

The information contained in this preliminary prospectus supplement and the accompanying prospectus is not complete and may be changed. A registration statement relating to the securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 13, 2021

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated July 27, 2018)

Shares



Common Stock

We are offering _____ shares of our common stock.

Our common stock is listed on The Nasdaq Capital Market under the symbol "ALDX." On January 12, 2021, the last reported sales price of our common stock on The Nasdaq Capital Market was \$10.80 per share.

Investing in our common stock involves a high degree of risk. Please see "[Risk Factors](#)" beginning on page S-8 of this prospectus supplement and in the related sections noted in the accompanying prospectus and in the other documents that are incorporated by reference herein and therein for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

| | PER SHARE | TOTAL |
|---|-----------|-------|
| Public offering price | \$ | \$ |
| Underwriting discounts and commissions ⁽¹⁾ | \$ | \$ |
| Proceeds to us, before expenses | \$ | \$ |

⁽¹⁾ See "Underwriting" for description of compensation payable to the underwriters.

Delivery of the shares of common stock is expected to occur on or about _____, 2021. We have granted the underwriters an option for 30 days from the date of this prospectus supplement to purchase up to an additional _____ shares of our common stock. If the underwriters exercise 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 \$ _____.

Joint Book-Running Managers

Jefferies

SVB Leerink

Prospectus Supplement dated _____, 2021

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Prospectus

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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,” “our,” or similar references refer to Aldeyra Therapeutics, Inc. (and its wholly-owned subsidiaries), 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 underwriters have 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, the accompanying prospectus, any document incorporated by reference herein or therein, and any free writing prospectus that we have authorized for use in connection with this offering, is 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.

No action is being taken in any jurisdiction outside the United States to permit a public offering of the securities or possession or distribution of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering in that jurisdiction. Persons who come into possession of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering applicable to that jurisdiction.

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, “may,” “might,” “will,” “objective,” “intend,” “should,” “could,” “can,” “would,” “expect,” “believe,” “anticipate,” “project,” “on track,” “scheduled,” “target,” “design,” “estimate,” “predict,” “potential,” “aim,” and “plan,” or the negative of these terms and similar expressions 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;
- delay in or failure to obtain regulatory approval of our product candidates, including as a result of the U.S. Food and Drug Administration (“FDA”) not accepting our regulatory filings or requiring additional clinical trials or data prior to review or approval of such filings;
- the ability to maintain regulatory approval of our product candidates, and the labeling for any approved products;
- the risk that prior results, such as signals of safety, activity or durability of effect, observed from preclinical or clinical trials, will not be replicated or will not continue in ongoing or future studies or trials involving our product candidates;
- the risk that the results from smaller clinical trials or portions of clinical trials may not accurately predict results of larger scale trials or the remainder of a clinical trial;
- the scope, progress, expansion, and costs of developing and commercializing our product candidates;
- the current and potential future impact of the COVID-19 pandemic on our business, results of operations and financial position;
- uncertainty as to our ability to commercialize (alone or with others) our product candidates following regulatory approval, if any;
- 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 limited sales and marketing infrastructure;
- our ability to establish and maintain development partnerships;
- our ability to successfully integrate acquisitions into our business;
- our expectations regarding federal, state and foreign regulatory requirements;
- political, economic, legal, social and health risks, including the recent COVID-19 pandemic and subsequent public health measures, that may affect our business or the global economy;

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- 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 on the forward-looking statements we make or that are made on our behalf as predictions of future events. 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, the accompanying prospectus and the documents incorporated by reference herein and therein 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 sections of this prospectus supplement and the accompanying prospectus 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.

PROSPECTUS SUPPLEMENT 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

Aldeyra is a clinical-stage biotechnology company focused on the development of novel therapies with the potential to improve the lives of patients with immune-mediated diseases.

Our lead product candidate, reproxalap, is a first-in-class treatment in Phase 3 clinical development for dry eye disease (“DED”) and allergic conjunctivitis (“AC”). We have additional product candidates in development for systemic immune-mediated diseases, proliferative vitreoretinopathy (“PVR”) and other retinal diseases, autoimmune disease, and cancer. We currently intend to commercialize our products directly or through collaborations. None of our product candidates have been approved for sale in the United States or elsewhere.

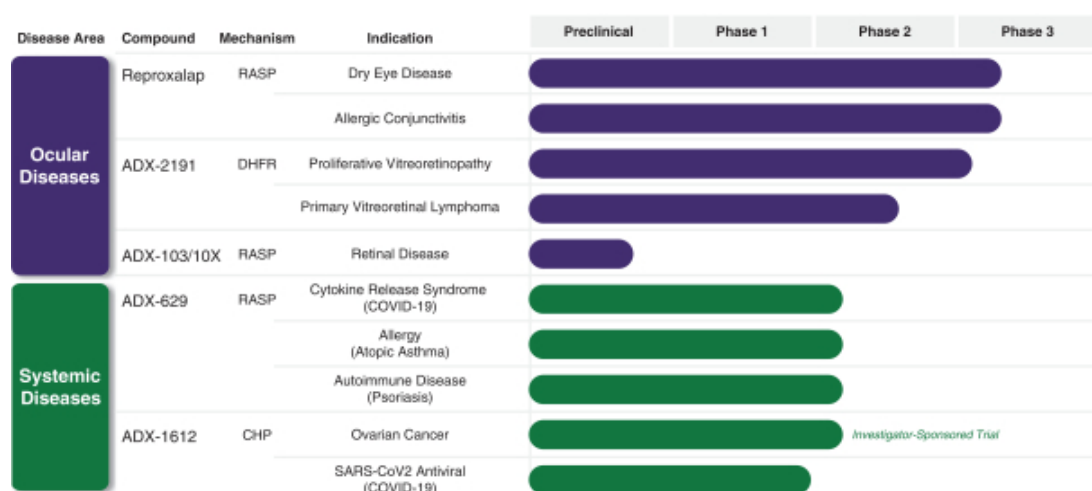
Reproxalap is a RASP (reactive aldehyde species) inhibitor that has demonstrated statistically significant and clinically relevant improvements across an aggregate of seven Phase 2 clinical trials in DED and AC, a Phase 3 clinical trial in AC, and Part 1 of a Phase 3 clinical trial in DED, when administered topically to the eye as an ophthalmic solution. Administered to the skin as a topical dermatologic formulation in a Phase 2 clinical trial and in Part 1 of a Phase 3 clinical trial, reproxalap demonstrated statistically significant and clinically relevant improvements in ichthyosis (a severe skin disorder) caused by Sjögren-Larsson Syndrome (“SLS”), a rare RASP-mediated disease with no approved therapy. Additionally, in a Phase 1 clinical trial, ADX-629, a first-in-class orally available RASP inhibitor, was well-tolerated and no treatment-related adverse events were observed. Relative to subjects treated with placebo, reduction in the commonly described pro-inflammatory RASP malondialdehyde was observed in ADX-629 treated subjects. A growing body of clinical evidence supports the potential and relevance of RASP inhibition as a new and differentiated mechanism of action. We have discovered and are developing one additional RASP inhibitor, ADX-103, for the treatment of retinal disease.

In January 2021, we announced positive top-line symptom, redness, and Schirmer’s test results from the run-in cohort of the Phase 3 TRANQUILITY clinical trial of reproxalap in patients with dry eye disease. Over all time points in aggregate in the dry eye chamber, reproxalap was observed to be statistically superior to vehicle for the two assessed symptoms, visual analog scale (“VAS”) ocular dryness score ($p = 0.001$) and ocular discomfort score ($p < 0.0001$) in the run-in cohort of TRANQUILITY. Consistent with previously announced allergen chamber Phase 2 clinical trial results, reproxalap demonstrated statistically significant improvement over vehicle ($p = 0.03$) in ocular redness, an objective sign of dry eye disease. Improvement in ocular symptoms and redness occurred within minutes after reproxalap dosing. Following acute dosing on the day prior to the dry eye chamber, Schirmer test scores were directionally in favor of reproxalap over vehicle, and reproxalap was statistically superior to vehicle in improvement in VAS dryness score ($p = 0.003$), ocular discomfort 4-symptom questionnaire (OD4SQ) dryness score ($p = 0.006$), OD4SQ grittiness score ($p = 0.006$), and OD4SQ discomfort score ($p = 0.003$). Consistent with clinical experience in over 1,100 patients, no adverse findings on safety assessments were observed, and reproxalap was well-tolerated. We are in the process of completing the tear RASP analysis from the run-in cohort of TRANQUILITY. Notwithstanding the results of this tear RASP analysis, the main cohort of TRANQUILITY is expected to begin enrollment in February 2021, following confirmation of the primary sign endpoint, which is expected to be either reduction in redness or reduction in

RASP, and number of subjects. Results from the main cohort of TRANQUILITY are expected in the second half of 2021. A second Phase 3 clinical trial, TRANQUILITY-2, is expected to initiate in the first quarter of 2021.

As we continue to execute on our strategy of expanding our product candidate pipeline, we may license or acquire new immune-modulating approaches with novel therapeutic potential. In January 2019, we acquired Helio Vision, Inc. (“Helio”) and thereby obtained rights to ADX-2191, an intravitreal DHFR inhibitor (methotrexate) for the prevention of PVR, a serious sight-threatening retinal disease with no approved treatment. We expect to complete enrollment in the GUARD Phase 3 clinical trial of ADX-2191 for PVR in 2021. On January 12, 2021, we received from the FDA preliminary written comments in preparation for a Pre-IND (“Investigational New Drug”) Type B meeting regarding ADX-2191 for the treatment of primary vitreoretinal lymphoma (“PVRL”), a rare cancer that occurs in the eye. We believe the comments indicated that submission of a New Drug Application (“NDA”) for ADX-2191 for the treatment of PVRL may be possible without performing clinical trials. In the first quarter of 2021, we expect to hold a teleconference with the FDA to discuss the preliminary written comments and clarify the ADX-2191 NDA submission requirements for the treatment of PVRL. We have applied for and expect to receive orphan designation for ADX-2191 for the treatment of PVRL in the first half of 2021. In addition, in December 2016, we in-licensed ADX-1612, which inhibits the protein chaperome, a mechanistically differentiated approach for the potential treatment of a number of inflammatory diseases. In the future, we may enter into additional partnerships that facilitate the development and commercialization of our product candidates.

All of our development timelines may be subject to adjustment depending on recruitment rate, regulatory review, preclinical and clinical results, funding, and other factors that could delay the initiation, completion, or reporting of clinical trials. Our pipeline, as of the date of this prospectus supplement is illustrated below.



RASP Mechanism = Reactive Aldehyde Species Inhibitor
 DHFR Mechanism = Dihydrofolate Reductase Inhibitor
 CHP Mechanism = Chaperome Inhibitor

We have no products approved for sale. We will not receive any revenue from any product candidates that we develop until we obtain regulatory approval and commercialize such products or until we potentially enter into agreements with third parties for the development and commercialization of product candidates. In addition, it may be difficult or not possible to obtain from the FDA orphan drug designation or a designation that facilitates and expedites development and review of certain new drugs, including breakthrough therapy

designation, fast track designation or any other expedited status that we may apply for in the future, for reproxalap or our other product candidates, and if we are unable to obtain such designations, our regulatory and commercial prospects may be negatively impacted. If our development efforts for any of our product candidates result in regulatory approval or we enter into collaboration agreements with third parties, we may generate revenue from product sales or from such third parties. We have primarily funded our operations through the sale of our convertible preferred stock, common stock, convertible promissory notes, warrants and borrowings under our loan and security agreements. We will need to raise additional capital in the form of debt or equity or through partnerships to fund additional development of reproxalap and other product candidates, and we may in-license, acquire, or invest in complementary businesses or products. However, the disruption in the capital markets caused by the COVID-19 pandemic could make any financing more challenging, and there can be no assurance that we will be able to raise capital on commercially reasonable terms or at all. In addition, contingent on capital resources, we may augment, diminish or otherwise modify our clinical development plans.

