Adamas Pharmaceuticals Inc
Form 424B5
May 11, 2017

Use these links to rapidly review the document
TABLE OF CONTENTS
TABLE OF CONTENTS

Table of Contents

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-214409

PROSPECTUS SUPPLEMENT **(To Prospectus dated November 21, 2016)**

$50,000,000

Common Stock

We have entered into a sales agreement with Cowen and Company, LLC, or Cowen, relating to shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to $50,000,000 from time to time through Cowen acting as our agent.

Our common stock is listed on the NASDAQ Global Market under the symbol "ADMS." On May 10, 2017, the last reported sale price of our common stock was $17.09 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus will be made in sales deemed to be "at the market offerings" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act. Cowen is not required to sell any specific amount of securities, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cowen and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Cowen for sales of common stock sold pursuant to the sales agreement will be an amount up to 3% of the gross proceeds of any shares of common stock sold under the sales agreement. In connection with the sale of the common stock on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cowen will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cowen with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended.

Our business and an investment in our common stock involve significant risks. These risks are described under the caption "Risk Factors" beginning on page S-6 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement.

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

Cowen and Company

The date of this prospectus supplement is May 11, 2017.

Table of Contents

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT

ABOUT THIS PROSPECTUS SUPPLEMENT	S-i
PROSPECTUS SUPPLEMENT SUMMARY	S-1
RISK FACTORS	S-6
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	S-8
USE OF PROCEEDS	S-9
DILUTION	S-10
PLAN OF DISTRIBUTION	S-11
LEGAL MATTERS	S-12
EXPERTS	S-12
WHERE YOU CAN FIND ADDITIONAL INFORMATION	S-12
INCORPORATION BY CERTAIN INFORMATION BY REFERENCE	S-12

PROSPECTUS

ABOUT THIS PROSPECTUS	i
PROSPECTUS SUMMARY	1
RISK FACTORS	6
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	6
USE OF PROCEEDS	7
DESCRIPTION OF CAPITAL STOCK	7
DESIGNATED STOCKHOLDERS	11
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
EXPERTS	14
WHERE YOU CAN FIND ADDITIONAL INFORMATION	14
INCORPORATION BY CERTAIN INFORMATION BY REFERENCE	14

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a registration statement that we have filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under the shelf registration process, we may offer shares of our common stock having an aggregate offering price of up to $200,000,000 under the accompanying prospectus. Under this prospectus supplement we may offer shares of our common stock having an aggregate offering price of up to $50,000,000 from time to time at prices and on terms to be determined by market conditions at the time of offering.

We provide information to you about this offering of shares of our common stock in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying prospectus, which provides general information, some of which may not apply to this offering. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in this prospectus supplement and the accompanying prospectus the statement in the document having

Table of Contents

the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and Cowen and Company, LLC, or Cowen, has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and Cowen is not, making an offer to sell or soliciting an offer to buy our securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement and the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we may authorize for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus supplement entitled "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference."

This prospectus supplement and the accompanying prospectus contain and incorporate by reference market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus supplement and the accompanying prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in this prospectus supplement and the accompanying prospectus and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus. Accordingly, investors should not place undue reliance on this information.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere in this prospectus supplement, the accompanying prospectus, or incorporated by reference in this prospectus supplement and the accompanying prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus supplement, the accompanying prospectus, and any related free writing prospectus, including the risks of investing in our securities discussed under the heading "Risk Factors" contained in this prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus. You should also carefully read the information incorporated by reference into this prospectus supplement and the accompanying prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus supplement and the accompanying prospectus are a part.

Adamas Pharmaceuticals, Inc.

Overview

We are a pharmaceutical company that discovers and develops chrono-synchronous therapies to improve the daily lives of people affected by chronic neurologic disorders. Approximately 36 million people in the United States suffer from conditions such as Parkinson's disease, multiple sclerosis, epilepsy, and Alzheimer's disease. Currently available medicines may lead to sub-optimal symptom control in these disorders.

We pioneered a platform to develop medicines for chronic neurologic disorders based upon an understanding of time-dependent biologic processes responsible for disease activity and drug response. We call these medicines chrono-synchronous therapies. These therapies synchronize the temporal pattern of disease activity with the dynamics of drug profiles we invent without disrupting the brain's master clock, e.g. circadian rhythm. We believe the lives of patients with neurologic disorders are improved when these factors operate in unison.

We identify and develop chrono-synchronous therapies for patients by listening, studying, and innovating. To that end, our aim is to enable substantial treatment effects among the existing landscape of medicines. Our portfolio includes:

***ADS-5102*:** an amantadine therapy with an U.S. Food and Drug Administration ("FDA") accepted New Drug Application ("NDA") for the treatment of levodopa-induced dyskinesia ("LID") in patients with Parkinson's disease. LID is a form of dyskinesia associated with levodopa, a drug used to treat Parkinson's disease. Over time, 90% of Parkinson's disease patients on levodopa therapy will develop alternating periods of OFF time (e.g. rigidity) and LID, as their disease progresses. LID is characterized by involuntary movements that are purposeless and unpredictable. The NDA for ADS-5102 in LID has a Prescription Drug User Fee Act ("PDUFA") date, or deadline by which the FDA must review the NDA, of August 24, 2017, and, if approved, we plan to commercialize ADS-5102 for the treatment of LID in patients with Parkinson's disease in 2017. If approved, ADS-5102 will be the first and only medicine approved for the treatment of LID, and it will be the only Parkinson's disease medicine demonstrated to reduce both LID and the time when the symptoms of Parkinson's disease are present, referred to as "OFF time."

Table of Contents

In addition, we believe ADS-5102 has opportunities to provide symptomatic treatment of other hyper-and hypokinetic neurologic disorders, including but not limited to walking impairment in multiple sclerosis patients and other Parkinson's disease indications.

