Filed pursuant to Rule 424(b)(5) Registration No. 333-213964

PROSPECTUS SUPPLEMENT

(to Prospectus dated October 18, 2016)



Collegium Pharmaceutical, Inc.

Up to \$60,000,000

Common Stock

We entered into a Controlled Equity Offering SM sales agreement with Cantor Fitzgerald & Co., or Cantor Fitzgerald, on March 13, 2017, relating to shares of our common stock offered by this prospectus supplement and the accompanying base prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our common stock, par value \$0.001 per share, having an aggregate offering price of up to \$60,000,000 from time to time through Cantor Fitzgerald, acting as sales agent.

Our common stock is listed on The NASDAQ Global Select Market, or NASDAQ, under the symbol "COLL." The last reported sales price of our common stock on March 10, 2017 was \$16.19 per share.

Sales of our common stock, if any, under this prospectus supplement may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act, including sales made directly on or through NASDAQ or on any other existing trading market for our common stock. Subject to the terms of the sales agreement, Cantor Fitzgerald will act as sales agent on a best efforts basis and use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between Cantor Fitzgerald and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Cantor Fitzgerald will be entitled to compensation at a commission rate equal to 3.0% of the gross sales price per share sold. See "Plan of Distribution" beginning on page S-14 for additional information regarding the compensation to be paid to Cantor Fitzgerald. In connection with the sale of our common stock on our behalf, Cantor Fitzgerald will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald will be deemed to be underwriting commissions or discounts.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended, or the Securities Act, and are subject to reduced public company reporting requirements. See "Prospectus Supplement Summary—Implications of Being an Emerging Growth Company."

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page S-6 of this prospectus supplement, page 4 of the accompanying base prospectus and in the documents we incorporate by reference in this prospectus supplement to read about factors you should consider before buying shares of our common stock.

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

Cantor Fitzgerald

Prospectus supplement dated March 13, 2017

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. 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 base prospectus, which provides general information, some of which may not apply to this offering. Generally, unless the context indicates otherwise, when we refer to this "prospectus," we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying base 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), the statement in the document having 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 also read and consider the additional information under the captions "Incorporation of Certain Information By Reference" in this prospectus supplement.

In making your investment decision, you should rely only on the information contained or incorporated by reference in this prospectus supplement, in the accompanying base prospectus and in any free writing prospectus with respect to this offering filed by us with the SEC. We have not authorized any person to provide you with different or additional information. If anyone provides you with different, additional or inconsistent information you should not rely on it. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus, any free writing prospectus with respect to the offering filed by us with the SEC and the documents incorporated by reference herein and therein is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date they were made. In addition, the assertions embodied in any representations, warranties and covenants contained in such agreements may be subject to qualifications with respect to knowledge and materiality different from those applicable to investors and may be qualified by information in disclosure schedules. These disclosure schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth in the agreements. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We obtained the industry, market and competitive position data in this prospectus supplement from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors" and elsewhere in this prospectus supplement. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and us.

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the

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accompanying base prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying base prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying base prospectus outside the United States. This prospectus supplement and the accompanying base prospectus on to solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying base prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

In this prospectus supplement, we use the term "day" to refer to a calendar day, and we use the term "business day" to refer to any day other than Saturday, Sunday, a legal holiday or a day on which banks in New York City are authorized or required to close.

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus supplement forms a part. You should read the exhibits carefully for provisions that may be important to you.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights some of the information contained elsewhere in this prospectus supplement and the documents incorporated by reference herein and therein. It is not complete and may not contain all of the information that you may want to consider. To fully understand the offering, you should read carefully the entire prospectus supplement, the accompanying base prospectus, any free writing prospectuses we have authorized for use in connection with this offering and the financial statements, notes to financial statements and other information incorporated by reference herein and therein, including the section entitled "Risk Factors," before making a decision to invest in our common stock.