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, or incorporated by reference into, the section of this prospectus supplement entitled “Risk Factors.”

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 (the “Exchange Act”), 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 U.S. Securities and Exchange Commission (the “SEC”).

THE OFFERING

| | |
|--|---|
| Common stock to be offered by us | shares. |
| Common stock to be outstanding immediately following this offering | shares (or additional shares in full) shares if the underwriters exercise their option to purchase additional shares in full). |
| Option to purchase additional shares from us | We have granted the underwriters an option for 30 days from the date of this prospectus supplement to purchase up to an additional shares of our common stock from us. |
| Use of Proceeds | We expect to use the net proceeds from this offering, together with our existing cash resources, for the continued development of reproxalap and our other product candidates, including the completion of the Phase 3 TRANQUILITY and TRANQUILITY 2 trials in dry eye disease for reproxalap, the completion of the Phase 3 trial in allergic conjunctivitis (the INVIGORATE trial) for reproxalap, as well as the Phase 2 clinical trials of ADX-629 in COVID-19-associated respiratory compromise, atopic asthma, and psoriasis and the continuation of Part 1 of the adaptive Phase 3 clinical trial in proliferative vitreoretinopathy (the GUARD Trial) contingent on patient enrollment, working capital 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 “Use of Proceeds.” |
| Risk Factors | Investing in our common stock involves a high degree of risk. See “Risk Factors” for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock. |
| Nasdaq Capital Market symbol | “ALDX” |

The number of shares of our common stock outstanding is based on 38,631,709 shares of our common stock outstanding as of September 30, 2020 and excludes the following:

- 4,889,685 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2020, at a weighted average exercise price of \$5.79 per share;
- 929,817 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of September 30, 2020;
- 940,863 shares of common stock reserved for future grants under our 2013 Equity Incentive Plan as of September 30, 2020; and
- 857,446 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan as of September 30, 2020.

Unless otherwise indicated, all information in this prospectus assumes:

- that the underwriters do not exercise their option to purchase up to additional shares of our common stock; and
- no exercise of the outstanding options, or settlement of outstanding restricted stock units, described above.

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. In addition, the impacts of COVID-19 and any worsening of the economic environment may exacerbate the risks described below and in those sections, any of which could have a material impact on us. 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 Our Business

Our business is dependent in large part on the success of a single product candidate, reproxalap, for which we are researching multiple indications. We cannot be certain that we will be able to obtain regulatory approval for, or successfully commercialize, reproxalap.

Our product candidates, including reproxalap, will require additional preclinical studies, substantial clinical development and testing, and regulatory approval prior to commercialization. We have not yet completed development of any product candidate. We have only one product candidate that has been the focus of significant clinical development: reproxalap, a novel small molecule chemical entity that is believed inhibit RASP, toxic chemical species suspected to cause and exacerbate numerous diseases in humans and animals. We are dependent in large part on successful continued development and ultimate regulatory approval of reproxalap for our future business success. Any negative results or perceived negative results in clinical trials for one indication may have an adverse effect on our ability to develop and potentially commercialize reproxalap for the treatment of another indication. We have invested, and will continue to invest, a significant portion of our time and financial resources in the development of reproxalap. We will need to raise sufficient funds for, and successfully enroll and complete, our current and planned clinical trials of reproxalap and our other product candidates. The future regulatory and commercial success of our product candidates is subject to a number of risks, including the following:

- we may not have sufficient financial and other resources to pursue our business plans and complete necessary clinical trials;
- we may not be able to provide sufficient evidence of safety and efficacy to continue a development program or obtain regulatory approval;
- the results of our clinical trials may not meet the endpoints, or level of statistical or clinical significance required by the FDA, or comparable foreign regulatory bodies, for marketing approval;
- the safety and efficacy results of our later phase or larger clinical trials may not confirm the results of our earlier trials;
- the results from smaller clinical trials or portions of clinical trials may not accurately predict results of larger scale trials or the remainder of a clinical trial;
- patients in our clinical trials may demonstrate greater response rates or improvements from vehicle or in the non-treatment arm than was expected when designing and powering our clinical trials;
- there may be variability in patients, adjustments to clinical trial procedures and inclusion of additional clinical trial sites;

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- the initial parts of adaptive clinical trials are not designed to be pivotal or definitive, as such we may not satisfy the designated endpoints and also may need to revise the design or endpoints to achieve success in later parts of the trial or potentially abandon the trial;
- we may not be able to timely or adequately finalize the design or formulation of any product candidate or demonstrate that a formulation of our product candidate will be stable for commercially reasonable time periods;
- the FDA, or comparable foreign regulatory bodies, may implement new standards, or change the interpretation of existing standards or requirements for the regulatory approval, in general or with respect to the indications our product candidates are being developed to treat;
- the FDA, or comparable foreign bodies, may require clinical data in addition to the clinical trial programs we expect or may require changes to the designs and endpoints of the subsequent clinical trials;
- patients in clinical trials for our product candidates may suffer adverse effects or die for reasons that may or may not be related to our product candidates;
- if approved for certain diseases, our product candidates will compete with well-established and other products or therapeutic options already approved for marketing by the FDA, or comparable foreign regulatory bodies;
- we may be adversely affected by legislative or regulatory reform of the health care system in the United States or other jurisdictions in which we may do business; and
- we may not be able to obtain, maintain, or enforce our patents and other intellectual property rights.

Of the large number of drugs in development in the pharmaceutical industry, only a small percentage result in the submission of a new drug application (“NDA”) to the FDA, and even fewer are approved for commercialization. We are currently planning to submit an NDA to the FDA for reproxalap in dry eye disease by the end of 2021, assuming positive clinical trial results, based on our interpretation of the feedback received from the FDA in the written minutes from our June 2020 meeting. However, we may amend our Phase 3 DED protocols based on run-in cohort data, including RASP data that we anticipate receiving in February 2021, prior to enrollment of the main cohort of the TRANQUILITY trial and prior to initiation of the TRANQUILITY-2 trial. If these trials are successful, we can provide no assurances that the FDA will accept this NDA for review. Moreover, even if FDA does accept our NDA, there can be no assurance that FDA will agree with our interpretation of the data, that FDA will not require us to conduct additional clinical trials or provide additional data, or that FDA will approve our NDA in a timely fashion, or at all.

Furthermore, even if we do receive regulatory approval to market reproxalap and our other product candidates, any such approval may be subject to limitations on the indicated uses for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development programs, we cannot assure that reproxalap and our other product candidates will be successfully developed or commercialized. If we or any of our future development partners are unable to develop, or obtain regulatory approval for or, if approved, successfully commercialize, reproxalap and our other product candidates, we may not be able to generate sufficient revenue to continue our business.

To generate revenue, we will depend on FDA approval of our lead product candidate, reproxalap for the potential treatment of dry eye disease. If we are unable to successfully conduct the TRANQUILITY and TRANQUILITY-2 trials, prepare and timely submit the planned NDA for this product candidate and obtain FDA approval, our ability to generate revenue will be significantly delayed.

Our ability to generate revenue will depend on the successful development, regulatory approval and commercialization of reproxalap. Based on our discussions with and our interpretation of feedback from the FDA, as well as run-in cohort data from the TRANQUILITY trial, we currently plan to submit an NDA to the

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FDA for reproxalap for the potential treatment of dry eye disease by the end of 2021, subject to positive clinical trial results. There can be no assurance that we can prepare and submit an NDA in a timely manner or at all. We have limited experience in preparing, filing, and pursuing applications necessary to gain regulatory approvals. The preparation of an NDA requires a great deal of effort and expertise, and if we do not secure the necessary resources and hire and retain personnel having the requisite expertise to prepare and submit the NDA, the filing of the NDA would be delayed. Further, if an NDA is submitted by the company, there can be no assurance that it will be accepted for filing by the FDA. If the FDA determines after an initial review of the NDA that the data included in the application is insufficient and not ready for formal consideration, we could receive a “refuse to file” notice. The FDA has substantial discretion in the approval process and may disagree with our interpretation of or the sufficiency of the data from our clinical trials. The FDA could also require that we conduct additional studies and submit that data before it will reconsider our application, which would require us to expend more resources than we planned or that are available to us, and could substantially delay any approval of our application. If the FDA is not satisfied with data included in our NDA, we may need to expend additional resources or conduct additional studies, including clinical trials, to obtain data that the FDA believes is sufficient. It is also possible that additional studies may not suffice to make our application approvable. Even if the NDA is accepted for filing by the FDA, there can be no assurance that it would be approved in a timely manner or at all.

Because RASP is a new objective sign for the treatment of dry eye disease, there is no precedent in measuring and validating the results of studies of RASP in tears, which could impact the timing and cost of development of our trials and delay or prevent the filing of an NDA in dry eye disease.

Written meeting minutes with the FDA confirmed the use of RASP as an objective sign for the treatment of dry eye disease. However, to our knowledge, a validated assay to measure RASP in tears has not been developed and the FDA has not established guidelines for the design of trials in which RASP is measured. We are working with CROs to develop and test multiple assays to measure RASP. There is risk that these approaches will not accurately measure RASP or be accepted by the FDA or other regulatory bodies as validated assays. Moreover, based on the ocular redness results of the run-in cohort of the TRANQUILITY trial, pending our receipt of the RASP results from the run-in cohort in February 2021, we may select reduction in redness or reduction in RASP as the primary objective DED sign endpoint in the TRANQUILITY and TRANQUILITY-2 trials. In addition, The FDA could change its view on clinical trial design and the method for assaying RASP and require a change in clinical trial design, additional data or even further clinical trials before granting approval of our product candidates. As a result, further development of reproxalap in dry eye disease may be negatively impacted or delayed, which would have an adverse impact on our business, prospects, financial condition, and results of operations.

Risks Related to This Offering and Our Common Stock

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:

- results of clinical trials, and the results of trials of our competitors or those of other companies in our market sector;
- the expectations of investors or securities analysts regarding our business and clinical development program, including interim or final top-line results that we may announce;
- regulatory developments in the United States and foreign countries;
- our ability to enroll patients in our clinical trials;

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

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.

If you purchase shares of common stock in this offering, 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. Based on _____ shares of our common stock being sold at the public offering price of \$ _____ per share, for aggregate gross proceeds of approximately \$ _____ million, and after deducting underwriting discounts and commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of \$ _____ per share, representing the difference between our as adjusted net tangible book value per share as of September 30, 2020 after giving effect to this offering and the public 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 "Dilution" on page S-16 below for a more detailed illustration of the dilution you may incur if you participate in this offering.