***ADS-4101*:** a lacosamide therapy in clinical development for the treatment of partial onset seizures in patients with epilepsy. The active ingredient in ADS-4101 is lacosamide, an anti-epileptic previously approved by the FDA, which is currently marketed by UCB as VIMPAT® (lacosamide).

Namenda XR® (memantine hydrochloride) extended-release capsules and ***Namzaric®*** (memantine hydrochloride extended-release and donepezil hydrochloride) capsules: two commercially available drugs currently marketed by Forest Laboratories Holdings Limited ("Forest"), an indirect wholly-owned subsidiary of Allergan plc (collectively, "Allergan"), in the United States for the treatment of moderate to severe Alzheimer's disease. We are eligible to receive royalties on sales of Namenda XR® and Namzaric® beginning in June of 2018 and May of 2020, respectively.

Our goal is to bring products to market, which are differentiated and distinguished by our platform insights, independently or in collaboration with partners. From prior experience, we appreciate the value that commercial strategic alliances can bring to patients and Adamas stakeholders.

In 2017, we are focused on commercializing ADS-5102, if approved, for the treatment of LID in patients with Parkinson's disease. Based on our market research, we expect ADS-5102 to be well received by physicians, patients, and payers, as there are currently no approved therapeutic treatments for LID, which is an existing Parkinson's disease treatment gap. Our research also indicates that payers recognize the substantial unmet need of patients with LID and the potentially important value proposition of ADS-5102 in LID, as well as its secondary benefit in OFF time, when the symptoms of Parkinson's disease are present.

On May 11, 2017, Adamas Pharmaceuticals, Inc., through a newly formed wholly-owned subsidiary, Adamas Pharma, LLC (collectively the "Company"), entered into a $100 million royalty-backed note arrangement (the "Arrangement") with HealthCare Royalty Partners III, L.P. ("HCR") pursuant to a Loan Agreement, a Contribution and Servicing Agreement and promissory notes and other customary related documents with respect to a secured loan transaction. The Arrangement provides for an initial loan of $35 million at closing and the potential to borrow an additional $65 million upon U.S. Food and Drug Administration (FDA) approval and receipt of Orphan Drug exclusivity of ADS-5102 (amantadine) extended-release capsules for the treatment of levodopa-induced dyskinesia in people with Parkinson's disease if achieved prior to a specified date. The Company will pay quarterly fixed interest at an annual rate of 11.0% on outstanding principal amounts, and interest and principal will be payable from the proceeds of a 12.5% royalty on U.S. net sales of ADS-5102 and up to $15 million of the Company's annual royalties from Allergan on U.S. net sales of Namzaric® starting in May 2020. Beginning in January 2021, the $15 million in annual Company royalties from Allergan is payable at the rate of $3.75 million per quarter. The HCR notes mature in December 2026, if not earlier prepaid. Prior to the interest payment date following the ninth full calendar quarter after the funding of the earlier of the $65 million additional loan and October 31, 2018, the principal of the loans will not be subject to amortization and to the extent such royalties are insufficient to pay interest in full, any unpaid portion of the quarterly interest payment will be added to the principal amount of the loans. The royalty rate on net sales of ADS-5102 will drop to 6.25% after the principal amount of the note has been fully repaid, and may increase up to 22.5% of U.S. net sales and other consideration received outside of the U.S. if total interest and principal payments have not reached minimum specified levels. Under the Arrangement, the

Table of Contents

Company may terminate its payment obligations by prepayment of 200% of the outstanding principal balance.

Risks Associated with our Business

Our business is subject to numerous risks. You should read these risks before you invest in our common stock. In particular, our risks include, but are not limited to, the following:

- Our success depends heavily on the timely approval and successful commercialization of our product candidates, including ADS-5102. If we are unable to successfully commercialize our product candidates or if we experience significant delays in doing so, our business will be materially harmed;
- If ADS-5102 for the treatment of LID fails to receive approval by regulatory authorities, our business will be adversely impacted and substantially harmed;
- Our product candidates, including ADS-5102, may fail to achieve the degree of market acceptance by physicians, patients, healthcare payers, and others in the medical community necessary for commercial success, negatively impacting our business;
- We currently have only limited commercial capabilities with no sales personnel. If we are unable to develop or obtain through outsourcing or other means our commercial capabilities, we will not be successful in commercializing ADS-5102 or other future product candidates;
- Failure to successfully obtain coverage and reimbursement of our products in the United States will substantially harm our business;
- We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do;
- If manufacturers obtain approval for generic versions of our products, including ADS-5102, or of products with which we compete, our business may suffer;
- If we do not have adequate funds to cover all of our development and commercial activities, we may have to raise additional capital or curtail or cease operations;
- We rely on third-party contract manufacturing organizations to manufacture and supply our product candidates, including ADS-5102, for us. If one of our suppliers or manufacturers fails to perform adequately or fulfill our needs, we may be required to incur significant costs and devote significant efforts to find new suppliers or manufacturers. We may also face delays in the development, commercialization, and supply of our product candidates; and
- Under our license agreement with Allergan, if Allergan fails to successfully commercialize Namenda XR® and Namzaric® for any reason or if the license agreement with Allergan is terminated, the potential royalties we expect to receive under our license agreement with Allergan may not occur or be minimal, and would have a negative impact on our revenue potential and harm our business.

Corporate Information

We were incorporated in Delaware in November 2000 under the name NeuroMolecular, Inc. In December 2004, we changed our name to NeuroMolecular Pharmaceuticals, Inc., and in July 2007 we changed our name to Adamas Pharmaceuticals, Inc. Our principal executive offices are located at 1900 Powell Street, Suite 750, Emeryville, California 94608, and our telephone number is (510) 450-3500. Our website address is www.adamaspharma.com. The information contained on our website is not incorporated by reference into this prospectus supplement and the accompanying prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

Table of Contents

As used in this prospectus supplement and the accompanying prospectus, "Adamas Pharmaceuticals,", "Adamas" "we," "us," and "our" refer to Adamas Pharmaceuticals, Inc. and its subsidiaries taken as a whole. The word trademark "Adamas" is registered on the Principal Register of the United States Patent and Trademark Office. This prospectus supplement and accompanying prospectus also contains trademarks and trade names of other companies, and those trademarks and trade names are the property of their respective owners. We do not intend our use or display of other companies' trademarks or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies or products.

