

Aldeyra Therapeutics, Inc.
Form 424B5
May 25, 2016
Table of Contents

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SUBJECT TO COMPLETION, DATED MAY 25, 2016

The information in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell nor do they solicit an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUPPLEMENT

(to Prospectus dated September 1, 2015)

Shares
Common Stock
\$ per share

We are offering _____ shares of our common stock.

Our common stock is listed on The NASDAQ Capital Market under the symbol ALDX. On May 24, 2016, the last reported sale price of our common stock on The NASDAQ Capital Market was \$5.27 per share.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus supplement and future filings.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-5 of this prospectus supplement and page 6 of the accompanying prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discount and commissions(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) We refer you to the section entitled "Underwriting" beginning on page S-20 of this prospectus supplement for additional information regarding total underwriter compensation.

We have granted the underwriter an option for a period of 30 days to purchase up to an additional _____ shares of our common stock. If the underwriter exercises the option in full, the total underwriting discounts and commissions payable by us will be \$ _____ and the total proceeds to us, before expenses, will be \$ _____.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock is expected to be made on or about _____, 2016.

The date of this Prospectus Supplement is _____, 2016.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

	Page
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-ii
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	S-iii
<u>PROSPECTUS SUMMARY</u>	S-1
<u>THE OFFERING</u>	S-4
<u>RISK FACTORS</u>	S-5
<u>USE OF PROCEEDS</u>	S-10
<u>PRICE RANGE OF OUR COMMON STOCK</u>	S-11
<u>DIVIDEND POLICY</u>	S-12
<u>CAPITALIZATION</u>	S-13
<u>DILUTION</u>	S-14
<u>MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS</u>	S-16
<u>UNDERWRITING</u>	S-20
<u>LEGAL MATTERS</u>	S-26
<u>EXPERTS</u>	S-26
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	S-26
<u>INCORPORATION BY REFERENCE</u>	S-27

Prospectus

	Page
<u>ABOUT THIS PROSPECTUS</u>	1
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	1
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	1
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	3
<u>THE COMPANY</u>	5
<u>OUR CORPORATE INFORMATION</u>	5
<u>RISK FACTORS</u>	6
<u>DESCRIPTION OF SECURITIES</u>	38
<u>USE OF PROCEEDS</u>	51
<u>RATIO OF FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS</u>	51
<u>DIVIDEND POLICY</u>	51
<u>PLAN OF DISTRIBUTION</u>	51
<u>LEGAL MATTERS</u>	52
<u>EXPERTS</u>	53

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of common stock and related matters. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to this offering of common stock. To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or any document incorporated by reference, the information in this prospectus supplement shall control.

All references in this prospectus supplement and the accompanying prospectus to Aldeyra, the Company, we, us, or similar references refer to Aldeyra Therapeutics, Inc., except where the context otherwise requires or as otherwise indicated.

You should rely only on the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus and any free-writing prospectus that we authorize to be distributed to you. We have not, and the underwriter has not, authorized anyone to provide you with different information. This prospectus supplement and the accompanying prospectus are not an offer to sell, nor are they seeking an offer to buy, these securities in any state where the offer or sale is not permitted. The information in this prospectus supplement and the accompanying prospectus are complete and accurate as of the date the information is presented, but the information may have changed since that date.

Aldeyra Therapeutics and our design logo used in this prospectus supplement and the accompanying prospectus are our trademarks. This prospectus supplement and the accompanying prospectus may also include other trademarks, tradenames and service marks that are the property of their respective holders. Solely for convenience, trademarks and tradenames referred to in this prospectus supplement and the accompanying prospectus may appear without the ® and symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable holder will not assert its rights, to these trademarks and tradenames.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference in these documents contain forward-looking statements. Words such as, but not limited to, believe, expect, anticipate, estimate, intend, plan, project, target, goal, likely, will, would, and could, or the negative of these terms and similar terms or words, identify forward-looking statements. Forward-looking statements are based upon current expectations that involve risks, changes in circumstances, assumptions and uncertainties. Important factors that could cause actual results to differ materially from those reflected in our forward-looking statements include, among others:

the timing of enrollment, commencement and completion of our clinical trials;

the timing and success of preclinical studies and clinical trials conducted by us and our development partners;

the ability to obtain and maintain regulatory approval of our product candidates, and the labeling for any approved products;

the scope, progress, expansion, and costs of developing and commercializing our product candidates;

the size and growth of the potential markets and pricing for our product candidates and the ability to serve those markets;

our expectations regarding our expenses and revenue, the sufficiency or use of our cash resources and needs for additional financing;

the rate and degree of market acceptance of any of our product candidates;

our expectations regarding competition;

our anticipated growth strategies;

our ability to attract or retain key personnel;

our ability to establish and maintain development partnerships;

our expectations regarding federal, state and foreign regulatory requirements;

regulatory developments in the United States and foreign countries;

our ability to obtain and maintain intellectual property protection for our product candidates; and

the anticipated trends and challenges in our business and the market in which we operate.