We may allocate our cash resources, including the proceeds from this offering, 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 proceeds from this offering. Because of the number and variability of factors that will determine our use of our cash resources, their ultimate use may vary substantially from their currently intended use. Our management might not apply our cash resources in ways that ultimately increase the value of your investment. We intend to use the net proceeds from this offering, together with our existing cash resources, for the continued development of reproxalap and our other product candidates, including the completion of the Phase 3 TRANQUILITY and TRANQUILITY 2 trials in dry eye disease for reproxalap, the completion of the Phase 3 trial in allergic conjunctivitis (the INVIGORATE trial) for reproxalap, as well as the Phase 2 clinical trials of

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ADX-629 in COVID-19-associated respiratory compromise, atopic asthma, and psoriasis and the continuation of Part 1 of the adaptive Phase 3 clinical trial in proliferative vitreoretinopathy (the GUARD Trial) contingent on patient enrollment, 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 resources 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 resources, including the proceeds from this offering, in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

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 Hercules Capital, Inc. currently prohibits us from paying dividends on our equity securities, and any future debt financing arrangements 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 the value of our common stock. 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. Sales by existing stockholders might also make it more difficult for us to sell additional equity securities at a time and price that we deem appropriate.

USE OF PROCEEDS

We estimate that the net proceeds from the public sale of _____ shares of our common stock in this offering will be approximately \$ _____ million, or approximately \$ _____ million if the underwriters exercise in full their option to purchase additional shares of common stock, based on the public offering price of \$ _____ per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

As of September 30, 2020, we had cash, cash equivalents and marketable securities of \$86.2 million. We intend to use the net proceeds from this offering, together with such existing cash resources, for the continued development of reproxalap and our other product candidates, including the completion of the Phase 3 TRANQUILITY and TRANQUILITY 2 trials in dry eye disease for reproxalap, the completion of the Phase 3 trial in allergic conjunctivitis (the INVIGORATE trial) for reproxalap, as well as the Phase 2 clinical trials of ADX-629 in COVID-19-associated respiratory compromise, atopic asthma, and psoriasis and the continuation of Part 1 of the adaptive Phase 3 clinical trial in proliferative vitreoretinopathy (the GUARD Trial) contingent on patient enrollment, working capital and other general corporate purposes. 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.

We believe, based on our current operating plan and expected expenditures, that our existing cash, cash equivalents and marketable securities, together with the proceeds from this offering, will be sufficient to meet our anticipated cash and capital expenditure requirements _____. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Additionally, as the impact of the COVID-19 pandemic on the economy and our operations evolves, we will continue to assess our liquidity needs. Given the economic uncertainty as a result of the pandemic, we have taken actions to improve our current liquidity position, including reducing working capital, reducing operating expenses and substantially reducing discretionary spending. Should we need to secure additional sources of liquidity, we believe that we could finance our needs through the issuance of equity securities or debt offerings. However, we cannot guarantee that we will be able to obtain financing through the issuance of equity securities or debt offerings on reasonable terms or at all in the future. The COVID-19 pandemic has negatively impacted the global economy, created significant volatility and disrupted financial markets. An extended period of economic disruption could materially affect our business, results of operations, access to sources of liquidity and financial condition.

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. Our loan and security agreement with Hercules Capital, Inc. currently prohibits us from paying dividends on our equity securities, and any future debt financing arrangements may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock.

CAPITALIZATION

The following table sets forth our capitalization as of September 30, 2020:

- on an actual basis; and
- on an as adjusted basis to give effect to the issuance and sale by us of shares of common stock in this offering, and the receipt of the net proceeds from the sale of these shares, at the public offering price of \$ per share, 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 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.

| | As of September 30, 2020 | |
|--|--------------------------|---------------|
| | Actual | As Adjusted |
| | (unaudited) | |
| Long-term debt | \$ 12,693,311 | \$ 12,693,311 |
| Stockholders’ equity: | | |
| Common stock, \$0.001 par value; 150,000,000 shares authorized, actual and as adjusted, 38,631,709 shares issued and outstanding, actual; shares issued and outstanding, as adjusted | 38,632 | |
| Additional paid-in capital | 294,755,363 | |
| Accumulated deficit | (225,623,548) | (225,623,548) |
| Total stockholders’ equity | 69,170,447 | |
| Total capitalization | \$ 81,863,758 | \$ |

The number of shares in the table above excludes:

- 188,638 shares of common stock that are issued and outstanding but that were subject to a right of repurchase by the Company at September 30, 2020 and are not included in stockholders’ equity pursuant to U.S. generally accepted accounting principles;
- 4,889,685 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2020, at a weighted average exercise price of \$5.79 per share;
- 929,817 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of September 30, 2020;
- 940,863 shares of common stock reserved for future grants under our 2013 Equity Incentive Plan as of September 30, 2020; and
- 857,446 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan as of September 30, 2020.

DILUTION

If you purchase our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of common stock and the pro forma net tangible book value per share of our common stock after this offering. Net tangible book value per share is determined by dividing the number of outstanding shares of our common stock into our total tangible assets (total assets less intangible assets) less total liabilities. As of September 30, 2020, we had a net tangible book value of our common stock of \$69.2 million, or approximately \$1.79 per share.

Investors participating in this offering will incur immediate, substantial dilution. After giving effect to the sale of shares of common stock in this offering at the public offering price of \$ _____ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our net tangible book value as of September 30, 2020 would have been approximately \$ _____ million, or approximately \$ _____ per share of common stock. This represents an immediate increase in net tangible book value of approximately \$ _____ per share to existing stockholders, and immediate dilution of approximately \$ _____ per share to investors participating in this offering.

The following table illustrates this per share dilution:

| | |
|---|----------------------|
| Public offering price per share | \$ |
| Net tangible book value per share as of September 30, 2020 | \$1.79 |
| Increase in net tangible book value per share after this offering | <u> </u> |
| Net tangible book value per share after this offering | <u> </u> |
| Dilution per share to investors participating in this offering | <u> </u> \$ |

If the underwriters exercise in full their option to purchase _____ additional shares of common stock at the public offering price of \$ _____ per share, our net tangible book value as of September 30, 2020 would have been approximately \$ _____ per share, representing an immediate increase in net tangible book value of approximately \$ _____ per share to existing stockholders, and immediate dilution of approximately \$ _____ per share to investors purchasing our common stock in this offering.

The above discussion and tables also exclude:

- 188,638 shares of common stock that are issued and outstanding but that were subject to a right of repurchase by the Company at September 30, 2020 and are not included in stockholders' equity pursuant to U.S. generally accepted accounting principles;
- 4,889,685 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2020, at a weighted average exercise price of \$5.79 per share;
- 929,817 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of September 30, 2020;
- 940,863 shares of common stock reserved for future grants under our 2013 Equity Incentive Plan as of September 30, 2020; and
- 857,446 shares of common stock reserved for future issuance under our 2016 Employee Stock Purchase Plan as of September 30, 2020.

To the extent that any of these options are exercised, restricted stock units are settled, new options or restricted stock units are issued under our equity incentive plans and subsequently exercised or settled or we issue additional shares of common stock or securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or substantially similar securities in the future, there will be further dilution to investors participating in this offering.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following summary describes the material U.S. federal income and estate tax consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion does not address all aspects of U.S. federal income and estate taxes and does not deal with foreign, state and local tax consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences other than income and estate taxes (such as the alternative minimum tax or the Medicare contribution tax on net investment income). Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Internal Revenue Code of 1986, as amended (the “Code”), such as banks, financial institutions, insurance companies, tax-exempt organizations, governmental organizations, brokers, dealers or traders in securities, certain former citizens or long-term residents of the United States, “controlled foreign corporations,” “passive foreign investment companies,” corporations that accumulate earnings to avoid U.S. federal income tax, persons that hold our common stock as part of a “straddle,” “hedge,” “conversion transaction,” “synthetic security” or integrated investment or other risk reduction strategy, persons deemed to sell our common stock under the constructive sale provisions of the Code, persons for whom our common stock constitutes “qualified small business stock” within the meaning of Section 1202 of the Code, persons who received our common stock pursuant to the exercise of an employee stock option or other compensatory transaction, tax-qualified retirement plans, qualified foreign pension funds as defined in Section 897(1)(2) of the Code, and partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein). Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income and estate tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service (the “IRS”), with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion assumes that the Non-U.S. Holder holds our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment).

Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income and estate tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.

For the purposes of this discussion, a “Non-U.S. Holder” is, for U.S. federal income tax purposes, a beneficial owner of common stock that is neither a U.S. Holder, a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation), nor an entity that is treated as a disregarded entity for U.S. federal income tax purposes (regardless of its place of organization or formation). A “U.S. Holder” means a beneficial owner of our common stock that is for U.S. federal income tax purposes (a) an individual who is a citizen or resident of the United States, (b) a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of persons treated as its partners for U.S. federal income tax purposes will generally depend upon the status of such partner and the activities of the partnership. Partnerships and other entities or arrangements that are classified as partnerships for U.S. federal income tax purposes and persons holding our common stock through such partnerships are encouraged to consult with their own tax advisors regarding the possible implications of these rules.

Distributions

As indicated in the “Dividend Policy” section of this prospectus, we have never declared or paid dividends on our common stock and we currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate declaring or paying any dividends in the foreseeable future.

In the event that we do make a distribution, subject to the discussion below, distributions made on our common stock to a Non-U.S. Holder to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. To obtain a reduced rate of withholding under a tax treaty, a Non-U.S. Holder generally must provide us with a properly executed applicable IRS Form W-8, or other appropriate form, certifying the Non-U.S. Holder’s entitlement to benefits under that treaty. In the case of a Non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those persons holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder’s behalf, the holder will be required to provide appropriate documentation to such agent. The holder’s agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If a Non-U.S. Holder is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty, such Non-U.S. Holder may be able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates applicable to U.S. persons. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional “branch profits tax,” which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder’s effectively connected earnings and profits, subject to certain adjustments.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will first reduce a Non-U.S. Holder’s adjusted basis in our common stock, but not below zero, and then will be treated as gain to the extent of any excess, and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

Gain on Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met, or (c) we are or have been a “United States real property holding corporation” within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder’s holding period. In general, we would be a United States real property holding corporation if interests in U.S. real property comprised (by fair market value) at least half of our worldwide real property and our other assets used or held for use in a trade or business. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation. If we are a United States real property

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holding corporation and our common stock is not regularly traded on an established securities market, a Non-U.S. Holder's proceeds received on the disposition of shares will also generally be subject to withholding at a rate of 15%. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a United States real property holding corporation.

A Non-U.S. Holder described in (a) above, will generally be required to pay tax on the net gain derived from the sale at regular U.S. federal income tax rates applicable to U.S. persons, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. An individual Non-U.S. Holder described in (b) above, will be required to pay a flat 30% tax on the gain derived from the sale or such lower rate as may be specified by an applicable income tax treaty, which gain may be offset by U.S. source capital losses (even though the individual is not considered a resident of the United States).

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any dividends we pay on our common stock including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed applicable IRS Form W-8 (and the applicable withholding agent does not have actual knowledge or reason to know that such holder is a U.S. person) or otherwise establishes an exemption.

Under current U.S. federal income tax law, U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or foreign, unless the holder provides a properly executed applicable IRS Form W-8 or otherwise meets documentary evidence requirements for establishing Non-U.S. Holder status (and the withholding agent does not have actual knowledge or reason to know that such holder is a U.S. person) or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. Any amounts of tax withheld under the backup withholding rules may be allowed as a refund or credits against the tax liability of persons subject to backup withholding (currently at a rate of 24%), provided that the required information is timely furnished to the IRS.

