

**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 Exchange Act of 1934

Date of Report (Date of earliest event reported): June 14, 2017

ALDEYRA THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation)

001-36332
(Commission File No.)

20-1968197
(IRS Employer Identification No.)

131 Hartwell Avenue, Suite 320
Lexington, MA 02421
(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (781) 761-4904

(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:

- 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 7.01. Regulation FD Disclosure.

On June 14, 2017, management of Aldeyra Therapeutics, Inc. (“Aldeyra”) will hold a conference call at 8:00 am ET to discuss data from its randomized, dose-ranging, parallel-group, double-masked, vehicle-controlled, conjunctival allergen challenge Phase 2b clinical trial of 0.1% and 0.5% ADX-102 ophthalmic solution. A copy of the presentation being used in connection with this conference call is furnished herewith as Exhibit 99.1 and is incorporated by reference herein.

The information in this Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section, or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in any such filing.

Item 8.01. Other Events.

On June 14, 2017, Aldeyra issued a press release announcing data from its randomized, dose-ranging, parallel-group, double-masked, vehicle-controlled, conjunctival allergen challenge Phase 2b clinical trial of 0.1% and 0.5% ADX-102 ophthalmic solution. A copy of Aldeyra’s press release is attached hereto as Exhibit 99.2 and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Aldeyra Therapeutics, Inc. Presentation dated June 14, 2017
99.2	Aldeyra Therapeutics, Inc. Press Release dated June 14, 2017

SIGNATURES

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.

ALDEYRA THERAPEUTICS, INC.

By: /s/ Todd C. Brady, M.D., Ph.D.

Name: Todd C. Brady, M.D., Ph.D.

Title: President and Chief Executive Officer

Dated: June 14, 2017



Allergic Conjunctivitis Phase 2b Results

June 14, 2017

Disclaimers and Forward-Looking Statements

- This presentation and various remarks which may be made during this presentation contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding Aldeyra's possible or assumed future results of operations, expenses and financing needs, business strategies and plans, research, development and regulatory plans or expectations, trends, the structure, timing and success of Aldeyra's planned or pending clinical trials, market sizing, pricing and reimbursement, competitive position, regulatory matters, industry environment and potential growth opportunities, among other things. Forward-looking statements include all statements that are not historical facts and, in some cases, can be identified by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or similar expressions and the negatives of those terms.
- Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause Aldeyra's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. These statements reflect Aldeyra's current views with respect to future events and are based on assumptions and subject to risks and uncertainties, including the development and clinical plans for Aldeyra's product candidates and Aldeyra's continuing review and quality control analysis of clinical data. Important factors that could cause actual results to differ materially from those reflected in Aldeyra's forward-looking statements are described in the "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of Aldeyra's Annual Report on Form 10-K for the year ended December 31, 2016 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, which are on file with the Securities and Exchange Commission (SEC) and available on the SEC's website at www.sec.gov.
- In addition to the risks described above and in Aldeyra's other filings with the SEC, other unknown or unpredictable factors also could affect Aldeyra's results. No forward-looking statements can be guaranteed and actual results may differ materially from such statements. The information in this presentation is provided only as of June 14, 2017, and Aldeyra undertakes no obligation to update any forward-looking statements contained in this presentation on account of new information, future events, or otherwise, except as required by law.