We are an "Emerging Growth Company"

As a company with less than approximately $1 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirement to hold a nonbinding advisory vote on executive compensation and to obtain stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of the closing of our initial public offering of our common stock, or December 31, 2019. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenue exceeds approximately $1 billion or we issue more than approximately $1 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus supplement and the accompanying prospectus are a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Table of Contents

The Offering

Common stock offered by us:	Shares of our common stock having an aggregate offering price of up to $50,000,000.
Common stock to be outstanding after this offering:	Up to 25,247,671 shares (as more fully described in the notes following this table), assuming sales of 2,925,687 shares of our common stock in this offering at an offering price of $17.09 per share, which was the last reported sale price of our common stock on the NASDAQ Global Market on May 10, 2017. The actual number of shares issued will vary depending on the sales price under this offering.
Manner of offering:	"At-the-market" offering that may be made from time to time through our sales agent, Cowen and Company, LLC. See "Plan of Distribution" on page S-11.
Use of Proceeds:	We intend to use the net proceeds from this offering, if any, for working capital and general corporate purposes. See "Use of Proceeds" on page S-9.
Risk Factors:	You should read the "Risk Factors" section of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of factors to consider before deciding to purchase shares of our common stock.
NASDAQ Global Market Symbol:	"ADMS"

The number of our shares of common stock outstanding is based on 22,321,984 shares of common stock outstanding as of March 31, 2017, and excludes the following:

- 5,648,330 shares issuable upon the exercise of stock options outstanding on March 31, 2017, at a weighted average exercise price of $10.82 per share;
- 342,154 shares issuable upon the vesting of restricted stock units outstanding on March 31, 2017; and
- 3,179,022 additional shares reserved for future issuance under our equity incentive plans, including our employee stock purchase plan, as of March 31, 2017.

Table of Contents

RISK FACTORS

You should consider carefully the risks described below and discussed under the section captioned "Risk Factors" contained in our quarterly report on Form 10-Q for the quarter ended March 31, 2017, and in our subsequent quarterly reports on Form 10-Q and annual reports on Form 10-K as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act, each of which is incorporated by reference in this prospectus supplement and the accompanying prospectus in their entirety, together with other information in this prospectus supplement, the accompanying prospectus and the information and documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering before you make a decision to invest in our common stock. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. The risks below and incorporated by reference in this prospectus supplement and the accompanying prospectus are not the only ones we face. Additional risks not currently known to us or that we currently deem immaterial may also affect our business operations. Please also read carefully the section below captioned "Special Note Regarding Forward-Looking Statements."

Risks Associated with our Business

Our business is subject to numerous risks. You should read these risks before you invest in our common stock. In particular, our risks include, but are not limited to, the following, which are more fully set forth in our quarterly report on Form 10-Q for the quarter ended March 31, 2017, filed with the SEC on May 9, 2017, and in our subsequent filings under the Exchange Act, which are incorporated by reference here:

- Our success depends heavily on the timely approval and successful commercialization of our product candidates, including ADS-5102. If we are unable to successfully commercialize our product candidates or if we experience significant delays in doing so, our business will be materially harmed;
- If ADS-5102 for the treatment of LID fails to receive approval by regulatory authorities, our business will be adversely impacted and substantially harmed;
- Our product candidates, including ADS-5102, may fail to achieve the degree of market acceptance by physicians, patients, healthcare payers, and others in the medical community necessary for commercial success, negatively impacting our business;
- We currently have only limited commercial capabilities with no sales personnel. If we are unable to develop or obtain through outsourcing or other means our commercial capabilities, we will not be successful in commercializing ADS-5102 or other future product candidates;
- Failure to successfully obtain coverage and reimbursement of our products in the United States will substantially harm our business;
- We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do;
- If manufacturers obtain approval for generic versions of our products, including ADS-5102, or of products with which we compete, our business may suffer;
- If we do not have adequate funds to cover all of our development and commercial activities, we may have to raise additional capital or curtail or cease operations;

Table of Contents

- We rely on third-party contract manufacturing organizations to manufacture and supply our product candidates, including ADS-5102, for us. If one of our suppliers or manufacturers fails to perform adequately or fulfill our needs, we may be required to incur significant costs and devote significant efforts to find new suppliers or manufacturers. We may also face delays in the development, commercialization, and supply of our product candidates; and
- Under our license agreement with Allergan, if Allergan fails to successfully commercialize Namenda XR® and Namzaric® for any reason or if the license agreement with Allergan is terminated, the potential royalties we expect to receive under our license agreement with Allergan may not occur or be minimal, and would have a negative impact on our revenue potential and harm our business.

Additional Risks Relating To The Offering

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. The net proceeds from this offering will be used for working capital and general corporate purposes, which may include, among other things, funding research and development, clinical trials, vendor payables, potential regulatory submissions, hiring additional personnel and capital expenditures. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or products; however, we have no current commitments or obligations to do so.

Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or enhance the value of our common stock.