Additional Withholding and Reporting Requirements on Foreign Accounts

Under Section 1471 through Section 1474 of the Code (commonly referred to as the Foreign Account Tax Compliance Act ("FATCA")), a U.S. federal withholding tax of 30% may apply to dividends and (subject to the proposed Treasury Regulations described below) the gross proceeds of a disposition of our common stock paid to a foreign financial institution (as specifically defined by applicable rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). This U.S. federal withholding tax of 30% will also apply to dividends and (subject to the proposed Treasury

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Regulations described below) the gross proceeds of a disposition of our common stock to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. The withholding tax under FATCA will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a Non-U.S. Holder might be eligible for refunds or credits of such taxes.

The abovementioned rules currently apply to dividend payments on our common stock. Withholding under FATCA also would have applied to payments of gross proceeds from the disposition of our common stock, but proposed Treasury Regulations (upon which taxpayers are entitled to rely until final Treasury Regulations are issued) eliminate FATCA withholding on payments of gross proceeds. Prospective investors should consult their own tax advisors regarding the possible impact of the FATCA rules on their investment in our common stock, and the possible impact of the FATCA rules on the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax.

U.S. Federal Estate Tax

An individual Non-U.S. Holder who is treated as the owner of, or has made certain lifetime transfers of, an interest in our common stock will be required to include the value thereof in his or her gross estate for U.S. federal estate tax purposes, and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise, even though such individual was not a citizen or resident of the United States at the time of his or her death.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAW.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2021, among us and Jefferies LLC and SVB Leerink LLC, as representatives of the underwriters named below and joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

| Underwriter | Number of Shares |
|-----------------|---------------------|
| Jefferies LLC | |
| SVB Leerink LLC | |
| Total | |

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock. The underwriters may allow, and certain dealers may reallow, a discount from the concession not in excess of \$ _____ per share of common stock to certain brokers and dealers. After the offering, the initial public offering price, concession and reallowance to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

| | Per Share | | Total | |
|---|--|---|--|---|
| | Without Option to Purchase Additional Shares | With Option to Purchase Additional Shares | Without Option to Purchase Additional Shares | With Option to Purchase Additional Shares |
| Public offering price | \$ | \$ | \$ | \$ |
| Underwriting discounts and commissions paid by us | \$ | \$ | \$ | \$ |
| Proceeds to us, before expenses | \$ | \$ | \$ | \$ |

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We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$250,000. We have agreed to reimburse the underwriters for certain expenses related to Financial Industry Regulatory Authority, Inc. matters in an amount up to \$15,000.

Listing

Our common stock is listed on The Nasdaq Capital Market under the trading symbol "ALDX."

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of _____ shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above.

No Sales of Similar Securities

We and our officers and directors (but not any funds affiliated with our officers and directors) have agreed, subject to specified exceptions, not to directly or indirectly:

- offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, or announce the intention to otherwise dispose of shares of common stock or securities convertible into or exercisable or exchangeable for common stock,
- enter into any swap, hedge or similar agreement or arrangement that transfers in whole or in part, the economic risk of ownership of shares of common stock or securities convertible into or exercisable or exchangeable for common stock, or
- engage in any short selling of the common stock or securities convertible into or exercisable or exchangeable for common stock.

This restriction terminates after the close of trading of the common stock on and including the 90th day after the date of this prospectus.

The representatives may, in their discretion and at any time or from time to time before the termination of the 90-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Securities Exchange Act of 1934, as amended, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

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“Covered” short sales are sales made in an amount not greater than the underwriters’ option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

“Naked” short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter’s purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters’ web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriter and certain of its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and certain of its affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses. Jefferies LLC has entered into an Open Market Sales AgreementSM with us, dated as of December 28, 2018, for our “at-the-market” equity program, under which we could offer and sell, from time to time through Jefferies LLC, as our sales agent, shares of common stock providing for aggregate sales proceeds of up to \$50.0 million.

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In the ordinary course of their various business activities, the underwriter and certain of its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area and the United Kingdom (each, a “Relevant State”), an offer to the public of any securities which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may not be made in that Relevant State except that an offer to the public in that Relevant State of any securities may be made at any time under the following exemptions under the Prospectus Regulation:

- (a) to any legal entity which is a “qualified investor” as defined in the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), as permitted under the Prospectus Regulation, subject to obtaining the prior consent of the underwriters or the underwriters nominated by us for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of securities shall require us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression “offer to the public” in relation to any securities in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Notice to Prospective Investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

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For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Notice to Prospective Investors in Canada

(A) Resale Restrictions

The distribution of shares in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the shares in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

(B) Representations of Canadian Purchasers

By purchasing shares in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares without the benefit of a prospectus qualified under those securities laws as it is an “accredited investor” as defined under National Instrument 45-106—*Prospectus Exemptions*,
- the purchaser is a “permitted client” as defined in National Instrument 31-103—*Registration Requirements, Exemptions and Ongoing Registrant Obligations*,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

(C) Conflicts of Interest

Canadian purchasers are hereby notified that the representatives are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105—*Underwriting Conflicts* from having to provide certain conflict of interest disclosure in this document.

(D) Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the offering memorandum (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser’s province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser’s province or territory for particulars of these rights or consult with a legal advisor.

(E) Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

(F) Taxation and Eligibility for Investment

Canadian purchasers of shares should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares in their particular circumstances and about the eligibility of the shares for investment by the purchaser under relevant Canadian legislation.

Notice to Prospective Investors in Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (“SFO”) and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong (“CO”) or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Notice to Prospective Investors in Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries’ rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the ADSs pursuant to an offer made under Section 275 of the SFA except:
 - (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
 - (ii) where no consideration is or will be given for the transfer;

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- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended) (“FIEL”), and the underwriters will not offer or sell any shares of common stock, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means, unless otherwise provided herein, any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Switzerland

The securities may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (“SIX”) or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, the Company or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (“CISA”). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

Notice to Prospective Investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and “qualified individuals,” each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Notice to Prospective Investors in Australia

This prospectus is not a disclosure document for the purposes of Australia’s Corporations Act 2001 (Cth) of Australia, or Corporations Act, has not been lodged with the Australian Securities & Investments Commission

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and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

(A) You confirm and warrant that you are either:

- a “sophisticated investor” under section 708(8)(a) or (b) of the Corporations Act;
- a “sophisticated investor” under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant’s certificate to the Company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the Company under Section 708(12) of the Corporations Act; or
- a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act.

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

(B) You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Boston, Massachusetts. As of September 30, 2020, certain partners and employees of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP are the beneficial owners of 1,000 shares of our common stock. Certain intellectual property matters will be passed upon for us by Dechert LLP, Boston, Massachusetts. Cooley LLP, New York, New York is acting as counsel for the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019 and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2019 incorporated by reference in this Prospectus and in the Registration Statement have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus supplement. This prospectus supplement and the accompanying prospectus, which are part of the registration statement, omits certain information, exhibits, schedules and undertakings set forth in the registration statement, as permitted by the SEC. For further information pertaining to us and the securities offered in this prospectus supplement, reference is made to that registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus supplement and the accompanying prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of the document has been filed as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matters involved.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including us.

Our common stock is listed on The Nasdaq Capital Market under the symbol "ALDX." General information about our company, including our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as any amendments and exhibits to those reports, are available free of charge through our website at www.aldeyra.com as soon as reasonably practicable after we file them with, or furnish them to, the SEC. Information on, or than can be accessed through, our website is not incorporated into this prospectus supplement or other securities filings and is not a part of these filings.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede some of this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act, including filings made after the date of the initial registration statement, until we sell all of the shares covered by this prospectus supplement or the sale of shares by us pursuant to this prospectus supplement is terminated. In no event, however, will any of the information that we furnish to, pursuant to Item 2.02 or Item 7.01 of any Current Report on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than file with, the SEC be incorporated by reference or otherwise be included herein, unless such information is expressly incorporated herein by a reference in such furnished Current Report on Form 8-K or other furnished document. The documents we incorporate by reference are:

- our annual report on [Form 10-K](#) for the fiscal year ended December 31, 2019, filed with the SEC on March 12, 2020 (the “Form 10-K”);
- the information contained in our [definitive proxy statement](#) on Schedule 14A for our 2020 annual meeting of stockholders, filed with the SEC on April 27, 2020, to the extent incorporated by reference in Part III of the Form 10-K;
- our quarterly reports on Form 10-Q for the quarters ended March 31, 2020, June 30, 2020 and September 30, 2020 filed with the SEC on [May 7, 2020](#), [August 6, 2020](#) and [November 5, 2020](#), respectively;
- our current reports on Form 8-K filed with the SEC on [January 14, 2020](#), [February 24, 2020](#), [March 12, 2020](#), [April 14, 2020](#), [May 1, 2020](#), [May 7, 2020](#), [May 20, 2020](#), [June 4, 2020](#), [June 12, 2020](#), [July 7, 2020](#), [July 14, 2020](#), [August 6, 2020](#), [November 5, 2020](#) and [January 7, 2021](#); and
- the description of our common stock contained in the registration statement on [Form 8-A](#) (File no. 001-36332), filed on March 4, 2014, and all [amendments](#) and reports updating such description.

Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide each person to whom a prospectus is delivered a copy of all of the information that has been incorporated by reference in this prospectus but not delivered with the prospectus. You may obtain copies of these filings, at no cost, through the “Investor Relations” section of our website (www.aldeyra.com) and you may request a copy of these filings (other than an exhibit to any filing unless we have specifically incorporated that exhibit by reference into the filing), at no cost, by writing or telephoning us at the following address:

131 Hartwell Avenue, Suite 320
Lexington, Massachusetts 02421
(781) 761-4904

Information on, or that can be accessed through, our website is not incorporated into this prospectus or other securities filings and is not a part of these filings.

PROSPECTUS

\$250,000,000

**Preferred Stock
Common Stock
Debt Securities
Warrants**

From time to time, we may offer and sell shares of preferred stock, common stock, debt securities or warrants to purchase debt securities, preferred stock, common stock or any combination of these securities, either separately or in units, in one or more offerings in amounts, at prices and on terms that we will determine at the time of the offering. The debt securities and warrants may be convertible into or exercisable or exchangeable for preferred stock, common stock or debt securities and the preferred stock may be convertible into or exchangeable for common stock. The aggregate initial offering price of all securities sold by us under this prospectus will not exceed \$250,000,000.

Each time we offer securities, we will provide you with specific terms of the securities offered in supplements to this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus, the information incorporated by reference in this prospectus, any applicable prospectus supplement and the additional information described below under the heading “Where You Can Find More Information” carefully before you invest in any securities.

The securities offered by this prospectus may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. We will set forth the names of any underwriters or agents in an accompanying prospectus supplement. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution.” The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on The Nasdaq Capital Market under the symbol “ALDX”. The last reported sale price of our common stock on July 19, 2018 was \$8.05 per share.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISKS. SEE “[RISK FACTORS](#)” ON PAGE 7 OF THIS PROSPECTUS AND IN THE OTHER DOCUMENTS INCORPORATED BY REFERENCE IN THIS PROSPECTUS AND THE APPLICABLE PROSPECTUS SUPPLEMENT TO READ ABOUT FACTORS YOU SHOULD CONSIDER BEFORE BUYING OUR SECURITIES.

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

The date of this prospectus is July 27, 2018.

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You should rely only on the information contained or incorporated by reference in this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with information in addition to or different from that contained in this prospectus or any applicable prospectus supplement. We will be offering to sell, and seeking offers to buy, the shares only in jurisdictions where offers and sales are permitted. You should not assume that the information in this prospectus or any applicable prospectus supplement is accurate as of any date other than the date on the front of those documents.