The Company

We are a specialty pharmaceutical company developing and commercializing next-generation abuse-deterrent products that incorporate our patented DETERx platform technology for the treatment of chronic pain and other diseases. Our first product, Xtampza, is an abuse-deterrent, extended-release, oral formulation of oxycodone, a widely prescribed opioid medication. In April 2016, the U.S. Food and Drug Administration, or FDA, approved our new drug application, or NDA, filing for Xtampza for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. Certain human abuse potential studies are included in the approved label, as well as data supporting the administration of the product as a sprinkle or administered through feeding tubes. In June 2016, we announced the commercial launch of Xtampza. In October 2016, we announced the submission of a New Drug Submission to Health Canada seeking marketing approval of Xtampza for the same indication for which we obtained approval from the FDA.

Xtampza has the same active ingredient as OxyContin OP, which is the largest selling abuse-deterrent, extended-release opioid in the United States by dollars, with \$2.1 billion in U.S. sales in 2016. We conducted a comprehensive preclinical and clinical program for Xtampza consistent with FDA guidance on abuse-deterrence. These studies and clinical trials demonstrated that chewing, crushing and/or dissolving Xtampza, and then taking it orally or smoking, snorting, or injecting it did not meaningfully change its drug release profile or safety characteristics. By contrast, clinical trials performed by us and others —including head-to-head clinical trials comparing Xtampza with OxyContin OP—have shown that drug abusers can achieve rapid release and absorption of the active ingredient by manipulating OxyContin OP using common household tools and methods commonly available on the Internet. In October 2016, we announced the submission of a Supplemental New Drug Application to the FDA for Xtampza to include comparative oral pharmacokinetic data from a recently completed clinical study evaluating the effect of physical manipulation by crushing Xtampza compared with OxyContin OP and a control (oxycodone hydrochloride immediate-release).

In addition, our preclinical studies and clinical trials have shown that the contents of the Xtampza capsule can be removed from the capsule and sprinkled on food or into a cup, and then directly into the mouth, or administered through feeding tubes, without compromising their drug release profile, safety or abuse-deterrent characteristics. By contrast, OxyContin OP, which is formulated in hard tablets, has a black box warning label stating that crushing, dissolving, or chewing can cause rapid release and absorption of a potentially fatal dose of the active ingredient. We believe that Xtampza can address the pain management needs of the approximately 11 million patients in the United States who suffer from chronic pain and have difficulty swallowing.

In May 2016, we entered into a License and Development Agreement with BioDelivery Science International, Inc. which grants us an exclusive license to make, use, sell, offer for sale, import, develop and commercialize Onsolis in the United States. Onsolis is a Transmucosal Immediate-Release Fentanyl film indicated for the management of breakthrough pain in cancer patients 18 years of age and older, who are already receiving and who are tolerant to opioid therapy for their underlying persistent cancer

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pain. We plan to commercialize Onsolis upon receipt of FDA approval of a Prior Approval Supplement for the manufacturing transfer. Subject to such approval, we expect to launch Onsolis in the first half of 2018.

Since 2010, when we divested our former subsidiary, Onset Therapeutics, LLC, to PreCision Dermatology, Inc., we have devoted substantially all of our resources to the development of our patented DETERx platform technology, the preclinical and clinical advancement of our product candidates, precommercialization activities and the creation and protection of related intellectual property. Since 2011, we have not generated any significant revenue from product sales and we continue to incur significant research, development and other expenses related to our ongoing operations. Prior to our initial public offering of common stock, or IPO, in May 2015, we funded our operations primarily through the private placement of preferred stock, convertible notes and commercial bank debt. Since our IPO, we have funded our operations primarily through the proceeds of public offerings and sale of our equity securities.

You can get more information regarding our business and industry by reading our most recent Annual Report on Form 10-K and the other reports we file with the SEC. See "Where You Can Find More Information" and "Incorporation of Certain Information By Reference."

