

**SECOND AMENDMENT  
TO  
LOAN AND SECURITY AGREEMENT**

This Second Amendment to Loan and Security Agreement (the "**Amendment**"), is entered into as of November 7, 2014, by and between SQUARE 1 BANK ("**Bank**") and ALDEYRA THERAPEUTICS, INC. ("**Borrower**").

**RECITALS**

Borrower and Bank are parties to that certain Loan and Security Agreement dated as of April 12, 2012 (as amended from time to time, the "**Agreement**"). The parties desire to amend the Agreement in accordance with the terms of this Amendment.

NOW, THEREFORE, the parties agree as follows:

- 1) Borrower has changed its name from ALDEXA THERAPEUTICS, INC. to ALDEYRA THERAPEUTICS, INC. Bank and Borrower agree that the Agreement is hereby amended wherever necessary to reflect this change.
- 2) Bank and Borrower hereby agree, that any Term Loans A and Term Loan B outstanding as of the date of this Amendment shall be deemed to be outstanding under the Term Loan (as set forth in Section 2.1(b) of the Agreement as in effect immediately following the date hereof).
- 3) Section 2.1(b) of the Agreement is hereby amended and restated, as follows:

**(b) Term Loan.**

(i) Subject to and upon the terms and conditions of this Agreement, Bank agrees to make one (1) or more term loans to Borrower in an aggregate principal amount not to exceed the Term Loan Amount (each a "Term Loan" and collectively the "Term Loans"). Borrower may request Term Loans at any time from the Second Amendment Effective Date through the Availability End Date. The proceeds of the Term Loans shall be used: (i) first, to refinance all outstanding Indebtedness owed to Bank by Borrower under the Term Loans A and Term Loan B, (ii) second, to fund expenses related Borrower's clinical trials, and (iii) third, for general working capital purposes.

(ii) Interest shall accrue from the date of each Term Loan at the rate specified in Section 2.3(a), and prior to the Availability End Date shall be payable monthly beginning on the 24<sup>th</sup> day of the month next following such Term Loan, and continuing on the same day of each month thereafter. Any Term Loans that are outstanding on the Availability End Date shall be payable in 36 equal monthly installments of principal, plus all accrued interest, beginning on the date that is one month immediately following the Availability End Date, and continuing on the same day of each month thereafter through the Term Loan Maturity Date, at which time all amounts due in connection with the Term Loans and any other amounts due under this Agreement shall be immediately due and payable. Term Loans, once repaid, may not be reborrowed. Borrower may prepay the Term Loans without penalty or premium.

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(iii) When Borrower desires to obtain a Term Loan, Borrower shall notify Bank (which notice shall be irrevocable) by facsimile transmission to be received no later than 3:30 p.m. Eastern time on the Business Day prior to the day on which the Term Loan is to be made. Such notice shall be substantially in the form of Exhibit C. The notice shall be signed by an Authorized Officer.

- 4) Section 2.3(a)(i) of the Agreement is hereby amended and restated, as follows:

(i) **Term Loans.** Except as set forth in Section 2.3(b), the Term Loans shall bear interest, on the outstanding daily balance thereof, at a variable annual rate equal to the greater of (A) 2.00% above the Prime Rate then in effect, or (B) 5.25%.

- 5) A new Section 3.2(d) is hereby added to the Agreement, as follows:

(d) within 3 Business Days prior to receipt by Bank of the Loan Advance/Paydown Request as provided in Section 2.1, Borrower shall have provided to Bank the Monthly Financial Statements for all the months following the most recent filing by Borrower of SEC Financial Statements.

- 6) Section 6.2(i) of the Agreement is hereby amended and restated, as follows:

(i) as soon as available, but in any event within 30 days after the end of each calendar month, a company prepared consolidated and consolidating balance sheet, income statement, and statement of cash flows covering Borrower's operations during such period (the "Monthly Financial Statements"), in a form reasonably acceptable to Bank and certified by a Responsible Officer, provided that so long as there are no outstanding Indebtedness owed to Bank by Borrower, Borrower shall only be required to provide Bank copies of the financial statements filed by Borrower with the Securities and Exchange Commission (the "SEC Financial Statements");

- 7) Section 6.2(a) of the Agreement is hereby amended and restated, as follows:

(a) Within 30 days after the last day of each month, Borrower shall deliver to Bank with the monthly financial statements a Compliance Certificate certified as of the last day of the applicable month and signed by a Responsible Officer in substantially the form of Exhibit D hereto, including a report, in form and substance acceptable to Bank, of monthly clinical trial updates.

- 8) Section 6.7 of the Agreement is hereby amended and restated, as follows:

**6.7 Financial Covenants.** Borrower shall at all times maintain the following financial ratios and covenants:

(a) **Minimum Cash.** After Borrower requested and Bank made a Term Loan under Tranche B to Borrower (such date, "Tranche B Date"), a balance of Cash at Bank of not less than \$3,000,000 (the "Cash Threshold"), monitored on a daily basis.