Unless the context otherwise requires, throughout this prospectus and any applicable prospectus supplement, the words “Aldeyra,” “Aldeyra Therapeutics,” “we,” “us,” the “registrant” or the “company” refer to Aldeyra Therapeutics, Inc.; the term “securities” refers collectively to our preferred stock, common stock, debt securities or warrants to purchase preferred stock, common stock or debt securities, or any combination of the foregoing securities.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Using this process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offering transactions up to a total dollar amount of \$250,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we sell any securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of that particular offering. Each such prospectus supplement may also add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. To the extent that any statements that we make in a prospectus supplement are inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in the prospectus supplement. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of the securities described in this prospectus. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sales of securities. To obtain additional information that may be important to you, you should read the exhibits filed by us with the registration statement of which this prospectus is a part or our other filings with the SEC. You should read this prospectus, any applicable prospectus supplement and the additional information described below under “Where You Can Find More Information” before making any investment decision with respect to the securities offered hereby.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus, which is part of the registration statement, omits certain information, exhibits, schedules and undertakings set forth in the registration statement, as permitted by the SEC. For further information pertaining to us and the securities offered in this prospectus, reference is made to that registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents or provisions of any documents referred to in this prospectus are not necessarily complete, and in each instance where a copy of the document has been filed as an exhibit to the registration statement, reference is made to the exhibit for a more complete description of the matters involved.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings can be read and copied at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including us.

Our common stock is listed on The Nasdaq Capital Market under the symbol “ALDX.” General information about our company, including our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as any amendments and exhibits to those reports, are available free of charge through our website at www.aldeyra.com as soon as reasonably practicable after we file them with, or furnish them to, the SEC. Information on, or that can be accessed through, our website is not incorporated into this prospectus or other securities filings and is not a part of these filings.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and later information that we file with the SEC will automatically update and supersede some of this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), including filings made after the date of the initial registration statement, until we sell all of the shares covered by this prospectus or the sale of shares by us pursuant to this prospectus is terminated. In no event, however, will any of the information that we furnish to, pursuant to Item 2.02 or Item 7.01 of any Current Report on Form 8-K (including exhibits related thereto) or other applicable SEC rules, rather than file with, the SEC be incorporated by reference or otherwise be included herein, unless such information is expressly incorporated herein by a reference in such furnished Current Report on Form 8-K or other furnished document. The documents we incorporate by reference are:

- our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on [March 29, 2018](#);
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2018 filed with the SEC on [May 15, 2018](#);
- our Definitive Proxy Statement on [Schedule 14A](#) filed with the SEC on April 25, 2018 (excluding those portions that are not incorporated by reference into our annual report on Form 10-K for the fiscal year ended December 31, 2017);
- our Current Reports on Form 8-K filed on [February 27, 2018](#), [June 8, 2018](#) and [June 26, 2018](#); and
- the description of our common stock contained in our registration statement on Form 8-A (File No. 001-36332) filed under the Exchange Act on [March 4, 2014](#), including any [amendment](#) or reports filed for the purpose of updating such descriptions.

Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide each person to whom a prospectus is delivered a copy of all of the information that has been incorporated by reference in this prospectus but not delivered with the prospectus. You may obtain copies of these filings, at no cost, through the “Investor Relations” section of our website (www.aldeyra.com) and you may request a copy of these filings (other than an exhibit to any filing unless we have specifically incorporated that exhibit by reference into the filing), at no cost, by writing or telephoning us at the following address:

131 Hartwell Avenue, Suite 320
Lexington, MA 02421
(781) 761-4904

Information on, or that can be accessed through, our website is not incorporated into this prospectus or other securities filings and is not a part of these filings.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve risks and uncertainties. The forward-looking statements are contained principally in “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business.” In some cases, you can identify forward-looking statements by terms such as, but not limited to, “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “contemplates,” “predict,” “project,” “target,” “likely,” “potential,” “continue,” “ongoing,” “design,” “might,” “objective,” “will,” “would,” “should,” “could,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements include, but are not limited to:

- 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 clinical trials and 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 for our product candidates and the ability to serve those markets;
- our expectations regarding our expenses and revenue, the sufficiency 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.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Any forward-looking statement made by us in this prospectus speaks only as of the date on which it is made. Except as required by law, we assume no obligation to update these statements publicly, or to update the reasons actual results could differ materially from those anticipated in these statements, even if new information becomes available in the future. We discuss many of these risks in this prospectus in greater detail under the heading “Risk Factors.” Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus. Unless required by United States federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made. You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

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This prospectus includes 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.

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.

In addition, you should refer to the section of this prospectus 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 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.

THE COMPANY

Aldeyra Therapeutics is developing next-generation medicines to improve the lives of patients with immune-mediated diseases. Our lead product candidate, reproxalap, is a first-in-class treatment in late-stage development for dry eye disease and other forms of ocular inflammation. We are leveraging our experience in ocular inflammation to develop other product candidates for systemic inflammatory disease. We intend to commercialize our products directly and through collaborations that expand global reach.

Inflammation is a significant component of many different diseases, including cardiovascular, metabolic, neurological, and musculoskeletal conditions, affecting tens of millions of patients in the United States and hundreds of millions of patients worldwide. Given the complexity of immune dysregulation, which involves many mediators and signaling pathways, rarely is any single therapeutic approach effective, and most inflammatory diseases are inadequately treated. As such, we believe inflammatory diseases represent considerable unmet medical need, and new immune-modulating therapies are therefore in high demand. In aggregate, we believe the potential markets for novel therapeutics that treat inflammation are considerable, representing in excess of \$50 billion in the United States alone.


Our first immune-modulating therapeutic approach is, we believe, mechanistically novel, and is focused on the sequestration of pro-inflammatory aldehyde-containing mediators, which we refer to as RASP (Reactive Aldehyde Species that are Pro-inflammatory). We have developed a family of novel small molecule RASP scavengers, led by our product candidate reproxalap, which has been shown in multiple clinical trials to diminish inflammation. In addition to the RASP scavenger platform, we intend to discover or license other immune-modulating product candidates with novel mechanisms of action. For example, we have in-licensed a clinical-stage product candidate ADX-1612 (investigated in oncology under the name ganetespib), which inhibits Heat Shock Protein 90 (HSP90), a mechanistically differentiated potential approach for treatment of a number of inflammatory diseases.

As a topical ophthalmic solution, reproxalap was developed for the treatment of ocular inflammation, and has now demonstrated statistically and clinically significant improvement across an aggregate of four Phase 2 clinical trials in dry eye disease, allergic conjunctivitis, and noninfectious anterior uveitis. Utilizing our experience in ocular inflammation, we intend to develop other RASP scavengers for systemic immune disease. In addition to our internal product development for systemic inflammatory diseases, we announced in February 2018 a partnership with Janssen, a Johnson & Johnson company, to develop other RASP scavengers for systemic immune-mediated diseases. In the future, we may enter into additional partnerships that facilitate the development and commercialization of our product candidates.

As a topical dermatologic formulation, reproxalap demonstrated activity in improving the dermatologic disease in patients with Sjögren-Larsson Syndrome (SLS), a rare inborn error of metabolism caused by genetic mutations in fatty aldehyde dehydrogenase, leading to accumulation of toxic aldehydes. SLS patients suffer from severe and generally intractable dermatologic and neurological disease. There is no therapy specifically for SLS that has been approved by the United States Food & Drug Administration (FDA), and no therapy is generally effective for the treatment of the skin disorder associated with SLS. As with our inflammation programs, we intend to continue to develop and, if approved by regulatory authorities, commercialize reproxalap for the treatment of the skin disease associated with SLS.

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Our program in dry eye disease has begun Phase 2b clinical testing and, in July 2018, we announced that the last patient completed dosing in the trial. Our programs in noninfectious anterior uveitis, allergic conjunctivitis, and SLS have begun Phase 3 clinical testing. Our systemic inflammation programs for our RASP scavenger platform and ADX-1612 are expected to begin clinical testing in 2019. A novel RASP scavenger is in pre-clinical development for retinal disease. All of our 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, completion, or reporting of clinical trials. Our pipeline is illustrated below.

| Approach | Compound | Indication | Preclinical | Phase 1 | Phase 2 | Phase 3 | Next Expected Milestone |
|-------------------|-------------------------------|------------------------------------|-------------|---------|---------|---|--|
| RASP Inhibitors | Reproxalap Ocular | Dry Eye Disease | | | ✓ | | Phase 2b results H2-2018 |
| | | Allergic Conjunctivitis | | | ✓ ✓ | | Phase 3 results H2-2018 / 2019 |
| | | Noninfectious Anterior Uveitis | | | ✓ | | Phase 3 results 2019 |
| | Reproxalap Dermal | Sjögren-Larsson Syndrome | | | ✓ | | Phase 3, Part 1 results 2019 |
| | ADX-629 Systemic | Autoimmune Disease | | | | | |
| | ADX-103 | Retinal Disease | | | | | |
| Not Disclosed | Systemic Inflammatory Disease | | | | | Research Collaboration  | |
| Hsp90 Inhibitors | ADX-1612 | Lymphoproliferative Immune Disease | | | | | |
| | | Ovarian Cancer | | | | | Investigator Sponsored Trial |
| | | Mesothelioma | | | | | Investigator Sponsored Trial Phase 2 results H2-2018 |
| | ADX-1615 | Autoimmune Disease | | | | | |
| Anti-inflammatory | Not Disclosed | Cancer | | | | | |
| | | Ocular Inflammation | | | | | |

RASP = Reactive Aldehydes Species that are Pro-inflammatory ✓ = Positive Phase 2 clinical data reported in 2016 – 2017

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 development of our product candidates to obtain regulatory approvals for and to manufacture, market, and sell our product candidates.

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. We do not incorporate the information on our website into this prospectus and you should not consider it part of this prospectus.

“Aldeyra Therapeutics” and our design logo are our trademarks. This prospectus may also include other registered and unregistered trademarks of Aldeyra Therapeutics, Inc. and other persons.

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the specific risks discussed or incorporated by reference into this prospectus and the applicable prospectus supplement, together with all the other information contained in this prospectus and the applicable prospectus supplement or incorporated by reference into this prospectus and the applicable prospectus supplement, including the risks, uncertainties and assumptions discussed under the caption “Risk Factors” in documents we file from time to time with the SEC, specifically our most recent Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and in subsequent filings. These risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future or by a prospectus supplement relating to a particular offering of our securities. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment.

Risks Related to the 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 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;
- 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;

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- 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.

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 reproxalap 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. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

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 (Nasdaq), 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 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

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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, including the proceeds we receive in this offering, in ways that you and other stockholders may not approve.

Our management will have broad discretion in the application of our cash and cash equivalents, including the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. Because of the number and variability of factors that will determine our use of our cash and cash equivalents, management's ultimate use of cash and cash equivalents may vary substantially from the 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 reproxalap and our other product candidates, development of other molecules that relate to immune-mediated disease, service our debt obligations 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.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by the investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

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 June 30, 2018, our executive officers, directors and greater than 5% stockholders, in the aggregate, own approximately 42% 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.

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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, the provisions 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 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 the value of our common stock. 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 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. Existing stockholder sales might also make it more difficult for us to sell additional equity securities at a time and price that we deem appropriate.

