the Effective Date (the "Closing"). The Closing shall be contingent upon the Purchaser executing and delivering the License. Within a reasonable time after the Closing, the Company will issue a stock certificate, registered in the name of the Purchaser, reflecting the Shares.

2.2 Delivery. At the Closing, the Company will deliver to the Purchaser a certificate representing the Shares against the execution and delivery to the company of the License Agreement by Purchaser. If the Purchaser is not in attendance at the Closing, such delivery shall be via U.S. mail to the address shown under the Purchaser's name on the signature page to this Agreement.

3 Company Representations. The Company hereby represents and warrants to the Purchaser as of the date hereof as follows:

3.1 Organization and Standing. The Company is a corporation duly organized, validly existing, and in good standing under the laws of the State of Delaware. The Company has all requisite corporate power and authority to own and operate its properties and assets and to carry on its business as presently conducted.

3.2 Corporate Power. The Company has all requisite legal and corporate power to execute and deliver this Agreement, to sell and issue the Shares hereunder, and to carry out and perform its obligations under the terms of this Agreement.

3.3 Authorization. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution, delivery and performance by the Company of this Agreement, the authorization, issuance, sale and delivery of the Shares, and the performance of the Company's obligations hereunder has been taken or will be taken prior to the Closing. This Agreement, when executed and delivered by the Company, shall constitute a valid and legally binding obligation of the Company enforceable in accordance with its respective terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies. The Shares, when issued in compliance with the provisions of

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this Agreement, will be validly issued, fully paid and nonassessable, and the Shares will be free of any liens or encumbrances created by the Company; provided, however, that the Shares may be subject to restrictions on transfer under applicable securities laws as set forth herein.

4 Purchaser Representations, Warranties and Covenants. In connection with the purchase of the Shares, the Purchaser represents and warrants to the Company as follows:

4.1 The Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the securities. The Purchaser is purchasing these securities for investment for the Purchaser's own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act of 1933 (the "Securities Act"). The Purchaser is an "accredited investor" within the meaning of SEC Rule 501 of Regulation D, as presently in effect.

4.2 The Purchaser understands that the securities have not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of the Purchaser's investment intent as expressed herein. In this regard, the Purchaser understands that, in view of the Securities and Exchange Commission ("Commission"), the statutory basis for such exemption may not be present if the Purchaser's representations meant that the Purchaser's present intention was to hold these securities for a minimum capital gains period under the tax statutes, for a deferred sale, for a market rise, for a sale if the market does not rise, or for a year or any other fixed period in the future.

4.3 The Purchaser further acknowledges and understands that the securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. The Purchaser further acknowledges and understands that the Company is under no obligation to register the securities. The Purchaser understands that the certificate evidencing the securities will be imprinted with a legend which prohibits the transfer of the securities unless they are registered or such registration is not required in the opinion of counsel for the Company.

4.4 The Purchaser is aware of the adoption of Rule 144 by the Commission, promulgated under the Securities Act, which permits limited public resale of securities acquired in a non-public offering subject to the satisfaction of certain conditions.

4.5 The Purchaser further acknowledges that in the event all of the requirements of Rule 144 are not met, compliance with Regulation A or some other registration exemption will be required; and that although Rule 144 is not exclusive, the staff of the Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and other than pursuant to Rule 144 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales and that such persons and the brokers who participate in the transactions do so at their own risk.

4.6 The Purchaser understands that the share certificate evidencing the Shares issued hereunder shall be endorsed with the following legends:

(A) THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE

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SALE OR DISTRIBUTION THEREOF. THESE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT.

(B) THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER, A RIGHT OF FIRST REFUSAL AND A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING HELD BY THE ISSUER OR ITS ASSIGNEE(S) AS SET FORTH IN THE STOCK PURCHASE AGREEMENT BETWEEN THE ISSUER AND THE ORIGINAL HOLDER OF THESE SHARES, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE ISSUER. SUCH TRANSFER RESTRICTIONS, RIGHT OF FIRST REFUSAL AND LOCK-UP PERIOD ARE BINDING ON TRANSFEREES OF THESE SHARES.