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

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 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. See "Dilution" below for more information.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, and the documents we have filed with the SEC that are incorporated by reference contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. These statements relate to future events or to our future operating or financial performance and 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. Forward-looking statements may include, but are not limited to, statements about:

- our expectation as to the therapeutic profile of our products and product candidates, including the safety and efficacy thereof;
- our expectations as to whether we will be able to obtain and maintain regulatory approval of our product candidates;
- our expectations as to whether we will be able to successfully commercialize any of our products that are approved;
- the rate and degree of market acceptance of our products in the future;
- our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for or ability to obtain additional financing;
- the anticipated scope, rate of progress and cost of our preclinical studies and clinical trials and other research and development activities;
- the potential cost of establishing clinical and commercial supplies of our product candidates and any products that we may develop;
- the anticipated cost and timing of regulatory submissions and approvals;
- our expectation as to the legal proceedings and related stays and terms of settlements;
- our expectations as to the sufficiency of our capital resources to enable us to complete our ongoing clinical studies;
- our expectations as to our ability to obtain and maintain intellectual property protection for our products and product candidates;
- our expectations as to our ability to negotiate manufacturing arrangements and scale up manufacturing of our product candidates to commercial scale;
- the anticipated performance by our collaboration partners over which we do not have control;
- the anticipated receipt and timing of any royalties from our collaborators;
- our expectations as to our ability to successfully establish and successfully maintain appropriate collaborations and derive significant revenue from those collaborations;
- the anticipated performance of third parties to conduct our clinical studies;
- the anticipated ability of third-party contract manufacturers to manufacture and supply our product candidates for us;
- our expectations as to our ability to identify, develop, acquire and in-license new products and product candidates;
- our expectations as to our ability to initiate new or continue clinical development programs;

- our expectations as to our ability to initiate sites and enroll patients in our clinical studies at the pace that we project;
- our expectations as to our ability to retain and recruit key personnel;
- our expectations regarding the time during which we will be an emerging growth company under the Jumpstart Our Business Startups Act;
- our anticipated financial performance; and
- our anticipated developments and projections relating to our competitors or our industry.

Table of Contents

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" 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 are subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss in greater detail many of these risks under the heading "Risk Factors" contained in this prospectus supplement and the accompanying prospectus, in any free writing prospectuses we may authorize for use in connection with a specific offering, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus supplement and the accompanying prospectus in their entirety. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. You should read this prospectus supplement and the accompanying prospectus together with the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with Cowen as a source of financing. We intend to use the net proceeds, if any, from this offering for working capital and general corporate purposes, which may include, among other things, funding research and development, clinical trials, vendor payables, potential regulatory submissions, hiring additional personnel and capital expenditures. We may also use a portion of the net proceeds to in-license, acquire or invest in complementary businesses or products; however, we have no current commitments or obligations to do so.

The amounts and timing of our actual expenditures will depend on numerous factors, including our development and commercialization efforts, as well as the amount of cash used in our operations. We therefore cannot estimate with certainty the amount of net proceeds to be used for the purposes described above. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities.

Table of Contents

DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price and the adjusted net tangible book value per share of our common stock after this offering.

Our net tangible book value on March 31, 2017, was approximately $120.0 million, or $5.36 per share. "Net tangible book value" is total assets minus the sum of liabilities and intangible assets. "Net tangible book value per share" is net tangible book value divided by the total number of shares outstanding.

After giving effect to the sale of $50,000,000 of common stock in this offering at an assumed offering price of $17.09 per share, which was the closing price of our common stock as reported on NASDAQ Global Market on May 10, 2017, and after deducting estimated offering commissions and expenses payable by us, our net tangible book value as of March 31, 2017, would have been approximately $168.0 million, or $6.66 per share of common stock. This represents an immediate increase in net tangible book value of $1.30 per share to our existing stockholders and an immediate dilution in net tangible book value of $10.43 per share to investors participating in this offering. The following table illustrates this dilution per share to investors participating in this offering:

Assumed offering price per share		$ 17.09
Net tangible book value per share as of March 31, 2017	$ 5.36	
Increase in net tangible book value per share attributable to new investors in offering	$ 1.30	
Pro forma net tangible book value per share after giving effect to the offering	$ 6.66	
Dilution per share to new investors		$ 10.43

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options to purchase our common stock or vesting of restricted stock units to acquire shares of our common stock.

The number of our shares of common stock outstanding is based on 22,321,984 shares of common stock outstanding as of March 31, 2017, and excludes the following:

- 5,648,330 shares issuable upon the exercise of stock options outstanding on March 31, 2017, at a weighted average exercise price of $10.82 per share;
- 342,154 shares issuable upon the vesting of restricted stock units outstanding on March 31, 2017; and
- 3,179,022 additional shares reserved for future issuance under our equity incentive plans, including our employee stock purchase plan, as of March 31, 2017.

To the extent that any of the outstanding options are exercised, or restricted stock units vest, there will be further dilution to new investors.

Table of Contents

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Cowen, under which we may issue and sell from time to time up to $50,000,000 of our common stock through Cowen as our sales agent. Sales of our common stock, if any, will be made at market prices by any method that is deemed to be an "at the market" offering as defined in Rule 415 under the Securities Act, including sales made directly on the NASDAQ Global Market or any other trading market for our common stock. If authorized by us in writing, Cowen may purchase shares of our common stock as principal.

Cowen will offer our common stock subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of common stock to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us. We may instruct Cowen not to sell common stock if the sales cannot be effected at or above the price designated by us in any such instruction. Cowen or we may suspend the offering of our common stock being made through Cowen under the sales agreement upon proper notice to the other party. Cowen and we each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party's sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent up to 3.0% of the gross sales price of the shares sold through it pursuant to the sales agreement. We have also agreed to reimburse Cowen up to $50,000 of Cowen's actual outside legal expenses incurred by Cowen in connection with this offering. We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately $280,000.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such common stock.

Cowen will provide written confirmation to us following the close of trading on The NASDAQ Global Market on each day in which common stock is sold through it as sales agent under the sales agreement. Each confirmation will include the number of shares of common stock sold through it as sales agent on that day, the volume weighted average price of the shares sold and the net proceeds to us.

We will report at least quarterly the number of shares of common stock sold through Cowen under the sales agreement, the net proceeds to us and the compensation paid by us to Cowen in connection with the sales of common stock.