We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding nonbinding advisory votes on executive compensation, and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until December 31, 2019, although circumstances could cause us to lose that status earlier, including: if we become a large accelerated filer; if we have total annual gross revenue of \$1.07 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31; or, if we issue more than \$1.0 billion in non-convertible debt during any three year period before that time, we would cease to be an emerging growth company immediately. Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on emerging growth company exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

We are incurring significant increased costs and demands upon management as a result of operating as a public company.

As a public company, we are incurring significant legal, accounting, and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which require, among other things, that we file with the Securities and Exchange Commission, or the SEC, annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and The Nasdaq Capital Market to implement provisions of the Sarbanes-Oxley Act, imposes significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as “say on pay” and proxy access. Recent legislation permits smaller “emerging growth companies” to implement many of these requirements over a longer period up to five years from our Initial Public Offering. We intend to continue to take advantage of this new legislation, but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned, incurring unexpected expenses. Stockholder activism, the current political environment, and the current high level of government intervention and regulatory reform may result in substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to continue to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If public company rules and regulations divert the attention of our management and personnel from other business concerns, our business, financial condition, and results of operations could be adversely affected. Increased costs associated with public company expenses will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, public company rules and regulations make it more difficult and more expensive for us to obtain director and officer

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liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements, the impact of which could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees, or as executive officers.

If we fail to maintain proper and effective internal control over financial reporting in the future, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, investors' views of us and, as a result, the value of our common stock.

Pursuant to Section 404 of the Sarbanes-Oxley Act, our management is required to report upon the effectiveness of our internal control over financial reporting. When and if we are a "large accelerated filer" or an "accelerated filer" and are no longer an "emerging growth company," each as defined in the Exchange Act, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal controls over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing, and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we will be required to upgrade our systems including information technology; implement additional financial and management controls, reporting systems, and procedures; and hire additional accounting and finance staff.

Historically, we have not had sufficient accounting and supervisory personnel with the appropriate level of technical accounting experience and training necessary, or adequate formally documented accounting policies and procedures to support, effective internal controls. As we grow, we will hire additional personnel and engage in external temporary resources and may implement, document, and modify policies and procedures to maintain effective internal controls. However, we may identify deficiencies and weaknesses or fail to remediate previously identified deficiencies in our internal controls. If material weaknesses or deficiencies in our internal controls exist and go undetected or unremediated, our financial statements could contain material misstatements that, when discovered in the future, could cause us to fail to meet our future reporting obligations and cause the price of our common stock to decline.

If securities or industry analysts do not publish research or reports or publish unfavorable research or reports about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us, our business, our market, or our competitors. We currently have limited research coverage by securities and industry analysts. If other securities or industry analysts do not commence coverage of our company, the trading price for our stock could be negatively impacted. If one or more of the analysts who covers us downgrades our stock, our stock price would likely decline. If one or more of these analysts ceases to cover us or fails to regularly publish reports on us, interest in our stock could decrease, which could cause our stock price or trading volume to decline.

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. The risk of securities class action litigation is especially relevant for us because biotechnology and 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 biotechnology industry over the last few years. We may be particularly vulnerable to activist stockholders due to the highly concentrated ownership of our common stock. 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.

DESCRIPTION OF SECURITIES

PREFERRED STOCK

We currently have authorized 15,000,000 shares of preferred stock, par value \$0.001, the rights and preferences of which may be established from time to time by our board of directors.

Under Delaware law and our amended and restated certificate of incorporation, our board of directors is authorized, without stockholder approval, to issue shares of preferred stock from time to time in one or more series. Subject to limitations prescribed by Delaware law and our amended and restated certificate of incorporation and bylaws, the board of directors can determine the number of shares constituting each series of preferred stock and the designation, preferences, voting powers, qualifications, and special or relative rights or privileges of that series. These may include provisions concerning voting, redemption, dividends, dissolution or the distribution of assets, conversion or exchange, and other subjects or matters as may be fixed by resolution of our board of directors or an authorized committee of the board. Any preferred stock offered by this prospectus will, when issued, be fully paid and nonassessable.

Our board of directors could authorize the issuance of shares of preferred stock with terms and conditions which could have the effect of discouraging a takeover or other transaction which holders of some, or a majority, of our common stock might believe to be in their best interests or in which holders of some, or a majority, of our common stock might receive a premium for their shares over the then market price of those shares.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share, and the purchase price;
- the dividend rate(s), period(s), and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;

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- the provisions for a sinking fund, if any;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution, or winding up of the affairs of Aldeyra; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution, or winding up of Aldeyra.

Transfer Agent and Registrar. The transfer agent and registrar for any series or class of preferred stock will be set forth in the applicable prospectus supplement.

COMMON STOCK

We currently have authorized 150,000,000 shares of common stock, par value \$0.001 per share. As of June 30, 2018, there were 20,842,199 shares of common stock outstanding held of record by 10 stockholders.

The following summary of the terms of our common stock is subject to and qualified in its entirety by reference to our amended and restated certificate of incorporation and bylaws, copies of which are on file with the SEC as exhibits to previous SEC filings. Please refer to the section entitled “Where You Can Find More Information” for directions on obtaining these documents.

Voting Rights. Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of the stockholders, including the election of directors. Except as otherwise provided by law or our restated certificate of incorporation or bylaws, all matters other than the election of directors submitted to the stockholders at any meeting shall be decided by the affirmative vote of a majority of the outstanding shares of common stock present in person or represented by proxy at the meeting and entitled to vote thereon. Directors are elected by a plurality of the votes cast at the meeting. Our restated certificate of incorporation and amended and restated bylaws do not provide for cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends. Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation. In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Other Rights and Preferences. Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

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Fully Paid and Nonassessable. All of our outstanding shares of common stock are fully paid and nonassessable.

Anti-Takeover Effects of Our Amended and Restated Certificate of Incorporation, Bylaws and Delaware Law. Some provisions of Delaware law and our amended and restated certificate of incorporation and bylaws could make the following transactions more difficult: our acquisition by means of a tender offer; our acquisition by means of a proxy contest or otherwise; or removal of our incumbent officers and directors.

Section 203 of the Delaware General Corporation Law is applicable to takeovers of Delaware corporations. Subject to exceptions enumerated in Section 203, Section 203 provides that a corporation shall not engage in any business combination with any “interested stockholder” for a three-year period following the date that the stockholder becomes an interested stockholder unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, though some shares may be excluded from the calculation; and
- on or subsequent to that date, the business combination is approved by the board of directors of the corporation and by the affirmative votes of holders of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Except as specified in Section 203, an interested stockholder is generally defined to include any person who, together with any affiliates or associates of that person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation, any time within three years immediately prior to the relevant date. Under certain circumstances, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with a corporation for a three-year period, although the stockholders may elect not to be governed by this section, by adopting an amendment to the certificate of incorporation or bylaws, effective 12 months after adoption. Our amended and restated certificate of incorporation and bylaws do not opt out from the restrictions imposed under Section 203. We anticipate that the provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with our board of directors because the stockholder approval requirement would be avoided if a majority of the directors then in office excluding an interested stockholder approve either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder. These provisions may have the effect of deterring hostile takeovers or delaying changes in control, which could depress the market price of our common stock and deprive stockholders of opportunities to realize a premium on shares of common stock held by them.

In addition to our board of directors’ ability to issue shares of preferred stock, our amended and restated certificate of incorporation and bylaws contain provisions that may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. Our amended and restated certificate of incorporation and bylaws:

- authorize the issuance of “blank check” preferred stock that could be issued by our board of directors to thwart a takeover attempt;
- do not provide for cumulative voting in the election of directors, which would allow holders of less than a majority of the stock to elect some directors;
- establish a classified board of directors, as a result of which the successors to the directors whose terms have expired will be elected to serve from the time of election and qualification until the third annual meeting following their election;
- require that directors only be removed from office for cause;
- provide that vacancies on the board of directors, including newly-created directorships, may be filled only by a majority vote of directors then in office;

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- limit who may call special meetings of stockholders;
- prohibit stockholder action by written consent, requiring all actions to be taken at a meeting of the stockholders; and
- establish advance notice requirements for nominating candidates for election to the board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

Transfer Agent and Registrar. The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

Listing. Our common stock is listed on The Nasdaq Capital Market under the symbol “ALDX.”

DEBT SECURITIES

We may issue, from time to time, debt securities in one or more series that will consist of either senior debt or subordinated debt under one or more trust indentures to be executed by us and a specified trustee. The terms of the debt securities will include those stated in the indenture and those made a part of the indenture (before any supplements) by reference to the Trust Indenture Act of 1939. The indentures will be qualified under the Trust Indenture Act. Debt securities, whether senior or subordinated, may be issued as convertible debt securities or exchangeable debt securities.

The following description sets forth certain anticipated general terms and provisions of the debt securities to which any prospectus supplement may relate. The particular terms of the debt securities offered by any prospectus supplement (which terms may be different than those stated below) and the extent, if any, to which such general provisions may apply to the debt securities so offered will be described in the prospectus supplement relating to such debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, investors should review both the prospectus supplement relating thereto and the following description. Forms of the senior indenture (as discussed herein) and the subordinated indenture (as discussed herein) are included as exhibits to the registration statement of which this prospectus is a part.

General

The debt securities will be our direct obligations and may be either senior debt securities or subordinated debt securities. The indebtedness represented by subordinated securities will be subordinated in right of payment to the prior payment in full of our senior debt (as defined in the applicable indenture). Senior securities and subordinated securities will be issued pursuant to separate indentures (respectively, a senior indenture and a subordinated indenture), in each case between us and a trustee.

Except as set forth in the applicable indenture and described in a prospectus supplement relating thereto, the debt securities may be issued without limit as to aggregate principal amount, in one or more series, secured or unsecured, in each case as established from time to time in or pursuant to authority granted by a resolution of our board of directors or as established in the applicable indenture. All debt securities of one series need not be issued at the time and, unless otherwise provided, a series may be reopened, without the consent of the holders of the debt securities of such series, for issuance of additional debt securities of such series. The applicable indenture may provide that we may issue debt securities in any currency or currency unit designated by us. Except for any limitations on consolidation, merger and sale of all or substantially all of our assets that may be contained in the applicable indenture, the terms of such indenture will not contain any covenants or other provisions designed to afford holders of any debt securities protection with respect to our operations, financial condition or transactions involving us.