Company Information

Our predecessor was incorporated in Delaware in April 2002 under the name Collegium Pharmaceuticals, Inc. In October 2003, our predecessor changed its name to Collegium Pharmaceutical, Inc. In 2010, our predecessor divested its subsidiary, Onset Therapeutics, LLC to PreCision Dermatology, Inc. In July 2014, we reincorporated in the Commonwealth of Virginia pursuant to a merger whereby Collegium Pharmaceutical, Inc., a Delaware corporation, merged with and into Collegium Pharmaceutical, Inc., a Virginia corporation, with the Virginia corporation surviving the merger. Since 2010, we have devoted substantially all of our resources to the development of our patented DETERx platform technology, the preclinical and clinical advancement of our product candidates, the commercialization of Xtampza and the creation and protection of related intellectual property.

Our global headquarters are located at 780 Dedham Street, Suite 800, Canton, MA 02021 and our telephone number is (781) 713-3699. Our website address is www.collegiumpharma.com. The content contained in, or that can be accessed through, our website is not incorporated by reference in this prospectus supplement, and you should not consider that information to be part of this prospectus supplement. See "Where You Can Find More Information" and "Incorporation of Certain Information By Reference."

Implications of Being an Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. We will cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.0 billion or more; (ii) December 31, 2020; (iii) the date on which we have issued more than \$1.0 billion in non-convertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

THE OFFERING

Common stock offered by us Shares of our common stock having an aggregate offering

price of up to \$60,000,000.

Common stock to be outstanding after this offering Up to 3,705,991 shares (as more fully described in the

notes following this table), assuming sales at a price of \$16.19 per share, which was the closing price of our common stock on NASDAQ on March 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, Cantor Fitzgerald. See "Plan of Distribution" beginning on page S-14 of this prospectus

supplement.

Use of proceedsWe intend to use the net proceeds from the sale of the

shares of common stock offered by us hereunder, if any, for

(i) the continued commercialization of Xtampza;

(ii) funding research and development efforts of our other product candidates, including clinical development for our Hydrocodone DETERx program, including abusedeterrence studies and clinical trials; and (iii) funding working capital and general corporate purposes, which may include the acquisition or licensing of product candidates, technologies, compounds, other assets or complementary

businesses.

See "Use of Proceeds" on page S-10 for more information.

Market for the common stock Our common stock is listed on NASDAQ under the symbol

"COLL."

Risk factors You should read the "Risk Factors" section of this

prospectus supplement for a discussion of certain factors to consider carefully before deciding to purchase any shares

of our common stock.

The number of shares of our common stock to be outstanding after this offering is based on 29,364,100 shares of common stock outstanding as of December 31, 2016 and excludes, as of such date:

- 2,326,801 shares of common stock issuable upon the exercise of outstanding stock options, at a weighted-average exercise price of \$13.07 per share;
- 2,445 shares of common stock issuable upon the exercise of warrants to purchase common stock, at a weighted-average exercise price of \$12.27 per share;
- 1,021,509 shares of common stock reserved for future issuance under our Amended and Restated 2014 Stock Incentive Plan; and
- 364,000 shares reserved for future issuance under our 2015 Employee Stock Purchase Plan.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below and the risks discussed under the section captioned "Risk Factors" contained in our most recent Annual Report on Form 10-K, which is incorporated by reference in this prospectus supplement and the accompanying base prospectus in its entirety, together with other information in this prospectus supplement, the accompanying base prospectus, the information and documents incorporated herein and therein by reference, and in any free writing prospectus that we have authorized for use in connection with this offering. We cannot assure you that any of the events discussed in the risk factors will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition and cash flows and if so our future prospects would likely be materially and adversely affected. If any of such events were to happen, the trading price and value of our common stock could decline, and you could lose all or part of your investment. You should understand that it is not possible to predict or identify all such risks. Consequently, you should not consider the following to be a complete discussion of all potential risks or uncertainties. Please also read carefully the section below titled "Special Note Regarding Forward-Looking Statements."