All written and verbal forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We caution investors not to rely too heavily on the forward-looking statements we make or that are made on our behalf. We undertake no obligation, and specifically decline any obligation, to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

This prospectus supplement and accompanying prospectus include statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data.

In addition, you should refer to the section of this prospectus supplement entitled **Risk Factors** as well as the documents we have incorporated by reference for a discussion of other important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus supplement will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all.

S-iii

Table of Contents

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by, and should be read together with, the more detailed information and financial statements and related notes thereto appearing elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. Before you decide to invest in our common stock, you should read the entire prospectus supplement and the accompanying prospectus carefully, including the risk factors and the financial statements and related notes incorporated by reference in this prospectus supplement and the accompanying prospectus.

Company Overview

We are a biotechnology company focused primarily on the development of new products for diseases caused by inflammation and inborn errors of metabolism that are thought to be related to naturally occurring toxic and pro-inflammatory chemical species known as aldehydes. We have developed a series of aldehyde traps, molecules that are designed specifically to sequester and allow for the degradation of aldehydes. Our most advanced aldehyde trap, NS2, is a novel product candidate that we are developing for the treatment of:

Allergic Conjunctivitis, a common disease that affects more than 20% of the population worldwide, and related rare allergic ocular diseases that are characterized by inflammation of the conjunctiva (a membrane covering part of the front of the eye), resulting in ocular itching, excessive tear production, swelling, and redness;

Noninfectious Anterior Uveitis, a severe inflammatory eye disease that can lead to blindness;

Sjögren-Larsson Syndrome, a rare inborn error of metabolism caused by mutations in an enzyme that metabolizes fatty aldehydes, resulting in severe skin and neurological disorders; and

Succinic Semi-Aldehyde Dehydrogenase Deficiency (SSADH Deficiency), a rare inborn error of metabolism caused by genetic mutations in an aldehyde-metabolizing enzyme that lead to severe neurological disease. In 2015, we began clinical testing of NS2 in diseases where we believe aldehyde trapping may improve symptoms and slow or prevent disease progression. In February 2016, we announced that the results of a randomized, parallel-group, double-masked, vehicle-controlled Phase II clinical trial of NS2 ophthalmic solution in patients with allergic conjunctivitis demonstrated statistically and clinically significant activity of NS2 over vehicle in reducing ocular itching and tearing. In May 2016, we announced that the results of our randomized, parallel-group, investigator-masked, active-controlled Phase II clinical trial of NS2 ophthalmic solution in patients with noninfectious anterior uveitis demonstrated that NS2 was not statistically different from standard-of-care corticosteroid therapy (which may lead to cataracts and glaucoma in some patients) in reducing inflammatory cell count in the anterior chamber of the eye. There were no serious adverse events reported in either of these trials. In the third quarter of 2016, we expect to report results of our randomized, parallel-group, double-masked, vehicle-controlled Phase II clinical trial of a dermatologic formulation of NS2 for the treatment of the skin manifestations of Sjögren-Larsson Syndrome (SLS).

We are in the process of planning for Phase II/III clinical trials in allergic conjunctivitis, noninfectious anterior uveitis and one or more other ocular inflammation indications. We plan to initiate Phase I clinical testing of oral or

subcutaneous NS2 formulations in 2017 in preparation for potential Phase II clinical trials in SLS, SSADH Deficiency, and severe inflammatory crises. We are also developing aldehyde traps different from NS2 that have the potential to treat diseases other than those described above.