(C) Any legend required to be placed thereon by applicable federal state securities laws, or the terms of this Agreement.

5 Market Standoff Covenant. Purchaser shall not sell or otherwise transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale, of any Common Stock (or other securities) of the Company held by Purchaser (other than those included in the registration) during the period from the filing of the registration statement for the Company's Initial Public Offering filed under the Securities Act that includes securities to be sold on behalf of the Company to the public in an underwritten public offering under the Securities Act through the end of the one hundred and eighty (180) day period following the effective date of the registration statement (or such other period as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (i) the publication or other distribution of research reports and (ii) analyst recommendations and opinions, including, but not limited to, the restrictions contained in NASD Rule 2711(0)(4) or NYSE Rule 472(0)(4), or any successor provisions or amendments thereto), provided that all officers and directors of the Company are bound by and have entered into similar agreements and the Company uses all reasonable efforts to have all holders of at least one percent (1%) of the Company's voting securities be bound by and enter into similar agreements. The obligations described in this Section 5 shall not apply to a registration relating solely to employee benefit plans on Form S-1 or Form S-8 or similar forms that may be promulgated in the future, or a registration relating solely to a transaction on Form S-4 or similar forms that may be promulgated in the future. The Company may impose stop-transfer instructions and may stamp each such certificate with the second legend set forth in Section 4.6 with respect to the shares of Common Stock (or other securities) subject to the foregoing restriction until the end of such one hundred and

eighty (180) day (or other) period. Purchaser agrees to execute a market standoff agreement with said underwriters in customary form consistent with the provisions of this Section 5.

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6 Company's Right of First Refusal. Before any Shares acquired by the Purchaser pursuant to this Agreement (or any beneficial interest in such Shares) may be sold, gifted, transferred, encumbered or otherwise disposed of in any way (whether by operation of law or otherwise) by the Purchaser or any subsequent transferee (each a "Holder"), such Holder must first offer such Shares or beneficial interest to the Company and/or its assignee(s) as follows:

6.1 Notice of Proposed Transfer. The Holder shall deliver to the Company a written notice stating: (a) the Holder's bona fide intention to sell or otherwise transfer the Shares; (b) the name of each proposed transferee; (c) the number of Shares to be transferred to each proposed transferee; (d) the bona fide cash price or other consideration for which the Holder proposes to transfer the Shares; and (e) that by delivering the notice, the Holder offers all such Shares to the Company and/or its assignee(s) pursuant to this Section and on the same terms described in the notice.

6.2 Exercise of Right of First Refusal. At any time within 30 days after receipt of the Holder's notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the proposed transferees, at the purchase price determined in accordance with Section 6.3.

6.3 Purchase Price. The purchase price for the Shares purchased by the Company and/or its assignee(s) under this Section shall be the price listed in the Holder's notice. If the price listed in the Holder's notice includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board of Directors of the Company in its sole discretion.

6.4 Payment. Payment of the purchase price shall be made, at the option of the Company and/or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness of the Holder to the Company and/or its assignee(s), or by any combination thereof within 30 days after receipt by the Company of the Holder's notice (or at such later date as is called for by such notice).

6.5 Holder's Right to Transfer. If all of the Shares proposed in the notice to be transferred to a given proposed transferee are not purchased by the Company and/or its assignee(s) as provided in this Section, then the Holder may sell or otherwise transfer such Shares to that proposed transferee, provided that: (a) the transfer is made only on the terms provided for in the notice, with the exception of the purchase price, which may be either the price listed in the notice or any higher price; (b) such transfer is consummated within 60 days after the date the notice is delivered to the Company; (c) the transfer is effected in accordance with any applicable securities laws, and if requested by the Company, the Holder shall have delivered an opinion of counsel acceptable to the Company to that effect; and (d) the proposed transferee agrees in writing that the provisions of this Section shall continue to apply to the transferred Shares in the hands of such proposed transferee. If any Shares described in a notice are not transferred to the proposed transferee within the period provided above, then before any such Shares may be transferred, a new notice shall be given to the Company, and the Company and/or its assignees shall again be offered the right of first refusal described in this Section.