Settlement for sales of common stock will occur, unless the parties agree otherwise, on the third business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of our common stock on our behalf, Cowen may be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to Cowen may be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to

Table of Contents

provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. As sales agent, Cowen will not engage in any transactions that stabilizes our common stock.

Our common stock is listed on The NASDAQ Global Market and trades under the symbol "ADMS." The transfer agent of our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, NY 11219.

Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

LEGAL MATTERS

Cooley LLP will pass upon the validity of the common stock offered by this prospectus supplement. Cowen is being represented in connection with this offering by Davis Polk & Wardwell LLP, Menlo Park, California.

EXPERTS

The consolidated financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2016, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement and the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus. Information in this prospectus supplement supersedes information in the accompanying prospectus and information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement, while information that we

Table of Contents

file later with the SEC will automatically update and supersede the information in this prospectus supplement and the accompanying prospectus. We incorporate by reference into this prospectus supplement, the accompanying prospectus and the registration statement of which this prospectus supplement and the accompanying prospectus are a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-36399):

- our Annual Report on Form 10-K for the year ended December 31, 2016, which was filed on February 28, 2017;
- the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2016, from our proxy statement filed on April 18, 2017;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, which was filed on May 9, 2017;
- our Current Reports on Form 8-K filed on February 27, 2017, April 5, 2017, April 27, 2017, and May 11, 2017; and
- the description of our common stock in our registration statement on Form 8-A filed with the SEC on April 7, 2014.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment that indicates the termination of the offering of the shares of our common stock made by this prospectus supplement and will become a part of this prospectus supplement and the accompanying prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus supplement and the accompanying prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Adamas Pharmaceuticals, Inc.
1900 Powell Street, Suite 750
Emeryville, CA 94608
(510) 450-3500
Attn: Secretary

Table of Contents

PROSPECTUS

$200,000,000

Common Stock

From time to time, we may offer and sell up to an aggregate amount of $200,000,000 of Common Stock.

In addition, designated stockholders to be named in a prospectus supplement may also offer and sell, from time to time, up to 1,600,000 shares of our common stock. To the extent that any designated stockholder sells any securities, the designated stockholder may be required to provide you with this prospectus and a prospectus supplement identifying and containing specific information about the designated stockholder and the terms of the securities being offered. We will not receive any proceeds from the sale of our common stock by designated stockholders.

We will provide the specific terms of these offerings in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the shares of common stock being offered.

Our common stock is listed on the NASDAQ Global Market under the trading symbol "ADMS." On November 2, 2016, the last reported sale price of our common stock was $13.56 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on the NASDAQ Global Market or other securities exchange of the shares of common stock covered by the applicable prospectus supplement.

Investing in shares of our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 6 of this prospectus and any similar section contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

This prospectus may not be used to consummate a sale of shares of our common stock unless accompanied by a prospectus supplement.

The shares of our common stock may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus. If any agents or underwriters are involved in the sale of any shares of our common stock with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such shares of our common stock and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

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

The date of this prospectus is November 21, 2016.

Table of Contents

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	i
PROSPECTUS SUMMARY	1
RISK FACTORS	6
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	6
USE OF PROCEEDS	7
DESCRIPTION OF CAPITAL STOCK	7
DESIGNATED STOCKHOLDERS	11
PLAN OF DISTRIBUTION	12
LEGAL MATTERS	14
EXPERTS	14
WHERE YOU CAN FIND ADDITIONAL INFORMATION	14
INCORPORATION BY CERTAIN INFORMATION BY REFERENCE	14

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 SEC, using a "shelf" registration process. Under this shelf registration statement, we may, from time to time, offer and sell in one or more offerings, up to a total dollar amount of $200,000,000 of shares of our common stock as described in this prospectus. In addition, under this shelf process, the designated stockholders to be named in a supplement to this prospectus may, from time to time, offer or sell up to 1,600,000 shares of our common stock.

Each time we and/or the designated stockholders offer shares of our common stock under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading "Incorporation of Certain Information by Reference," before buying any of the shares of our common stock being offered.

This prospectus may not be used to consummate a sale of shares of our common stock unless it is accompanied by a prospectus supplement.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. Neither we nor the designated stockholders have authorized anyone to provide you with any information other than that contained or incorporated by reference in this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus, the accompanying

i.

Table of Contents

prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you. We and the designated stockholders take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares of our common stock offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains and incorporates by reference market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the section entitled "Where You Can Find Additional Information."

Table of Contents

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our shares of our common stock discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the other information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Adamas Pharmaceuticals, Inc.

Overview

We are a pharmaceutical company that is developing new medicines to improve the daily lives of those affected by chronic neurologic disorders. Approximately 36 million people in the United States suffer from chronic neurologic disorders, including Alzheimer's disease, Parkinson's disease (PD), multiple sclerosis, and epilepsy. We have pioneered a platform based on an understanding of time dependent biologic effects of disease activity and drug response to achieve symptomatic relief without additional tolerability issues. We have developed a portfolio of chrono-synchronous therapies to potentially address chronic neurologic disorders. Our first proprietary product candidate is ADS-5102, a chrono-synchronous amantadine therapy, for the treatment of levodopa-induced dyskinesia (LID) in patients with PD. We submitted a New Drug Application (NDA) with the U.S. Food and Drug Administration (FDA) for ADS-5102 in October 2016. The FDA has designated that LID in patients with PD is an orphan disease. There are currently no approved drugs in the United States or Europe for the treatment of LID in PD.

The ADS-5102 LID NDA is supported by efficacy and safety data compiled from our comprehensive registration program, which was designed to evaluate ADS-5102 for the treatment of LID in patients with PD. The Phase 3 clinical program included three placebo-controlled trials: EASED, EASE LID and EASE LID 3. The three trials enrolled a total of 286 patients, of whom 121 patients received a 340 mg dose of ADS-5102 once daily at bedtime. Both Phase 3 trials met their primary and key secondary endpoints. In addition, the NDA is supported by data from an open-label safety study known as EASE LID 2 for patients from EASED, EASE LID and EASE LID 3 as well as LID patients who have undergone deep brain stimulation. The EASE LID 2 trial is ongoing and patients are being followed for up to two years.