S-1

Table of Contents

The following table summarizes key information about our development of our product candidates:

INDICATION	PRODUCT CANDIDATE	STAGE OF CLINICAL DEVELOPMENT AND ANTICIPATED MILESTONES
Noninfectious Anterior Uveitis	NS2 Ocular	Positive Phase II data announced in May 2016
Allergic Conjunctivitis	NS2 Ocular	Phase II/III clinical trial expected to begin in second half of 2016, with data expected in mid-2018 Positive Phase II data announced in February 2016
Sjögren-Larsson Syndrome	NS2 Dermatologic	Phase II/III clinical trial expected to begin in second half of 2016, with data expected in the second half of 2017 Phase II data expected to be announced in third quarter of 2016
Other Ocular Inflammation Indications	NS2 Ocular	Phase II data expected to be announced in the second half of 2017 or first half of 2018
Sjögren-Larsson Syndrome	NS2 Systemic	Phase II clinical trial expected to begin in 2017
SSADH Deficiency	NS2 Systemic	Phase II data expected to be announced in first half of 2018 Phase II clinical trial expected to begin in 2017
		Phase II data expected to be announced in first half of 2018

All of our development timelines could be subject to adjustment depending on recruitment rate, regulatory agency review, and other factors that could delay the initiation and completion of clinical trials.

NS2 has been tested in a variety of *in vitro* and preclinical models, and has demonstrated efficacy in trapping aldehydes, diminishing inflammation, reducing healing time, protecting key cellular constituents from aldehyde damage, and lowering the potential for scarring or fibrosis. In cell models of SLS, NS2 has demonstrated trapping of

fatty aldehydes, and in a knock-out mouse model of SSADH Deficiency, NS2 has demonstrated trapping of succinic semi-aldehyde in key organs. NS2 has completed a variety of topical toxicity studies in animals and appears generally safe and well tolerated. In preparation for clinical testing of systemically administered NS2, we believe that we have identified a preliminary No Adverse Effect Level (NOAEL) in pre-clinical toxicology studies where NS2 was administered intravenously.

Since our incorporation, we have devoted substantially all of our resources to the preclinical and clinical development of our product candidates. Our ability to generate revenues largely depends upon our ability, alone or with others, to complete the development of our product candidates to obtain the regulatory approvals for and to manufacture, market and sell our products and product candidates. The results of our operations will vary significantly from year-to-year and quarter-to-quarter and depend on a number of factors, including risks related to our business and industry, risks relating to intellectual property and other legal matters, risks related to our common stock, and other risks that are detailed in the section of this prospectus supplement entitled Risk Factors.

Table of Contents

Our Corporate Information

We were incorporated in the state of Delaware on August 13, 2004 as Neuron Systems, Inc. On December 20, 2012, we changed our name to Aldexa Therapeutics, Inc. and on March 17, 2014, we changed our name to Aldeyra Therapeutics, Inc. Our principal executive offices are located at 131 Hartwell Avenue, Suite 320, Lexington, Massachusetts 02421. Our telephone number is (781) 761-4904. Our website address is www.aldeyra.com. Information contained on our website is not incorporated by reference into this prospectus supplement, and you should not consider information contained on our website to be part of this prospectus supplement or in deciding whether to purchase shares of our common stock. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on the Investors portion of our website at <http://ir.aldeyra.com/> as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Implications of Being an Emerging Growth Company

As a company with less than \$1.0 billion in revenue during our last fiscal year, we qualify as an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

a requirement to have only two years of audited financial statements and only two years of related management's discussion and analysis;

exemption from the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;

reduced disclosure about the company's executive compensation arrangements; and

no non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions until December 31, 2017 or until such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1.0 billion in annual revenue, have more than \$700 million in market value of our capital stock held by non-affiliates, or issue more than \$1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some but not all of these reduced burdens.

Additionally, as a smaller reporting company we have taken advantage of certain reduced reporting obligations available to smaller reporting companies.

Table of Contents

THE OFFERING

Common stock offered by us	shares of common stock.
Overallotment option	We have granted the underwriter an option for a period of up to 30 days from the date of this prospectus supplement to purchase up to additional shares of common stock at the public offering price less the underwriting discounts and commissions.
Offering price	\$ per share of common stock.
Common stock to be outstanding after this offering	shares (or shares if the underwriter exercises in full its option to purchase additional shares).
Use of proceeds	We intend to use the net proceeds from this offering, together with our existing cash resources, for the continued development of NS2 and other product candidates, including further clinical testing of NS2, and other general corporate purposes. We may also use a portion of the net proceeds to acquire or invest in businesses, products or technologies that we believe are complementary to our own. See the section titled Use of Proceeds.
Risk Factors	You should read the Risk Factors section of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement for a discussion of factors to consider before deciding to purchase shares of our common stock.
NASDAQ Capital Market Symbol	ALDX
The number of shares of common stock that will be outstanding immediately after this offering as shown above is based on 9,712,521 shares of common stock outstanding as of March 31, 2016 and excludes:	