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The prospectus supplement relating to any series of debt securities being offered will contain the specific terms thereof, including, without limitation:

- the title of such debt securities and whether such debt securities are senior securities or subordinated securities and the terms of any such subordination;
- the aggregate principal amount of such debt securities and any limit on such aggregate principal amount;
- the percentage of the principal amount at which such debt securities will be issued and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or (if applicable) the portion of the principal amount of such debt securities which is convertible into common stock or preferred stock, or the method by which any such portion shall be determined;
- the date or dates, or the method for determining the date or dates, on which the principal of such debt securities will be payable;
- the rate or rates (which may be fixed or variable), or the method by which the rate or rates shall be determined, at which such debt securities will bear interest, if any;
- the date or dates, or the method for determining such date or dates, from which any interest will accrue, the interest payment dates on which any such interest will be payable, the regular record dates for such interest payment dates, or the method by which any such date shall be determined, the person to whom such interest shall be payable, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months;
- the right, if any, to extend the interest payment periods and the duration of the extensions;
- the place or places where the principal of (and premium, if any) and interest, if any, on such debt securities will be payable, such debt securities may be surrendered for conversion or registration of transfer or exchange and notices or demands to or upon us in respect of such debt securities and the applicable indenture may be served;
- the period or periods within which, the price or prices at which and the terms and conditions upon which such debt securities may be redeemed, as a whole or in part, at our option, if we have such an option;
- our obligation, if any, to redeem, repay or purchase such debt securities pursuant to any sinking fund or analogous provision or at the option of a holder thereof, and the period or periods within which, the price or prices at which and the terms and conditions upon which such debt securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;
- if other than U.S. dollars, the currency or currencies in which such debt securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, and the terms and conditions relating thereto;
- whether the amount of payments of principal of (and premium, if any) or interest, if any, on such debt securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on a currency, currencies, currency unit or units or composite currencies) and the manner in which such amounts shall be determined;
- any additions to, modifications of or deletions from the terms of such debt securities with respect to the events of default or covenants set forth in the indenture;
- any provisions for collateral security for repayment of such debt securities;
- whether such debt securities will be issued in certificated and/or book-entry form;
- whether such debt securities will be in registered or bearer form and, if in registered form, the denominations thereof if other than \$1,000 and any integral multiple thereof and, if in bearer form, the denominations thereof and terms and conditions relating thereto;
- whether issued in the form of one or more global securities and whether all or a portion of the principal amount of the debt securities is represented thereby;

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- if other than the entire principal amount of the debt securities when issued, the portion of the principal amount payable upon acceleration of maturity, and the terms and conditions of any acceleration;
- if applicable, covenants affording holders of debt protection with respect to our operations, financial condition or transactions involving us;
- the applicability, if any, of defeasance and covenant defeasance provisions of the applicable indenture;
- the terms, if any, upon which such debt securities may be convertible into our common stock or preferred stock and the terms and conditions upon which such conversion will be effected, including, without limitation, the initial conversion price or rate and the conversion period;
- if applicable, any limitations on the ownership or transferability of the common stock or preferred stock into which such debt securities are convertible;
- whether and under what circumstances we will pay additional amounts as contemplated in the indenture on such debt securities in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem such debt securities in lieu of making such payment; and
- any other material terms of such debt securities.

The debt securities may provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity thereof. Special federal income tax, accounting and other considerations applicable to these original issue discount securities will be described in the applicable prospectus supplement. The applicable prospectus supplement will set forth material U.S. federal income tax considerations for holders of any debt securities and the securities exchange or quotation system on which any debt securities are listed or quoted, if any.

The applicable indenture may contain provisions that would limit our ability to incur indebtedness or that would afford holders of debt securities protection in the event of a highly leveraged or similar transaction involving us or in the event of a change of control.

Senior Debt Securities

Payment of the principal of premium, if any, and interest on senior debt securities will rank on parity with all of our other senior unsecured and unsubordinated debt.

Subordinated Debt Securities

Payment of the principal of, premium, if any, and interest on subordinated debt securities will be subordinated and junior in right of payment to the prior payment in full of all of our senior debt. We will set forth in the applicable prospectus supplement relating to any subordinated debt securities the subordination terms of such securities as well as the aggregate amount of outstanding indebtedness, as of the most recent practicable date, that by its terms would be senior to the subordinated debt securities. We will also set forth in such prospectus supplement limitations, if any, on issuance of additional senior debt.

Merger, Consolidation or Sale

The applicable indenture will provide that we may consolidate with, or sell, lease or convey all or substantially all of our assets to, or merge with or into, any other corporation, provided that:

- either we shall be the continuing corporation, or the successor corporation (if other than the Company) formed by or resulting from any such consolidation or merger or which shall have received the transfer of such assets shall expressly assume payment of the principal of (and premium, if any), and interest on, all of the applicable debt securities and the due and punctual performance and observance of all of the covenants and conditions contained in the applicable indenture;
- immediately after giving effect to such transaction and treating any indebtedness which becomes our obligation or an obligation of one of our subsidiaries as a result thereof as having been incurred by us

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or such subsidiary at the time of such transaction, no event of default under the applicable indenture, and no event which, after notice or the lapse of time, or both, would become such an event of default, shall have occurred and be continuing; and

- an officer's certificate and legal opinion covering such conditions shall be delivered to the applicable trustee.

Covenants

The applicable indenture will contain covenants requiring us to take certain actions and prohibiting us from taking certain actions. The covenants with respect to any series of debt securities will be described in the prospectus supplement relating thereto.

Events of Default, Notice and Waiver

Each indenture will describe specific "events of default" with respect to any series of debt securities issued thereunder. Such "events of default" are likely to include (with grace and cure periods):

- default in the payment of any installment of interest on any debt security of such series;
- default in the payment of principal of (or premium, if any, on) any debt security of such series at its maturity or upon any redemption, by declaration or otherwise;
- default in making any required sinking fund payment for any debt security of such series;
- default in the performance or breach of any other covenant or warranty of the Company contained in the applicable indenture (other than a covenant added to the indenture solely for the benefit of a series of debt securities issued thereunder other than such series), continued for a specified period of days after written notice as provided in the applicable indenture;
- default in the payment of specified amounts of indebtedness of the Company or any mortgage, indenture or other instrument under which such indebtedness is issued or by which such indebtedness is secured, such default having occurred after the expiration of any applicable grace period and having resulted in the acceleration of the maturity of such indebtedness, but only if such indebtedness is not discharged or such acceleration is not rescinded or annulled;
- certain events of bankruptcy, insolvency or reorganization, or court appointment of a receiver, liquidator or trustee of the Company or any of our significant subsidiaries or their property; and
- any other event of default provided in the applicable resolution of our board of directors or the supplemental indenture under which we issue series of debt securities.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the indenture. Unless otherwise indicated in the applicable prospectus supplement, if an event of default under any indenture with respect to debt securities of any series at the time outstanding occurs and is continuing, then the applicable trustee or the holders of not less than a majority of the principal amount of the outstanding debt securities of that series may declare the principal amount (or, if the debt securities of that series are original issue discount securities or indexed securities, such portion of the principal amounts may be specified in the terms thereof) of all the debt securities of that series to be due and payable immediately by written notice thereof to us (and to the applicable trustee if given by the holders). However, at any time after such a declaration of acceleration with respect to debt securities of such series (or of all debt securities then outstanding under any indenture, as the case may be) has been made, but before a judgment or decree for payment of the money due has been obtained by the applicable trustee, the holders of not less than a majority in principal amount of outstanding debt securities of such series (or of all debt securities then outstanding under the applicable indenture, as the case may be) may rescind and annul such declaration and its consequences if:

- we shall have deposited with the applicable trustee all required payments of the principal of (and premium, if any) and interest on the debt securities of such series (or of all debt securities then outstanding under the applicable indenture, as the case may be), plus certain fees, expenses, disbursements and advances of the applicable trustee; and

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- all events of default, other than the non-payment of accelerated principal (or specified portion thereof), with respect to debt securities of such series (or of all debt securities then outstanding under the applicable indenture, as the case may be) have been cured or waived as provided in such indenture.

If an event of default relating to events of bankruptcy, insolvency or reorganization of the Company occurs and is continuing, then the principal amount of all of the debt securities outstanding, and any accrued interest, will automatically become due and payable immediately, without any declaration or other act by the trustee or any holder.

Each indenture also will provide that the holders of not less than a majority in principal amount of the outstanding debt securities of any series (or of all debt securities then outstanding under the applicable indenture, as the case may be) may waive any past default with respect to such series and its consequences, except a default:

- in the payment of the principal of (or premium, if any) or interest on any debt security of such series; or
- in respect of a covenant or provision contained in the applicable indenture that cannot be modified or amended without the consent of the holder of each outstanding debt security affected thereby.

Each trustee will be required to give notice to the holders of debt securities within 90 days of a default under the applicable indenture unless such default shall have been cured or waived; provided, however, that such trustee may withhold notice to the holders of any series of debt securities of any default with respect to such series (except a default in the payment of the principal of (or premium, if any) or interest on any debt security of such series or in the payment of any sinking fund installment in respect of any debt security of such series) if specified responsible officers of such trustee consider such withholding to be in the interest of such holders.

Each indenture will provide that no holders of debt securities of any series may institute any proceedings, judicial or otherwise, with respect to such indenture or for any remedy thereunder, except in the case of failure of the applicable trustee, for 60 days, to act after it has received a written request to institute proceedings in respect of an event of default from the holders of not less than 25% in principal amount of the outstanding debt securities of such series, as well as an offer of indemnity reasonably satisfactory to it. This provision will not prevent, however, any holder of debt securities from instituting suit for the enforcement of payment of the principal of (and premium, if any) and interest on such debt securities at the respective due dates thereof.

Each indenture provides that in case an event of default shall occur and be known to any trustee and not be cured, the trustee must use the same degree of care as a prudent person would use in the conduct of his or her own affairs in the exercise of the trustee's power. Subject to provisions in each indenture relating to its duties in case of default, no trustee will be under any obligation to exercise any of its rights or powers under an indenture at the request or direction of any holders of any series of debt securities then outstanding under such indenture, unless such holders shall have offered to the trustee thereunder reasonable security or indemnity. The holders of not less than a majority in principal amount of the outstanding debt securities of any series (or of all debt securities then outstanding under an indenture, as the case may be) shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the applicable trustee, or of exercising any trust or power conferred upon such trustee. However, a trustee may refuse to follow any direction which is in conflict with any law or the applicable indenture, which may involve such trustee in personal liability or which may be unduly prejudicial to the holders of debt securities of such series not joining therein.

Within 120 days after the close of each fiscal year, we will be required to deliver to each trustee a certificate, signed by one of several specified officers, stating whether or not such officer has knowledge of any default under the applicable indenture and, if so, specifying each such default and the nature and status thereof.

Modification of the Indenture

Each indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities to:

- secure any debt securities;
- evidence the assumption by a successor corporation of our obligations;
- add covenants for the protection of the holders of debt securities;
- cure any ambiguity or correct any inconsistency in the indenture;
- establish the forms or terms of debt securities of any series; and
- evidence and provide for the acceptance of appointment by a successor trustee.

It is anticipated that modifications and amendments of an indenture may be made by us and the trustee, with the consent of the holders of not less than a majority in principal amount of each series of the outstanding debt securities issued under the indenture that are affected by the modification or amendment, provided that no such modification or amendment may, without the consent of each holder of such debt securities affected thereby:

- change the stated maturity date of the principal of (or premium, if any) or any installment of interest, if any, on any such debt security;
- reduce the principal amount of (or premium, if any) or the interest, if any, on any such debt security or the principal amount due upon acceleration of an original issue discount security;
- change the time or place or currency of payment of principal of (or premium, if any) or interest, if any, on any such debt security;
- impair the right to institute suit for the enforcement of any such payment on or with respect to any such debt security;
- reduce any amount payable on redemption;
- modify any of the subordination provisions or the definition of senior indebtedness applicable to any subordinated debt securities in a manner adverse to the holders of those securities;
- reduce the above-stated percentage of holders of debt securities necessary to modify or amend the indenture; or
- modify the foregoing requirements or reduce the percentage of outstanding debt securities necessary to waive compliance with certain provisions of the indenture or for waiver of certain defaults.

A record date may be set for any act of the holders with respect to consenting to any amendment. The holders of not less than a majority in principal amount of outstanding debt securities of each series affected thereby will have the right to waive our compliance with certain covenants in such indenture. Each indenture will contain provisions for convening meetings of the holders of debt securities of a series to take permitted action.