Allergic Conjunctivitis Phase 2b Key Conclusions

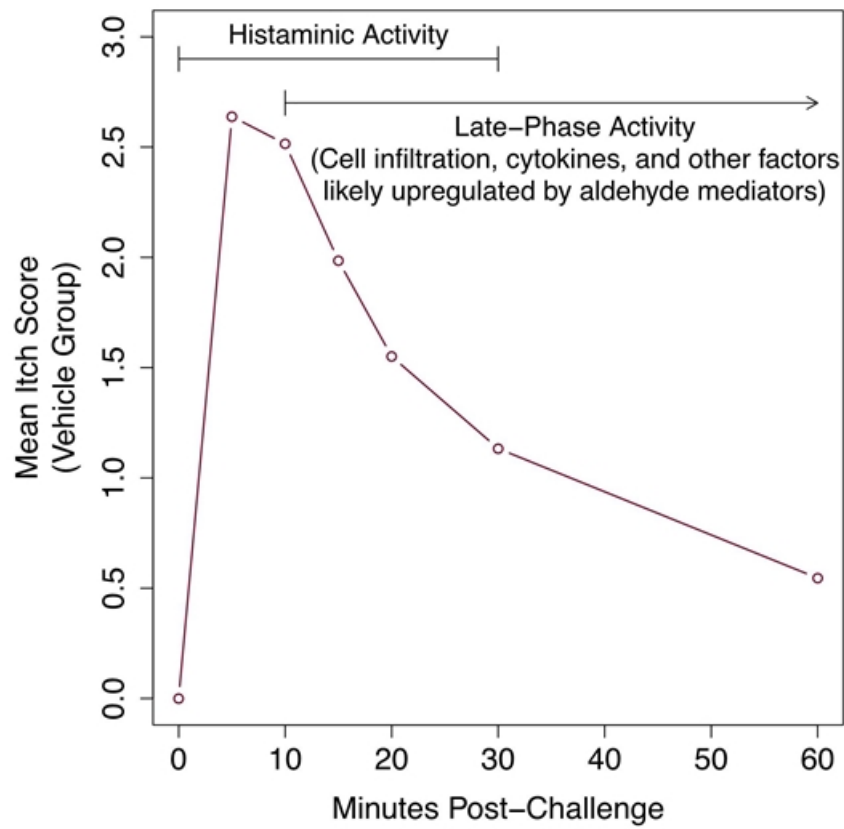
- The results confirm the activity of ADX-102 in allergic conjunctivitis.
- Aldeyra plans to move forward aggressively to Phase 3 testing.
- Aldeyra believes that the differentiated clinical response to ADX-102 supports a compelling product opportunity in a significant, unaddressed segment of the allergic conjunctivitis population, potentially representing one of the largest ophthalmic markets worldwide.
- The data provide further validation of the anti-inflammatory potential of Aldeyra's novel aldehyde trap platform.

Allergic Conjunctivitis Phase 2b Clinical Design

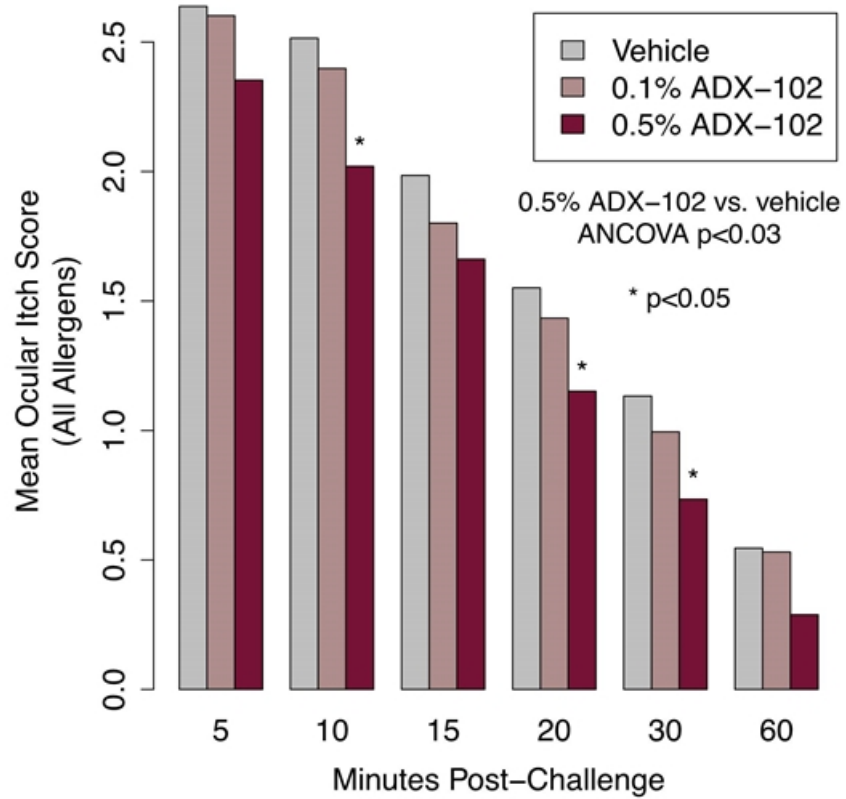
Groups	Topical Ocular ADX-102 0.1%, ADX-102 0.5%, or Vehicle
Randomization	Double-Masked, Vehicle-Controlled 1:1:1
Enrollment	154 Patients with History of Allergic Conjunctivitis
Model	Single Dose Seasonal and Perennial Allergen Challenge
Endpoint	Patient-Reported Itching Score (0 to 4)