1,647,009 shares of common stock issuable upon exercise of stock options outstanding as of March 31, 2016, at a weighted average exercise price of approximately \$4.31 per share;

143,783 shares of common stock reserved for future grants under our 2013 Equity Incentive Plan as of March 31, 2016 (subject to automatic annual adjustment in accordance with the terms of the plan and the addition of 700,000 shares of common stock which have been approved by our board of directors and which are subject to a stockholder vote at our 2016 annual meeting of stockholders); and

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1,384,608 shares of our common stock issuable upon exercise of warrants at a weighted average exercise price of approximately \$9.52 per share.

Unless otherwise indicated, all information in this prospectus assumes:

that the underwriter does not exercise its option to purchase up to additional shares of our common stock; and

no exercise of the outstanding options or warrants described above.

S-4

Table of Contents

RISK FACTORS

*An investment in our common stock involves a high degree of risk. You should carefully consider the risks described under **Risk Factors** in our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, and all of the other information contained in this prospectus supplement and the accompanying prospectus, and incorporated by reference into this prospectus supplement and the accompanying prospectus, including our financial statements and related notes, before investing in our common stock. If any of the possible events described below or in those sections actually occur, our business, business prospects, cash flow, results of operations or financial condition could be harmed, the trading price of our common stock could decline, and you might lose all or part of your investment in our common stock. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our operations and results.*

Risks Related to This Offering and Our Common Stock

An active trading market for our common stock may not develop or be sustained and investors may not be able to resell their shares at or above the price at which they purchased them.

We have a limited history as a public company. An active trading market for our shares may never develop or be sustained. In the absence of an active trading market for our common stock, investors may not be able to sell their common stock at or above the price they paid or at the time that they would like to sell. In addition, an inactive market may impair our ability to raise capital by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration, which, in turn, could harm our business.

The trading price of the shares of our common stock has been and is likely to continue to be highly volatile, and purchasers of our common stock could incur substantial losses.

Our stock price has been and will likely continue to be volatile for the foreseeable future. The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the price they paid. The market price for our common stock may be influenced by many factors, including:

our ability to enroll patients in our planned clinical trials;

results of the clinical trials, and the results of trials of our competitors or those of other companies in our market sector;

regulatory developments in the United States and foreign countries;

variations in our financial results or those of companies that are perceived to be similar to us;

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changes in the structure of healthcare payment systems, especially in light of current reforms to the United States healthcare system;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

market conditions in the pharmaceutical and biotechnology sectors and issuance of securities analysts' reports or recommendations;

sales of our stock by insiders and 5% stockholders;

trading volume of our common stock;

general economic, industry and market conditions other events or factors, many of which are beyond our control;

additions or departures of key personnel; and

intellectual property, product liability or other litigation against us.

S-5

Table of Contents

In addition, in the past, stockholders have initiated class action lawsuits against biotechnology and pharmaceutical companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert management's attention and resources, which could have a material adverse effect on our business, financial condition and results of operations.

Our quarterly operating results may fluctuate significantly.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

variations in the level of expenses related to our clinical trial and development programs;

addition or termination of clinical trials;

any intellectual property infringement lawsuit in which we may become involved;

regulatory developments affecting NS2 and our other product candidates;

our execution of any collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements;

nature and terms of stock-based compensation grants; and

derivative instruments recorded at fair value.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially.

You will experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that shares of our common stock are sold at the assumed offering price of \$5.27 per share (the last reported sale price of our common stock on The NASDAQ Capital Market on May 24, 2016), for aggregate gross proceeds of approximately \$10.0 million, and after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of \$2.73 per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2016 after giving effect to this offering and the assumed offering price. In addition, we are not restricted from issuing additional securities in the future, including shares of common stock, securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or substantially similar securities. The issuance of these securities may cause further dilution to our stockholders. The exercise of outstanding stock options and the

vesting of outstanding restricted stock units may also result in further dilution of your investment. See the section entitled "Dilution" on page S-14 below for a more detailed illustration of the dilution you may incur if you participate in this offering.

Our failure to meet the continued listing requirements of The NASDAQ Capital Market could result in a delisting of our common stock.