A prospectus supplement may set forth modifications or additions to these provisions with respect to a particular series of debt securities.

Conversion or Exchange Rights

A prospectus supplement will describe the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock, preferred stock or other securities. These terms will also include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. Such provisions will also include the conversion or exchange price (or manner or calculation thereof), the conversion or exchange period, the events requiring an adjustment of the conversion or exchange price, and provisions affecting conversion or exchange in the event of the redemption of such series of debt securities.

Registered Global Securities

We may issue the debt securities of a series in whole or in part in the form of one or more fully registered global securities that we will deposit with a depositary or with a nominee for a depositary identified in the applicable prospectus supplement and registered in the name of such depositary or nominee. In such case, we will issue one or more registered global securities denominated in an amount equal to the aggregate principal amount of all of the debt securities of the series to be issued and represented by such registered global security or securities.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a registered global security may not be transferred except as a whole:

- by the depositary for such registered global security to its nominee;
- by a nominee of the depositary to the depositary or another nominee of the depositary; or
- by the depositary or its nominee to a successor of the depositary or a nominee of the successor.

The prospectus supplement relating to a series of debt securities will describe the specific terms of the depositary arrangement with respect to any portion of such series represented by a registered global security. We anticipate that the following provisions will apply to all depositary arrangements for debt securities:

- ownership of beneficial interests in a registered global security will be limited to persons that have accounts with the depositary for the registered global security, those persons being referred to as “participants,” or persons that may hold interests through participants;
- upon the issuance of a registered global security, the depositary for the registered global security will credit, on its book-entry registration and transfer system, the participants’ accounts with the respective principal amounts of the debt securities represented by the registered global security beneficially owned by the participants;
- any dealers, underwriters, or agents participating in the distribution of the debt securities will designate the accounts to be credited; and
- ownership of any beneficial interest in the registered global security will be shown on, and the transfer of any ownership interest will be effected only through, records maintained by the depositary for the registered global security (with respect to interests of participants) and on the records of participants (with respect to interests of persons holding through participants).

The laws of some states may require that certain purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary for a registered global security, or its nominee, is the registered owner of the registered global security, the depositary or the nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the indenture. Except as set forth below, owners of beneficial interests in a registered global security:

- will not be entitled to have the debt securities represented by a registered global security registered in their names;
- will not receive or be entitled to receive physical delivery of the debt securities in the definitive form; and
- will not be considered the owners or holders of the debt securities under the indenture.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for the registered global security and, if the person is not a participant, on the procedures of a participant through which the person owns its interest, to exercise any rights of a holder under the indenture.

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We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take the action, and those participants would authorize beneficial owners owning through those participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal and premium, if any, and interest, if any, on debt securities represented by a registered global security registered in the name of a depositary or its nominee to the depositary or its nominee, as the case may be, as the registered owners of the registered global security. None of the Company, the trustee or any other agent of the Company or the trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to the beneficial ownership interests.

We expect that the depositary for any debt securities represented by a registered global security, upon receipt of any payments of principal and premium, if any, and interest, if any, in respect of the registered global security, will immediately credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the registered global security as shown on the records of the depositary. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in the registered global security held through the participants, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name." We also expect that any of these payments will be the responsibility of the participants.

If the depositary for any debt securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act, we will appoint an eligible successor depositary. If we fail to appoint an eligible successor depositary within 90 days, we will issue the debt securities in definitive form in exchange for the registered global security. In addition, we may at any time and in our sole discretion decide not to have any of the debt securities of a series represented by one or more registered global securities. In such event, we will issue debt securities of that series in a definitive form in exchange for all of the registered global securities representing the debt securities. The trustee will register any debt securities issued in definitive form in exchange for a registered global security in such name or names as the depositary, based upon instructions from its participants, shall instruct the trustee.

We may also issue bearer debt securities of a series in the form of one or more global securities, referred to as "bearer global securities." We will deposit these bearer global securities with a common depositary for Euroclear System and Clearstream Bank Luxembourg, Societe Anonyme, or with a nominee for the depositary identified in the prospectus supplement relating to that series. The prospectus supplement relating to a series of debt securities represented by a bearer global security will describe the specific terms and procedures, including the specific terms of the depositary arrangement and any specific procedures for the issuance of debt securities in definitive form in exchange for a bearer global security, with respect to the position of the series represented by a bearer global security.

Discharge, Defeasance and Covenant Defeasance

We can discharge or defease our obligations under the indenture as set forth below. Unless otherwise set forth in the applicable prospectus supplement, the subordination provisions applicable to any subordinated debt securities will be expressly subject to the discharge and defeasance provisions of the indenture.

We may discharge some of our obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable within one year (or are scheduled for redemption within one year). We may effect a discharge by irrevocably depositing with the trustee cash or U.S. government obligations, as trust funds, in an amount certified to be sufficient to pay when due, whether at maturity, upon redemption or otherwise, the principal of, premium, if any, and interest on the debt securities and any mandatory sinking fund payments.

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Unless otherwise provided in the applicable prospectus supplement, we may also discharge any and all of our obligations to holders of any series of debt securities at any time (“defeasance”). We also may be released from the obligations imposed by any covenants of any outstanding series of debt securities and provisions of the indenture, and we may omit to comply with those covenants without creating an event of default (“covenant defeasance”). We may effect defeasance and covenant defeasance only if, among other things:

- we irrevocably deposit with the trustee cash or U.S. government obligations, as trust funds, in an amount certified to be sufficient to pay at maturity (or upon redemption) the principal, premium, if any, and interest on all outstanding debt securities of the series; and
- we deliver to the trustee an opinion of counsel from a nationally recognized law firm to the effect that the holders of the series of debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance or covenant defeasance and that defeasance or covenant defeasance will not otherwise alter the holders’ U.S. federal income tax treatment of principal, premium, if any, and interest payments on the series of debt securities, which opinion, in the case of legal defeasance, must be based on a ruling of the Internal Revenue Service issued, or a change in U.S. federal income tax law.

Although we may discharge or defease our obligations under the indenture as described in the two preceding paragraphs, we may not avoid, among other things, our duty to register the transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

Redemption of Securities

Debt securities may also be subject to optional or mandatory redemption on terms and conditions described in the applicable prospectus supplement.

From and after notice has been given as provided in the applicable indenture, if funds for the redemption of any debt securities called for redemption shall have been made available on such redemption date, such debt securities will cease to bear interest on the date fixed for such redemption specified in such notice, and the only right of the holders of the debt securities will be to receive payment of the redemption price.

Notices

Holders of our debt securities will receive notices by mail at their addresses as they appear in the security register.

Title

We may treat the person in whose name a debt security is registered on the applicable record date as the owner of the debt security for all purposes, whether or not it is overdue.

Governing Law

Unless otherwise set forth in the applicable prospectus supplement, New York law will govern the indentures and the debt securities, without regard to its conflicts of law principles.

Concerning the Trustee

Each indenture provides that there may be more than one trustee under the indenture, each with respect to one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under the indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only with respect to the one or more series of debt

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securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed with respect to one or more series of debt securities. All payments of principal of, premium, if any, and interest on, and all registration, transfer, exchange, authentication and delivery (including authentication and delivery on original issuance of the debt securities) of, the debt securities of a series will be effected by the trustee with respect to that series at an office designated by the trustee in New York, New York.

Each indenture contains limitations on the right of the trustee, should it become a creditor of the Company, to obtain payment of claims in some cases or to realize on certain property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions. If it acquires any conflicting interest relating to any duties with respect to the debt securities, however, it must eliminate the conflict or resign as trustee.

WARRANTS

We may issue warrants for the purchase of debt securities, preferred stock, common stock, or any combination thereof. We may issue warrants independently or together with any other securities offered by any prospectus supplement and may be attached to or separate from the other offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into by us with a warrant agent. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. Further terms of the warrants and the applicable warrant agreements will be set forth in the applicable prospectus supplement.

The applicable prospectus supplement relating to any particular issue of warrants will describe the terms of the warrants, including, as applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, terms and number of shares of preferred stock or common stock or principal amount of debt securities purchasable upon exercise of the warrants;
- the designation and terms of the offered securities, if any, with which the warrants are issued and the number of the warrants issued with each offered security;
- the date, if any, on and after which the warrants and the related debt securities, preferred stock or common stock will be separately transferable;
- the price at which each share of preferred stock, common stock or underlying debt securities purchasable upon exercise of the warrants may be purchased or the manner of determining such price;
- the date on which the right to exercise the warrants shall commence and the date on which that right shall expire;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- a discussion of certain federal income tax considerations; and
- any other material terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

We and the warrant agent may amend or supplement the warrant agreement for a series of warrants without the consent of the holders of the warrants issued thereunder to effect changes that are not inconsistent with the provisions of the warrants and that do not materially and adversely affect the interests of the holders of the warrants.

USE OF PROCEEDS

We intend to use the net proceeds from this offering, together with such existing cash resources, for the continued development of reproxalap and our other product candidates 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.

RATIO OF FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS

Our ratio of combined fixed charges and preference dividends to earnings for each of the five most recently completed fiscal years and any required interim periods will each be specified in a prospectus supplement or in a document that we file with the SEC and incorporate by reference pertaining to the issuance, if any, by us of preference securities in the future.

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.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus in any of three ways (or in any combination):

- to or through underwriters or dealers;
- directly to a limited number of purchasers or to a single purchaser; or
- through agents.

We may also sell equity securities covered by this registration statement in an “at the market offering” as defined in Rule 415 under the Securities Act. Such offering may be made into an existing trading market for such securities in transactions at other than a fixed price, either:

- on or through the facilities of The Nasdaq Capital Market or any other securities exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- to or through a market maker otherwise than on The Nasdaq Capital Market or such other securities exchanges or quotation or trading services.

Such at-the-market offerings, if any, may be conducted by underwriters acting as principal or agent.

Each time we offer and sell securities, we will provide a prospectus supplement that will set forth the terms of the offering of the securities covered by this prospectus, including:

- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities;
- any underwriting discounts or commissions or agency fees and other items constituting underwriters’ or agents’ compensation;
- the public offering price of the securities;
- any discounts, commissions or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time or dealers may offer and sell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. If underwriters or dealers are used in the sale of any securities, the securities will be acquired by such underwriters or dealers for their own account and may be resold from time to time in one or more transactions described above. We may offer the securities to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters or dealers. Subject to certain conditions, the underwriters or dealers will be obligated to purchase all the securities of the series offered by the prospectus supplement. We will describe the nature of any such relationship in the prospectus supplement, naming the underwriter or dealer.

We may use underwriters with whom we have a material relationship. We may sell the securities through agents from time to time. The prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions we pay to them. Unless the prospectus supplement states otherwise, any agent will be acting on a best efforts basis for the period of its appointment.

We may authorize underwriters, dealers or agents to solicit offers by certain purchasers to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The prospectus supplement will set forth the conditions to these contracts and any commissions we pay for solicitation of these contracts.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Boston, Massachusetts.

EXPERTS

The financial statements as of December 31, 2017 and 2016 and for each of the two years in the period ended December 31, 2017 incorporated by reference in this Prospectus, constituting a part of the Registration Statement on Form S-3 have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

Shares



Common Stock

PROSPECTUS SUPPLEMENT

Joint Book-Running Managers

Jefferies

SVB Leerink

, 2021