Further information can be found on www.clinicaltrials.gov: Trial #NCT03012165.

Histamine and Non-Histamine Components of Itch Score After Allergen Challenge

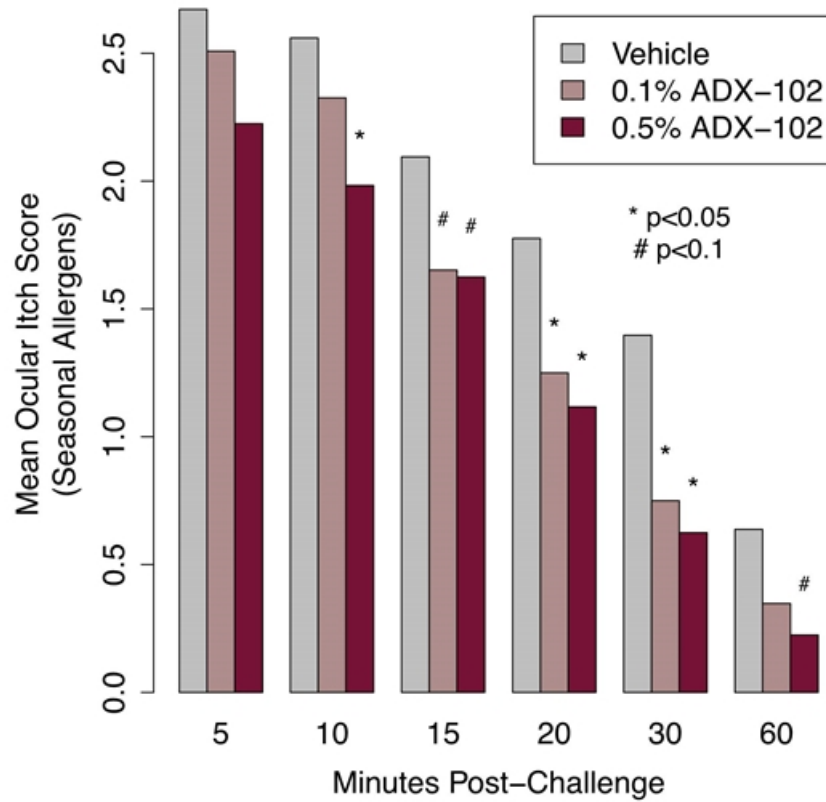


Phase 2b Itch Score vs. Time Post-Challenge (Seasonal and Perennial Allergens)