If we fail to satisfy the continued listing requirements of The NASDAQ Capital Market, such as the corporate governance requirements or the minimum closing bid price requirement, NASDAQ may take steps to de-list our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we would expect to take actions to restore our compliance with NASDAQ's listing requirements, but we can provide no assurance that any such action taken by us would allow our common stock to become listed again, stabilize

Table of Contents

the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the NASDAQ minimum bid price requirement or prevent future non-compliance with NASDAQ's listing requirements.

If our shares become subject to the penny stock rules, it would become more difficult to trade our shares.

The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. Penny stocks are generally equity securities with a price of less than \$5.00, other than securities registered on certain national securities exchanges or authorized for quotation on certain automated quotation systems, provided that current price and volume information with respect to transactions in such securities is provided by the exchange or system. If we do not retain a listing on The NASDAQ Capital Market and if the price of our common stock is less than \$5.00, our common stock will be deemed a penny stock. The penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from those rules, to deliver a standardized risk disclosure document containing specified information. In addition, the penny stock rules require that before effecting any transaction in a penny stock not otherwise exempt from those rules, a broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive (i) the purchaser's written acknowledgment of the receipt of a risk disclosure statement; (ii) a written agreement to transactions involving penny stocks; and (iii) a signed and dated copy of a written suitability statement. These disclosure requirements may have the effect of reducing the trading activity in the secondary market for our common stock, and therefore stockholders may have difficulty selling their shares.

We may allocate our cash and cash equivalents in ways that you and other stockholders may not approve.

Our management has broad discretion in the application of our cash, cash equivalents and marketable securities, including the expected proceeds of this offering. Because of the number and variability of factors that will determine our use of our cash and cash equivalents, their ultimate use may vary substantially from their currently intended use. Our management might not apply our cash and cash equivalents in ways that ultimately increase the value of your investment. We expect to use of our cash and cash equivalents to fund our planned clinical trials of NS2, development of other molecules that may relate to our aldehyde trapping platform, and the remainder for working capital and other general corporate purposes. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest our cash and cash equivalents in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders. If we do not invest or apply our cash and cash equivalents in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

Because a small number of our existing stockholders own a majority of our voting stock, your ability to influence corporate matters will be limited.

As of March 31, 2016, our executive officers, directors and greater than 5% stockholders, in the aggregate, own approximately 71.0% of our outstanding common stock. As a result, such persons, acting together, will have the ability to control our management and business affairs and substantially all matters submitted to our stockholders for approval, including the election and removal of directors and approval of any significant transaction. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

Table of Contents

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include:

authorizing the issuance of blank check preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;

limiting the removal of directors by the stockholders;

creating a staggered board of directors;

prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;

eliminating the ability of stockholders to call a special meeting of stockholders;

permitting our board of directors to accelerate the vesting of outstanding option grants upon certain transactions that result in a change of control; and

establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirors to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

We do not intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividend on our common stock and do not currently intend to do so for the foreseeable future. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, our loan and security agreement with Pacific Western Bank currently prohibits us from paying dividends on

our equity securities, and any future debt financing arrangement may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Any return to stockholders will therefore be limited to the appreciation of their stock. Therefore, the success of an investment in shares of our common stock will depend upon any future appreciation in their value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

A substantial number of shares of our common stock could be sold into the public market in the near future, which could depress our stock price.

Sales of substantial amounts of our common stock in the public market could reduce the prevailing market prices for our common stock. Substantially all of our outstanding common stock are eligible for sale as are common stock issuable under vested and exercisable stock options. If our existing stockholders sell a large number of shares of our common stock, or the public market perceives that existing stockholders might sell shares of common stock, the market price of our common stock could decline significantly. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate.

Table of Contents

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our business could be negatively affected as a result of the actions of activist stockholders.