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**(b) Third Warrant Milestone.** Within 3 Business Days following the Tranche B Date, Borrower shall deliver to Bank, a warrant, substantially in the form of Appendix I attached hereto and duly executed by Borrower.

**(c) To Be Determined New Financial Covenant(s).** Bank and Borrower hereby acknowledge and agree that, (i) within 10 days following the Tranche B Date, Bank and Borrower shall mutually agree upon certain financial covenant(s) of a type and at levels reasonably acceptable to Bank (the "Future Covenant"), with such covenant(s) to be added to this Agreement through an amendment, which Bank and Borrower hereby agree to execute (the "Future Amendment"), and (ii) immediately after Borrower's Cash at Bank falls below the Cash Threshold following the execution of the Future Amendment, Borrower shall be required to comply with the Future Covenant as set forth in the Future Amendment.

- 9) Section 7.2 of the Agreement is hereby amended and restated, as follows:

**7.2 Change in Name, Location, Executive Office, or Executive Management; Change in Business; Change in Fiscal Year; Change in Control.** Change its name or the state of Borrower's formation or relocate its chief executive office without 30 days prior written notification to Bank; replace or suffer the departure of its chief executive officer or chief financial officer without delivering written notification to Bank within 10 days thereafter; fail to appoint an interim replacement or fill a vacancy in the position of chief executive officer or chief financial officer for more than 30 consecutive days; suffer a change on its board of directors which results in the failure of at least one partner of Domain Associates or its Affiliates to serve as a voting member (an "Investor Board Departure"), or suffer the resignation of one or more directors from its board of directors in anticipation of Borrower's insolvency, in either case without the prior written consent of Bank which may be withheld in Bank's sole discretion, provided that, after an initial public offering of Borrower's equity securities, an Investor Board Departure shall not be a violation of this Section 7.2 so long as Borrower provides Bank with written notice within 10 days of such Investor Board Departure; take action to liquidate, wind up, or otherwise cease to conduct business in the ordinary course; engage in any business, or permit any of its Subsidiaries to engage in any business, other than or reasonably related or incidental to the businesses currently engaged in by Borrower; change its fiscal year end; have a Change in Control.

- 10) The following defined terms are hereby added to Exhibit A to the Agreement, as follows:

"Availability End Date" means November 7, 2015.

"Positive Phase II and Other Milestones" means, after the Second Amendment Effective Date but on or before the Availability End Date, (i) the completion of a satisfactory written evaluation, reasonably acceptable to Bank, with respect to Borrower's positive phase II data on either SLS or Uveitis indications, (ii) a verbal request from Domain Associates to increase the Term Loan Amount, and (iii) a report, in form and substance reasonably acceptable to Bank, with respect to Borrower's clinical progress.

"Second Amendment Effective Date" means November 7, 2014.

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“Term Loan Amount” means \$2,000,000 (the “Tranche A”), provided that, if Borrower achieves the Positive Phase II and Other Milestones, the “Term Loan Amount” shall increase by \$3,000,000 (the “Tranche B”).

11) The following defined term in Exhibit A to the Agreement is hereby amended and restated, as follows:

“Term Loan Maturity Date” means November 7, 2018.

12) The defined term “Interest-Only End Date” and its definition in Exhibit A to the Agreement is hereby deleted.

13) A new Appendix I to the Agreement is attached hereto.

14) Unless otherwise defined, all initially capitalized terms in this Amendment shall be as defined in the Agreement. The Agreement, as amended hereby, shall be and remain in full force and effect in accordance with its respective terms and hereby is ratified and confirmed in all respects. Except as expressly set forth herein, the execution, delivery, and performance of this Amendment shall not operate as a waiver of, or as an amendment of, any right, power, or remedy of Bank under the Agreement, as in effect prior to the date hereof. Borrower ratifies and reaffirms the continuing effectiveness of all agreements entered into in connection with the Agreement.

15) Borrower represents and warrants that the representations and warranties contained in the Agreement are true and correct as of the date of this Amendment.

16) This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

17) As a condition to the effectiveness of this Amendment, Bank shall have received, in form and substance satisfactory to Bank, the following:

- a) this Amendment, duly executed by Borrower;
- b) an officer’s certificate of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Amendment;
- c) a Second Amended and Restated Intellectual Property Security Agreement, duly executed by Borrower;
- d) payment of a \$2,500 facility fee, which may be debited from any of Borrower’s accounts;
- e) payment of all Bank Expenses, including Bank’s expenses for the documentation of this Amendment and any related documents, and any UCC, good standing or intellectual property search or filing fees, which may be debited from any of Borrower’s accounts; and
- f) such other documents and completion of such other matters, as Bank may reasonably deem necessary or appropriate.

*[Remainder of page intentionally left blank]*

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the first date above written.

**ALDEYRA THERAPEUTICS, INC.**

**SQUARE 1 BANK**

By: /s/ Stephen Tulipano  
Name: Stephen Tulipano  
Title: CFO

By: /s/ Elisabeth Foussianes  
Name: Elisabeth Foussianes  
Title: Vice President

*[Signature Page to Second Amendment to Loan and Security Agreement]*