6.6 Exception for Certain Transfers. Notwithstanding anything to the contrary contained elsewhere in this Section, the transfer of any or all of the Shares by the Purchaser to his spouse, ex-spouse, domestic partner, lineal descendant or antecedent, brother or sister, the adopted child or adopted grandchild, or the spouse or domestic partner of any child, adopted child, grandchild or adopted grandchild of the Purchaser, or to one or more trusts, retirement accounts, or other estate planning vehicles for the exclusive benefit of Purchaser or those members of Purchaser's family specified in this Section, shall be exempt from the provisions of this Section; provided that, in each such case, the transferee(s) shall agree in writing to receive and hold the Shares so transferred subject to all of the provisions of this Agreement, including but not limited to this Section, and there shall be no further transfer of such Shares except in accordance with the terms of this Section.

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6.7 Termination of Right of First Refusal. The right of first refusal contained in this Section shall terminate as to all Shares purchased hereunder upon the earlier of: (i) the closing date of the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act, as amended, and (ii) the closing date of a change of control transaction pursuant to which the holders of the outstanding voting securities of the Company receive securities of a class registered pursuant to Section 12 of the Securities Exchange Act of 1934, as amended.

7 Miscellaneous.

7.1 Governing Law. This Agreement shall be governed by and construed under the laws of the State of California.

7.2 Finder's Fee. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. The Purchaser and the Company agree to indemnify and hold harmless the other party from any liability for any commission or

compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Purchaser or the Company is responsible.

7.3 Successors and Assigns. Except as otherwise expressly provided, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties.

7.4 Entire Agreement. This Agreement, any exhibits thereto and any other documents delivered pursuant to this Agreement constitute the full and entire understanding and agreement among the parties with regard to the subjects hereof and no party shall be liable or bound to any other party in any manner by any representations, warranties, covenants, or agreements except as specifically set forth herein or therein. Nothing in this Agreement, express or implied, is intended to confer upon any third party any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided herein.

7.5 Severability. In case any provision of this Agreement becomes or is declared by a court of competent jurisdiction to be unenforceable, this Agreement shall continue in full force and effect without said provision; provided, however, that no such severability shall be effective if it materially changes the economic benefit of this Agreement to any party.

7.6 Amendment and Waiver. Any term of the Agreement may be amended and the observance of any term of the Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Purchaser. Any amendment or waiver effected in accordance with this Section shall be binding upon each holder of any Shares purchased under the Agreement at the time outstanding, each future holder of all such securities and the Company.

7.7 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to the Purchaser or any subsequent holder, of any Shares upon any breach, default or noncompliance of the Company under this Agreement shall impair any such right, power, or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of any similar breach, default or noncompliance thereafter occurring.

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7.8 Notices. All notices and other communications required or permitted hereunder shall be in writing and shall be deemed effectively given upon personal delivery or upon deposit with the United States Post Office, by first class mail, postage prepaid, addressed: (a) if to the Purchaser, at the Purchaser's address as set forth on the signature page to this Agreement, or at such other address as the Purchaser shall have furnished to the Company in writing, or (b) if to the Company, at its address as set forth on the signature page to this Agreement, or at such other address as the Company shall have furnished to the Purchaser in writing.

7.9 Titles and Subtitles. The titles of the sections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

7.10 Counterparts. This Agreement may be executed in any number of counterparts, each of which is an original, and all of which together shall constitute one instrument.

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The foregoing Agreement is hereby confirmed and accepted by the Company as of the date first written above.

COMPANY:

IMMUMETRIX, INC

By:

Print:

Title:

Address:

PURCHASER:

[]

By:

Print:

Title:

Address:

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