We are also exploring the utility of ADS-5102 for the treatment of walking impairment in patients with multiple sclerosis. We have completed a positive Phase 2 proof-of-concept study in these patients. The Phase 2 study evaluated ADS-5102 dosed at 340 mg once daily at bedtime and enrolled MS patients with impaired walking speed. A key walking assessment was the timed 25-foot walk (T25FW) test, a well-established outcome measure that has been used as a basis for product approval in the United States and Europe. Key secondary outcome measures included assessments of walking performance. Other outcome measures included assessments of other MS-related symptoms. We plan to pursue a pivotal registration program for this indication.

The second product candidate is ADS-4101, an extended-release version of an FDA-approved single-agent compound for the treatment of epilepsy (partial onset seizures). We anticipate initiating a Phase 1 clinical study of ADS-4101 for partial onset seizures in patients with epilepsy in 2016.

Additionally, through our license to Forest Laboratories Holdings Limited ("Forest Laboratories" or "Forest"), an indirect wholly-owned subsidiary of Allergan plc, our portfolio includes two medicines

Table of Contents

commercially available in the United States for indications relating to Alzheimer's disease: Namzaric® (memantine hydrochloride extended-release and donepezil hydrochloride) capsules and Namenda XR® (memantine hydrochloride) extended-release capsules. Adamas is eligible to receive royalties on sales of Namenda XR® and Namzaric®beginning in June of 2018 and May of 2020, respectively.

Our business strategy is to continue to discover, develop and commercialize new treatment solutions for patients independently or in collaboration with partners.

Risks Associated with our Business

Our business is subject to numerous risks. You should read these risks before you invest in our common stock. In particular, our risks include, but are not limited to, the following:

- Our success depends heavily on the timely approval and successful commercialization of our product candidates, including ADS-5102, and if we are unable to successfully commercialize our product candidates or if we experience significant delays in doing so, our business will be materially harmed;
- If ADS-5102 for the treatment of LID fails to receive approval by regulatory authorities, our business will be adversely impacted and substantially harmed;
- Although we have completed clinical trials of ADS-5102 for the treatment of LID, a clinical trial with ADS-5102 is ongoing for LID and other indications and could result in clinical findings not consistent with previously reported positive clinical results, which could lead us to experience failure to receive regulatory approval and have a material and adverse impact on our business;
- We will face risks in the development of our other product candidates similar to those we face with ADS-5102;
- Our product candidates, including ADS-5102, have not been manufactured in a commercially validated process, nor at a scale that may be required to meet future market demand, and there are risks associated with developing and validating manufacturing and packaging processes and scaling up on a timely basis;
- Our product candidates, including ADS-5102, are complex to manufacture, and manufacturing disruptions may occur that could delay the launch or commercialization of our product candidates;
- Our product candidates, including ADS-5102, may fail to achieve the degree of market acceptance by physicians, patients, healthcare payers, and others in the medical community necessary for commercial success, negatively impacting our business;
- We currently have only limited commercial capabilities and no sales or distribution personnel, and if we are unable to develop or obtain through outsourcing, sales, marketing, and distribution capabilities, we will not be successful in commercializing ADS-5102 or other future product candidates;
- Failure to successfully obtain coverage and reimbursement of our products in the United States will substantially harm our business; and
- We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do.

Corporate Information

We were incorporated in Delaware in November 2000 under the name NeuroMolecular, Inc. In December 2004, we changed our name to NeuroMolecular Pharmaceuticals, Inc., and in July 2007 we

Table of Contents

changed our name to Adamas Pharmaceuticals, Inc. Our principal executive offices are located at 1900 Powell Street, Suite 750, Emeryville, California 94608, and our telephone number is (510) 450-3500. Our website address is www.adamaspharma.com. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

As used in this prospectus, "Adamas Pharmaceuticals,", "Adamas" "we," "us," and "our" refer to Adamas Pharmaceuticals, Inc. and its subsidiaries taken as a whole. The word trademark "Adamas" is registered on the Principal Register of the United States Patent and Trademark Office. This prospectus also contains trademarks and trade names of other companies, and those trademarks and trade names are the property of their respective owners. We do not intend our use or display of other companies' trademarks or trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies or products.

We are an "Emerging Growth Company"

As a company with less than $1 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations incorporated by reference in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirement to hold a nonbinding advisory vote on executive compensation and to obtain stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of the closing of our initial public offering, or December 31, 2019. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenue exceeds $1 billion or we issue more than $1 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Table of Contents

The Shares of Common Stock We May Offer

We may offer shares of our common stock up to a total dollar amount of $200,000,000, from time to time under this prospectus, together with the applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of any offering. In addition, the designated stockholders to be named in a supplement to this prospectus may offer or sell, from time to time, up to 1,600,000 shares of our common stock. Each time we or the designated stockholders offer shares of our common stock under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the offering.

The applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer any security other than shares of our common stock.

THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SHARES OF OUR COMMON STOCK UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

We or the designated stockholders may sell the shares of our common stock directly to investors or to or through agents, underwriters or dealers. We and the designated stockholders, and our or their agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of shares of our common stock. If we or the designated stockholders do offer shares of our common stock to or through agents or underwriters, we will include in the applicable prospectus supplement:

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options, if any; and

the net proceeds to us.

We may issue shares of our common stock from time to time. The designated stockholders may offer shares of our common stock to the extent such shares were issued and outstanding prior to the original date of filing of the registration statement to which this prospectus relates. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to our common stock. We urge you to read the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) related to any common stock being offered.