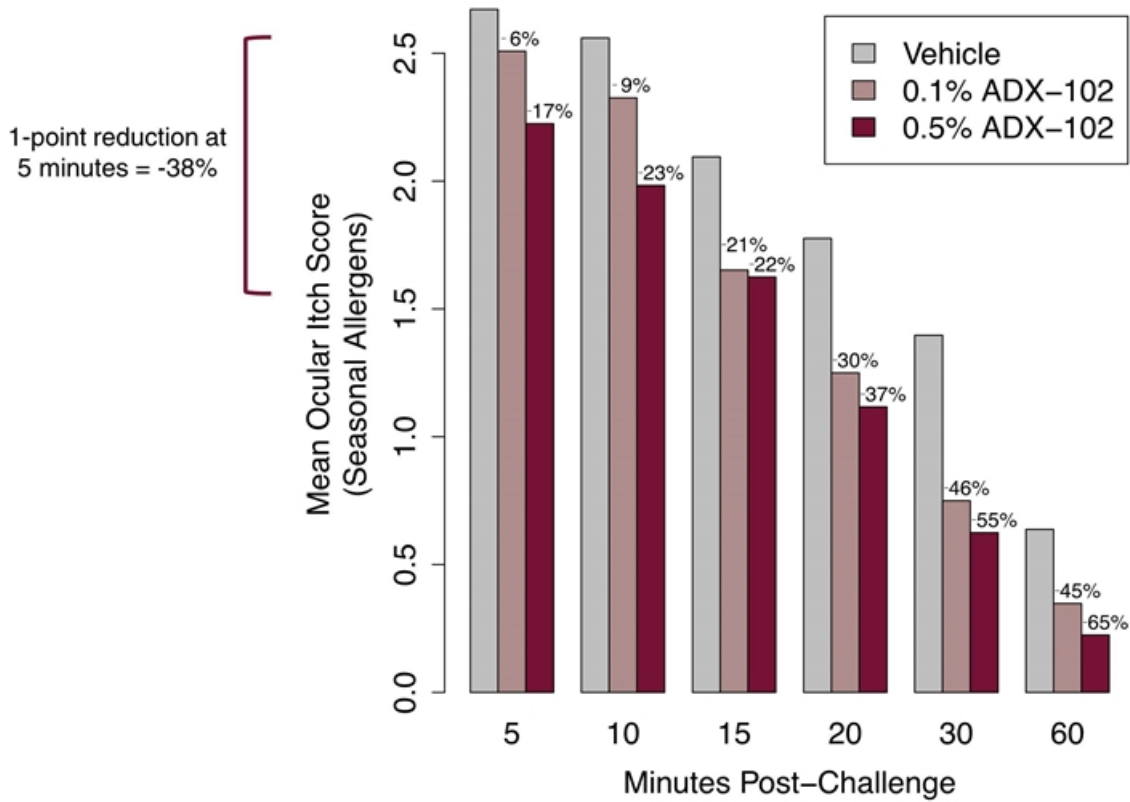
p values are subject to change based on quality control analysis.

Phase 2b Itch Score vs. Time Post-Challenge (Seasonal Allergens)