Proxy contests have been waged against many companies in the biopharmaceutical industry, including us, over the last few years. If faced with a proxy contest or other type of shareholder activism, we may not be able to respond successfully to the contest or dispute, which would be disruptive to our business. Even if we are successful, our business could be adversely affected by a proxy contest or shareholder dispute involving us or our partners because:

responding to proxy contests and other actions by activist stockholders can be costly and time-consuming, disrupting operations and diverting the attention of management and employees;

perceived uncertainties as to future direction may result in the loss of potential acquisitions, collaborations or in-licensing opportunities, and may make it more difficult to attract and retain qualified personnel and business partners; and

if individuals are elected to a board of directors with a specific agenda, it may adversely affect our ability to effectively and timely implement our strategic plan and create additional value for our stockholders. These actions could cause our stock price to experience periods of volatility.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from the assumed sale of _____ shares of our common stock in this offering will be approximately \$9.0 million, or approximately \$10.4 million if the underwriter exercises in full its option to purchase additional shares of common stock, based on an assumed public offering price of \$5.27 per share (the last reported sales price of our common stock on The NASDAQ Capital Market on May 24, 2016), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

As of March 31, 2016, we had cash, cash equivalents and marketable securities of \$23.0 million. We intend to use the net proceeds from this offering, together with such existing cash resources, for the continued development of NS2 and our other product candidates, including a planned Phase II/III clinical trial of NS2 in allergic conjunctivitis and noninfectious anterior uveitis, one or more Phase II clinical trials in other ocular indications, a Phase II clinical trial of systemic NS2 in Sjögren-Larsson Syndrome and SSADH Deficiency and other general corporate purposes, debt maintenance and working capital. This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. We may also use a portion of the net proceeds to acquire or invest in businesses, products or technologies that we believe are complementary to our own, although we are not currently planning or negotiating any such transactions. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes. Accordingly, our management will have significant discretion and flexibility in applying the net proceeds from the sale of these securities. Pending any use, as described above, we intend to invest the net proceeds in high-quality, short-term, interest-bearing securities.

Table of Contents**PRICE RANGE OF OUR COMMON STOCK**

Our common stock is traded on The NASDAQ Capital Market under the symbol ALDX. The following table summarizes the high and low closing sales prices for our common stock as reported by The NASDAQ Capital Market for the period indicated:

	High	Low
2014		
Second Quarter (from May 1, 2014)	\$ 8.22	6.00
Third Quarter	7.63	3.00
Fourth Quarter	11.99	5.39
2015		
First Quarter	\$ 12.30	\$ 6.90
Second Quarter	11.79	6.64
Third Quarter	10.90	5.35
Fourth Quarter	7.70	4.84
2016		
First Quarter	\$ 6.76	\$ 3.52
Second Quarter (through May 24, 2016)	6.50	4.24

The last reported sale price for our common stock on The NASDAQ Capital Market on May 24, 2016 was \$5.27.

Table of Contents

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to compliance with certain covenants under our credit facilities, which restrict or limit our ability to declare or pay dividends, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

S-12

Table of Contents**CAPITALIZATION**

The following table sets forth our cash, cash equivalents and capitalization as of March 31, 2016:

on an actual basis; and

on an as adjusted basis to give effect to the assumed issuance and sale by us of _____ shares of common stock in this offering, and the receipt of the net proceeds from the assumed sale of these shares, at an assumed public offering price of \$5.27 (the last reported sales price of our common stock on The NASDAQ Capital Market on May 24, 2016), after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table in conjunction with the sections titled Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and related notes appearing in our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

	March 31, 2016	March 31, 2016 (as adjusted)
Stockholders' equity:		
Preferred stock, \$0.001 par value, 15,000,000 shares authorized, none issued and outstanding as of March 31, 2016		
Common stock, voting, \$0.001 par value; 150,000,000 authorized and 9,712,521 shares issued and outstanding as of March 31, 2016; 11,610,054 shares issued and outstanding, as adjusted	9,713	11,610
Additional paid-in capital	84,084,750	93,053,051
Accumulated other comprehensive income, net of tax	1,800	1,800
Accumulated deficit	(63,569,236)	(63,569,236)
Total stockholders' equity	20,527,027	29,497,225
Total capitalization	\$ 20,527,027	\$ 29,497,225

The number of shares in the table above excludes:

1,647,009 shares of common stock issuable upon exercise of stock options outstanding as of March 31, 2016, at a weighted average exercise price of approximately \$4.31 per share;

143,783 shares of common stock reserved for future grants under our 2013 Equity Incentive Plan as of March 31, 2016 (subject to automatic annual adjustment in accordance with the terms of the plan and the addition of 700,000 shares of common stock which have been approved by our board of directors and which are subject to a

stockholder vote at our 2016 annual meeting of stockholder); and

1,384,608 shares of our common stock issuable upon exercise of warrants at a weighted average exercise price of approximately \$9.52 per share.

S-13

Table of Contents

DILUTION

If you purchase our common stock in th