Use of Proceeds

Except as described in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of the shares of our common stock offered by us hereunder, if any, for working capital, capital expenditures and other general corporate purposes. We will not receive any proceeds from the sale of shares of our common stock by any designated stockholder. See "Use of Proceeds" in this prospectus.

Table of Contents

NASDAQ Global Market Listing

Our common stock is listed on the NASDAQ Global Market under the symbol "ADMS." The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on the NASDAQ Global Market or other securities exchange of the shares of our common stock covered by the applicable prospectus supplement.

Table of Contents

RISK FACTORS

Investing in shares of our common stock involves a high degree of risk. Before deciding whether to invest in shares of our common stock, you should consider carefully the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and discussed under the section entitled "Risk Factors" contained in our most recent Annual Report on Form 10-K and in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering. The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled "Special Note Regarding Forward-Looking Statements."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents we have filed with the SEC that are incorporated by reference contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. These statements relate to future events or to our future operating or financial performance and 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. Forward-looking statements may include, but are not limited to, statements about:

- our expectations with respect to the clinical development of our product candidates, our clinical trials and the regulatory approval process;
- statements regarding the steps, timing and costs of our development programs;
- any projections of earnings, revenue, sufficiency of cash resources or other financial items;
- the plans and objectives of management for future operations;
- the availability of additional financing and access to capital;
- the formation of a trading market for our common stock;
- discussions and approvals of regulatory agencies; and
- the period of time for which we will be able to fund our operations.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential" 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 are subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss in greater detail many of these risks under the heading "Risk Factors" contained in the applicable prospectus supplement, in any free writing prospectuses we may authorize for use in connection with a specific offering, and in our most recent annual report on

6.

Table of Contents

Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. You should read this prospectus, any applicable prospectus supplement, together with the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

Except as described in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of the shares of our common stock offered by us hereunder, if any, for working capital, capital expenditures and other general corporate purposes, which may include costs of funding future acquisitions or for any other purpose we describe in the applicable prospectus supplement.

We will not receive any proceeds from the sale of shares of our common stock by any designated stockholder.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 100,000,000 shares of common stock, $0.001 par value per share, and 5,000,000 shares of preferred stock, $0.001 par value per share. A description of material terms and provisions of our certificate of incorporation and bylaws affecting the rights of holders of our capital stock is set forth below. The description is intended as a summary, and is qualified in its entirety by reference to our certificate of incorporation and the bylaws.

Common stock

Voting Rights. Each holder of our common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders, except as otherwise expressly provided in our certificate of incorporation or required by applicable law. Our certificate of incorporation does not provide for cumulative voting for the election of directors, which means that the holders of a majority of the then-outstanding shares of our common stock can elect all of the directors then standing for election.

Dividends. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends, if any, out of funds legally available at the times and in the amounts that our board of directors may determine.

Liquidation. Upon our liquidation, dissolution or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time after payment of liquidation preferences, on any outstanding shares of preferred stock and payment of other claims of creditors.

Rights and Preferences. The rights, preferences, and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock that we may designate and issue in the future.

Table of Contents

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

Preferred stock

Our board of directors is authorized, subject to limitations prescribed by Delaware law, without further action by our stockholders, to fix the rights, preferences, privileges and restrictions of up to an aggregate of 5,000,000 shares of preferred stock in one or more series and authorize their issuance. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action.

Anti-takeover effects of provisions of our certificate of incorporation and bylaws and Delaware law

Certificate of incorporation and bylaws

Our certificate of incorporation provides for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the voting power of our shares of common stock outstanding will be able to elect all of our directors. The directors may be removed by the stockholders only for cause and upon the vote of holders of a majority of the shares then entitled to vote at an election of directors. Furthermore, the authorized number of directors may be changed only by resolution of our board of directors, and vacancies and newly created directorships on our board of directors may, except as otherwise required by law or determined by our board, only be filled by a majority vote of the directors then serving on the board, even though less than a quorum.

Our certificate of incorporation and bylaws also provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by a consent in writing. A special meeting of stockholders may be called only by a majority of our whole board of directors, the chair of our board of directors, or our chief executive officer. Our bylaws also provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and specify requirements as to the form and content of a stockholder's notice.

Our certificate of incorporation further provides that the affirmative vote of holders of at least $66^{2}/_{3}\%$ of the voting power of all of the then-outstanding shares of voting stock, voting as a single class, are required to amend certain provisions of our certificate of incorporation, including provisions relating to the structure of our board of directors, the size of the board, removal of directors, special meetings of stockholders, actions by written consent and cumulative voting. The affirmative vote of holders of at least $66^{2}/_{3}\%$ of the voting power of all of the then-outstanding shares of voting stock, voting as a single class, are required to amend or repeal our bylaws, although our bylaws may be amended by a simple majority vote of our board of directors.

The foregoing provisions make it more difficult for our stockholders to replace our board of directors as well as for another party to obtain control of the company by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for our stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our

Table of Contents

board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change the control of the company.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in control of the company or our management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the DGCL, which prohibits a Delaware corporation from engaging in a business combination with any interested stockholder for a period of three years following the date the person became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested holder;
- upon completion 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 began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (a) by persons who are directors and also officers and (b) pursuant to employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; and
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least $66^{2}/_{3}\%$ of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 of the DGCL defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

Section 203 of the DGCL defines an "interested stockholder" as an entity or person who, together with the entity's or person's affiliates and associates, beneficially owns, or is an affiliate of the corporation and within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation. A Delaware corporation may "opt out" of these provisions with an express provision in its certificate of incorporation. We have not

9.

Table of Contents

opted out of these provisions, which may as a result, discourage or prevent mergers or other takeover or change of control attempts of us.

Transfer Agent and Registrar

Our transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Listing on the NASDAQ Global Market

Our common stock is listed on the NASDAQ Global Market the symbol "ADMS".