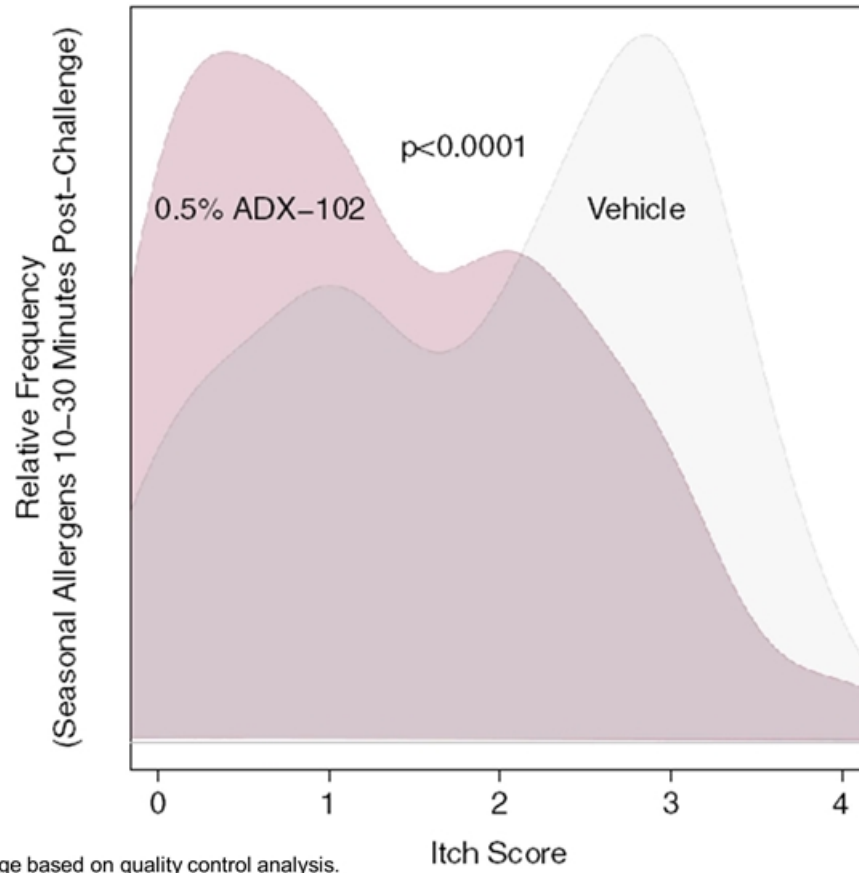


p values are subject to change based on quality control analysis.

Phase 2b Itch Score vs. Time Post-Challenge (Seasonal Allergens)

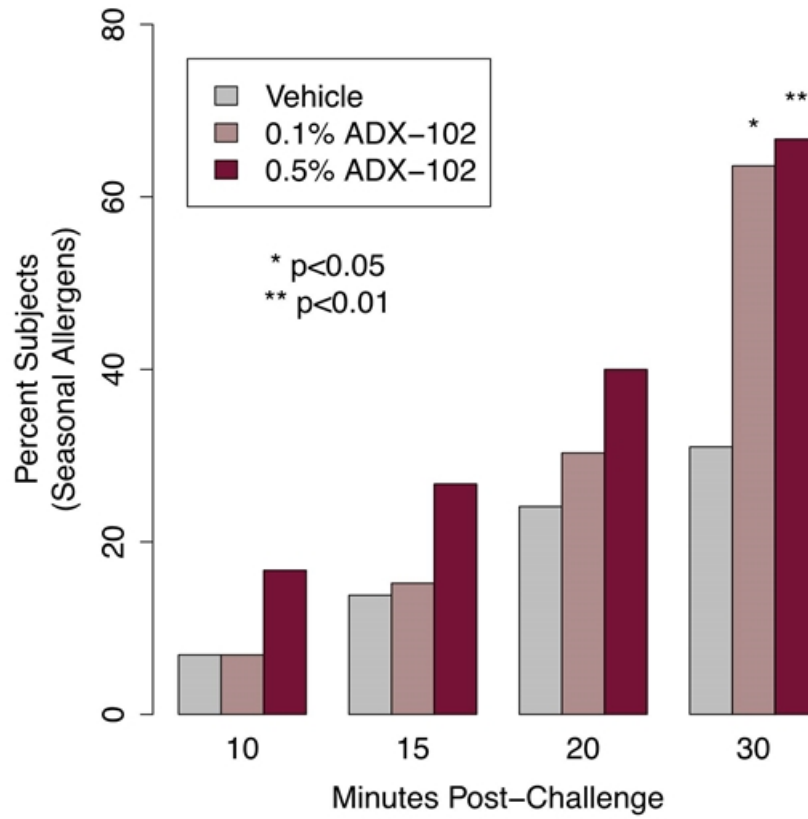


p values are subject to change based on quality control analysis.



p values are subject to change based on quality control analysis.

Phase 2b Proportion of Subjects with Itch Scores of Less Than One



p values are subject to change based on quality control analysis.

Allergic Conjunctivitis Phase 2b Clinical Trial Summary

- One-point itch score reduction vs. control (a component of the primary endpoint of all allergen challenge allergic conjunctivitis trials to date) was not met, but approached in seasonal allergy patients (peak reduction of 0.8).
- 0.5% ADX-102 was statistically superior to control in reducing itching.
- *One-point equivalent* percent reductions of 38% were observed in seasonal allergy patients during the late inflammatory phase.
- The proportion of patients with minimal or zero itch was statistically superior to control at 30 minutes.
- A clear and highly consistent dose response was demonstrated, confirming the biological effect of drug.
- Both concentrations of drug were well tolerated; no serious adverse events were reported.

The late inflammatory phase drug activity is differentiated from antihistamines, an effect that is, to our knowledge, unprecedented. Late phase inflammation is responsible for suboptimal response to antihistamines and persistent disease associated with serious and chronic forms of allergic conjunctivitis, an area of high medical need.

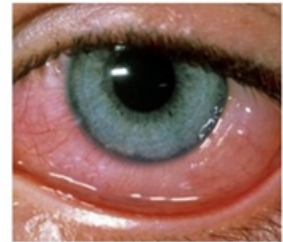
Allergic Conjunctivitis: A Common Unmet Medical Need

Allergic conjunctivitis is estimated to affect 20% or more of worldwide population

Symptoms include stinging, burning, tearing, pain, itching, redness

Aldehydes may mediate IL-5 release and other pro-allergy cytokines

An estimated 30% - 40% of patients may not respond sufficiently to antihistamines



Allergic Conjunctivitis Phase 2b Key Conclusions

- The results confirm the activity of ADX-102 in allergic conjunctivitis.
- Aldeyra plans to move forward aggressively to Phase 3 testing.
- Aldeyra believes that the differentiated clinical response to ADX-102 supports a compelling product opportunity in a significant, unaddressed segment of the allergic conjunctivitis population, representing one of the largest ophthalmic markets worldwide.
- The data provide further validation of the anti-inflammatory potential of Aldeyra's novel aldehyde trap platform.

Aldeyra Therapeutics Announces Results from Allergic Conjunctivitis Phase 2b Clinical Trial and Plans for Phase 3 Clinical Testing

One-Point Reduction vs. Control Component of Primary Endpoint Not Met but 0.5% ADX-102 Statistically Superior to Control and Demonstrates Late-Phase Anti-Inflammatory Activity Differentiated from Standard of Care**Clear Evidence of ADX-102 Dose Response****Phase 3 Clinical Testing Planned Following End of Phase 2 Discussion with Regulatory Authorities in the Second Half of 2017**

LEXINGTON, Mass., June 14, 2017 /PRNewswire/ — Aldeyra Therapeutics, Inc. (NASDAQ: ALDX) (Aldeyra), a clinical-stage biotechnology company devoted to treating inflammation, inborn errors of metabolism, and other diseases related to aldehyde toxicity, today announced results from a Phase 2b clinical trial of topical ocular ADX-102 in patients with allergic conjunctivitis. Based on the data from the trial and the differentiated late-phase anti-inflammatory profile of ADX-102 that could apply to a large underserved population with allergic conjunctivitis, Aldeyra currently plans to initiate Phase 3 clinical testing with 0.5% ADX-102 following discussion with the regulatory authorities in the second half of this year.