Registration Rights

We are party to an investor rights agreement that provides that certain holders of common stock (all of whom received the common stock upon conversion of preferred stock) have certain registration rights. This investor rights agreement was entered into in June 2011 and has been amended and/or restated from time to time in connection with our preferred stock financings. The registration of shares of our common stock pursuant to the exercise of registration rights described below would enable the holders who have these rights to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions and limitations, to limit the number of shares the registration rights holders participating in any offering may include in any particular registration. The demand, piggyback and Form S-3 registration rights described below will expire on the earlier of (i) the date that is five years after the date of our Initial Public Offering or (ii) with respect to each stockholder following the closing of this offering, at such time as (A) such stockholder holds less than 0.5% of the company's common stock on an as-converted, fully diluted basis and (B) such stockholder is entitled to sell all of its shares pursuant to Rule 144 of the Securities Act during any 90-day period.

Demand registration rights. Some of the holders of shares of our common stock party to the investor rights agreement are entitled to certain demand registration rights. The holders of not less than 30% of these shares may, on not more than two occasions, request that we file a registration statement having an aggregate offering price to the public of not less than $10,000,000 to register at least 30% of their shares.

Piggyback registration rights. In the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, some of the holders of shares of our common stock party to the investor rights agreement will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act other than with respect to a demand registration or a registration statement on Form S-3, S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration.

Form S-3 registration rights. Some of the holders of shares of our common stock party to the investor rights agreement are entitled to certain Form S-3 registration rights. Such holders may make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3. Such request for registration on Form S-3 must cover securities the aggregate offering price of which, after payment of underwriting discounts and commissions, is at least $3,000,000.

Table of Contents

DESIGNATED STOCKHOLDERS

This prospectus also relates to the possible sale by certain of our stockholders, whom we refer to in this prospectus as the "designated stockholders," of up to 1,600,000 shares of our common stock that were issued and outstanding prior to the original date of filing of the registration statement of which this prospectus forms a part, including shares that may be owned by affiliates. The designated stockholders are former holders of our preferred stock that originally acquired the shares of our common stock included in this prospectus through several private placements of our convertible preferred stock prior to our initial public offering, all of which shares of preferred stock were converted into shares of our common stock in connection with our initial public offering.

Information about the designated stockholders, where applicable, including their identities, the amount of shares of common stock owned by each designated stockholder prior to the offering, the number of shares of our common stock to be offered by each designated stockholder and the amount of common stock to be owned by each designated stockholder after completion of the offering, will be set forth in an applicable prospectus supplement, documents incorporated by reference or in a free writing prospectus we file with the SEC. The applicable prospectus supplement will also disclose whether any of the designated stockholders has held any position or office with, has been employed by or otherwise has had a material relationship with us during the three years prior to the date of the prospectus supplement.

The designated stockholders shall not sell any shares of our common stock pursuant to this prospectus until we have identified such designated stockholders and the shares being offered for resale by such designated stockholders in a subsequent prospectus supplement. However, the designated stockholders may sell or transfer all or a portion of their shares of our common stock pursuant to any available exemption from the registration requirements of the Securities Act.

Table of Contents

PLAN OF DISTRIBUTION

We or the designated stockholders may sell the shares of our common stock from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. We or the designated stockholders may sell the shares of our common stock to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute the shares from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the shares of our common stock, including, to the extent applicable:

the name or names of the underwriters, if any;

the purchase price of the shares of our common stock or other consideration therefor, and the proceeds, if any, we will receive from the sale;

any over-allotment options under which underwriters may purchase additional shares of our common stock from us;

any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;

any public offering price;

any discounts or concessions allowed or reallowed or paid to dealers; and

any securities exchange or market on which the shares of our common stock may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the shares of our common stock offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the shares of our common stock for their own account and may resell the shares of our common stock from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the shares of our common stock will be subject to the conditions set forth in the applicable underwriting agreement. We or the designated stockholders may offer the shares of our common stock to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the shares of our common stock offered by the prospectus supplement, other than shares of our common stock covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We or the designated stockholders may use underwriters with whom we have a material relationship. We will describe

in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We or the designated stockholders may sell shares of our common stock directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of shares of our common stock and we will describe any commissions we or the designated stockholders will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our or the designated stockholders' agent will act on a best-efforts basis for the period of its appointment.

Table of Contents

We or the designated stockholders may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase shares of our common stock from us or the designated stockholders 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. We will describe the conditions to these contracts and the commissions we or the designated stockholders must pay for solicitation of these contracts in the prospectus supplement.

We or the designated stockholders may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us or the designated stockholders in the ordinary course of business.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the shares of our common stock, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the shares of our common stock originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the shares of our common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters or agents that are qualified market makers on the NASDAQ Global Market may engage in passive market making transactions in the common stock on the NASDAQ Global Market accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the shares of our common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

Table of Contents

LEGAL MATTERS

Cooley LLP, San Francisco and Palo Alto, California, will pass upon the validity of the shares of common stock offered hereby unless otherwise indicated in the applicable prospectus supplement. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2015, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-36399):

- our Annual Report on Form 10-K for the year ended December 31, 2015, which was filed on February 23, 2016;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, which was filed on May 10, 2016;
- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, which was filed on August 4, 2016;
- our Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, which was filed on November 3, 2016;
- our Current Reports on Form 8-K filed on January 6, 2016, January 7, 2016, March 24, 2016, June 6, 2016, and September 22, 2016;

Table of Contents

the information specifically incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2015, from our definitive proxy statement relating to our 2016 annual meeting of stockholders, which was filed on April 18, 2016; and

the description of our common stock in our registration statement on Form 8-A filed with the SEC on April 7, 2014.

All filings filed by us pursuant to the Exchange Act after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the shares of our common stock made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Adamas Pharmaceuticals, Inc.
1900 Powell Street, Suite 750
Emeryville, CA 94608
(510) 450-3500
Attn: Secretary

Table of Contents

$50,000,000

Common Stock

PROSPECTUS SUPPLEMENT

Cowen and Company

May 11, 2017