“The consistent statistically significant reductions in ocular itching scores during the late phase of ocular allergy observed in Phase 2a and Phase 2b clinical trials have confirmed the clinical activity of our lead aldehyde trap, ADX-102, and strengthened our confidence in continued clinical development as a potentially differentiated product for the large worldwide market of allergic conjunctivitis patients whose symptoms are not relieved by standard of care antihistamines,” commented Todd C. Brady, M.D., Ph.D., President and Chief Executive Officer of Aldeyra Therapeutics. “While the one-point improvement relative to control component of the primary endpoint was not met, the threshold was approached in seasonal allergy patients, with peak changes of 0.8, and was exceeded on a percent change basis in this population 30 to 60 minutes after allergen challenge, which we believe represents a novel activity profile that addresses late phase inflammation generally not affected by antihistamines.”

The randomized, dose-ranging, parallel-group, double-masked, vehicle-controlled, conjunctival allergen challenge (ORA-CAC®) Phase 2b clinical trial of 0.1% and 0.5% ADX-102 ophthalmic solution enrolled 154 patients (approximately 50 per arm) with allergic conjunctivitis, including subjects with seasonal and perennial allergies. Relative to levels of ocular itching in the control group, the primary endpoint required statistically significant improvement, and absolute levels of improvement

of at least one point on a patient-reported scale of 0 to 4. The trial demonstrated statistically significant efficacy of 0.5% ADX-102 over vehicle in reducing ocular itching over one hour post-challenge ($p < 0.03$), and effect sizes were generally larger than those observed in the prior Phase 2a clinical trial. Relative to vehicle, 0.5% ADX-102 achieved statistically significant reduction in itching at 10, 20 and 30 minutes post-challenge (p values of 0.02, 0.04, and 0.03, respectively), exhibiting a late-phase anti-inflammatory profile that was differentiated from standard-of-care antihistamines, which are active around 5 minutes post-allergen challenge. In subjects with seasonal allergy, reductions in itching were up to 0.8 points over vehicle (on a 0 to 4 point scale, $p = 0.002$), approaching the one-point threshold of activity required for achievement of the primary endpoint of the trial.

A one-point difference at 5 minutes post-challenge, which has been typically used in antihistamine and corticosteroid allergic conjunctivitis studies for endpoint assessment, represents a 38% improvement in itch score relative to that of the vehicle values observed in the trial. Observed percent improvements in itch score for 0.5% ADX-102 versus vehicle were 23%, 37%, 55%, and 65% at 10, 20, 30, and 60 minutes post-challenge in seasonal allergy patients. The data suggest that the 38% one-point equivalent threshold was met or exceeded 20 minutes post-challenge and later.

Aldeyra is not aware of any therapy that has demonstrated activity during the late phase allergy response, which is responsible for persistent disease in patients with serious and chronic forms of allergic conjunctivitis that do not respond optimally to antihistamines. This population is estimated to represent approximately one-third of allergic conjunctivitis patients.

“The clinical data announced today represent a unique activity profile that is distinguished from antihistamines, the standard of care in allergic conjunctivitis. This is a clear demonstration of efficacy with a novel anti-inflammatory mechanism in the Ora-CAC[®],” commented David A. Hollander, M.D., M.B.A., Chief Medical Officer of Ora, Inc. (the clinical research organization that performed the trial). “In our experience, the rate of sub-optimal response to antihistamines is up to 30 to 40 percent, a significant unmet medical need that has the potential to be addressed by ADX-102.”

0.1% ADX-102 also reduced itching, but generally to a lesser degree than 0.5% ADX-102, suggesting a dose-related efficacy response that confirms the biological effect of drug. Both concentrations of ADX-102 were generally well tolerated and there were no safety concerns observed during the trial.

Conference Call

Aldeyra will hold a conference call on June 14, 2017 at 8:00 A.M. EDT to discuss results of the clinical trial. The dial-in numbers are 1-877-870-4263 for domestic callers and 1-412-317-0790 for international callers. Please reference the Aldeyra Therapeutics call to the operator. A live webcast of the conference call will also be available on the investor relations page of Aldeyra's corporate website at ir.aldeyra.com.

After the live webcast, the event will remain archived on Aldeyra's website for one year.

About Aldeyra Therapeutics

Aldeyra Therapeutics, Inc. is a biotechnology company devoted to improving lives by inventing, developing and commercializing products that treat diseases thought to be related to endogenous aldehydes, a naturally occurring class of pro-inflammatory and toxic molecules. Aldeyra's lead product candidate, ADX-102, is an aldehyde trap in development for ocular inflammation, as well as for Sjögren-Larsson Syndrome and Succinic Semi-Aldehyde Dehydrogenase Deficiency, two inborn errors of aldehyde metabolism. ADX-102 has not been approved for sale in the U.S. or elsewhere.

About Allergic Conjunctivitis

Allergic conjunctivitis is a common allergic disease that is thought to be mediated in part by pro-inflammatory aldehydes, and is characterized by inflammation of the conjunctiva (a membrane covering part of the front of the eye), resulting in ocular itching, excessive tear production, lid swelling, and redness.

Safe Harbor Statement

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding Aldeyra's plans and expectations for the development of ADX-102. Aldeyra intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "aim," "plan" or the negative of these terms, and similar expressions intended to identify forward-looking statements. Such forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and uncertainties. Aldeyra is at an early stage of development and may not ever have any products that generate significant revenue. Important factors that could cause actual results to differ materially from those reflected in Aldeyra's forward-looking statements include, among others, the timing of enrollment, commencement and completion of Aldeyra's clinical trials, the timing and success of preclinical studies and clinical trials conducted by Aldeyra and its development partners; updated or refined data based on Aldeyra's continuing review and quality control analysis of clinical data, Aldeyra's ability to design clinical trials with protocols and endpoints acceptable to applicable regulatory authorities, the ability to obtain and maintain regulatory approval to conduct clinical trials and to commercialize Aldeyra's

product candidates, and the labeling for any approved products; the scope, progress, expansion, and costs of developing and commercializing Aldeyra's product candidates; the size and growth of the potential markets for Aldeyra's product candidates and the ability to serve those markets; Aldeyra's expectations regarding Aldeyra's expenses and revenue, the sufficiency of Aldeyra's cash resources and needs for additional financing; the rate and degree of market acceptance of any of Aldeyra's product candidates; Aldeyra's expectations regarding competition; Aldeyra's anticipated growth strategies; Aldeyra's ability to attract or retain key personnel; Aldeyra's ability to establish and maintain development partnerships; Aldeyra's expectations regarding federal, state and foreign regulatory requirements; regulatory developments in the United States and foreign countries; Aldeyra's ability to obtain and maintain intellectual property protection for its product candidates; the anticipated trends and challenges in Aldeyra's business and the market in which it operates; and other factors that are described in the "Risk Factors " and "Management's Discussion and Analysis of Financial Condition and Results of Operations " sections of Aldeyra's Annual Report on Form 10-K for the year ended December 31, 2016 and Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, which are on file with the Securities and Exchange Commission(SEC) and available on the SEC's website at www.sec.gov. All of Aldeyra's development timelines may be subject to adjustment depending on recruitment rate, regulatory review, preclinical and clinical results, and other factors that could delay the initiation or completion of clinical trials.

In addition to the risks described above and in Aldeyra's other filings with the SEC, other unknown or unpredictable factors also could affect Aldeyra's results. No forward-looking statements can be guaranteed and actual results may differ materially from such statements. The information in this release is provided only as of the date of this release, and Aldeyra undertakes no obligation to update any forward-looking statements contained in this release on account of new information, future events, or otherwise, except as required by law.

Corporate Contact:

Stephen Tulipano
Aldeyra Therapeutics, Inc.
Tel: +1 781-761-4904 ext. 205
stulipano@aldeyra.com

Investor Contact:

Chris Brinzey
Westwicke Partners
Tel: 339-970-2843
Chris.brinzey@westwicke.com

Media Contact:

Cammy Duong
MacDougall Biomedical Communications
781-591-3443
cduong@macbiocom.com