You will suffer immediate and substantial dilution in the securities you purchase.

The price per share of our common stock in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Therefore, if you purchase shares of our common stock in this offering, you may pay a price per share that substantially exceeds our net tangible book value per share after this offering. To the extent shares are issued under outstanding options or warrants at exercise prices lower than the price of our common stock in this offering, you will incur further dilution. Assuming that an aggregate of 3,705,991 shares of our common stock are sold at a price of \$16.19 per share, the last reported sale price of our common stock on NASDAQ on March 10, 2017, for aggregate proceeds to us of \$58.0 million after deducting commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of \$10.36 per share, representing the difference between our as adjusted net tangible book value per share as of December 31, 2016 after giving effect to this offering and the assumed offering price. See the section entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

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

In order to raise additional capital, we may at any time, including during the pendency of this offering, 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.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We have agreed, without the prior written consent of Cantor Fitzgerald, and subject to certain exceptions set forth in the sales agreement, not to sell or otherwise dispose of any common stock or securities convertible into or

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exchangeable for shares of common stock, warrants or any rights to purchase or acquire common stock during the period beginning on the fifth trading day immediately prior to the delivery of any placement notice delivered by us to Cantor Fitzgerald and ending on the fifth trading day immediately following the final settlement date with respect to the shares sold pursuant to such notice. We have further agreed, subject to certain exceptions set forth in the sales agreement, not to sell or otherwise dispose of any common stock or securities convertible into or exchangeable for shares of common stock, warrants or any rights to purchase or acquire common stock in any other "at the market" or continuous equity transaction prior to the later of the termination of the sales agreement with Cantor Fitzgerald and the sixtieth (60th) day immediately following the final settlement date with respect to shares sold by pursuant to a placement notice delivered by us to Cantor Fitzgerald. Therefore, it is possible that we could issue and sell additional shares of our common stock in the public markets. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock.

We have broad discretion in the use of our cash and cash equivalents, including the net proceeds of this offering and, despite our efforts, we may use them in a manner that does not increase the value of your investment.

We currently anticipate that the net proceeds from the sale of our common stock will be used for the continued commercialization of Xtampza, funding research and development efforts of our other product candidates, including clinical development for our Hydrocodone DETERx program, including abuse-deterrence studies and clinical trials, and funding working capital and general corporate purposes, which may include the acquisition or licensing of product candidates, technologies, compounds, other assets or complementary businesses. However, we have not determined the specific allocation of the net proceeds among these potential uses. We have broad discretion in the use of our cash and cash equivalents, including the net proceeds of this offering, and investors must rely on the judgment of our management regarding the use of our cash and cash equivalents. Our management may not use cash and cash equivalents in ways that ultimately increase the value of your investment. Our failure to use our cash and cash equivalents effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest our cash and cash equivalents in short-term or long-term, investment-grade, interest-bearing securities. These investments may not yield favorable returns. If we do not invest or apply our cash and cash equivalents in ways that enhance shareholder value, we may fail to achieve expected financial results, which could cause the price of our common stock to decline. Please see the section entitled "Use of Proceeds" on page S-10 of this prospectus supplement for further information.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our capital stock will be your sole source of gain for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus supplement, the accompanying base prospectus, any free writing prospectuses we have authorized for use in connection with this offering and the documents incorporated by reference herein and therein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein include, among other things, statements about:

- our ability to obtain and maintain regulatory approval of our products and product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product;
- our plans to commercialize our product candidates and grow sales of our products;
- the size and growth potential of the markets for our products and product candidates, and our ability to service those markets;
- the success of competing products that are or become available;
- our ability to obtain reimbursement and third-party payor contracts for our products;
- the costs of commercialization activities, including marketing, sales and distribution;
- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;
- the rate and degree of market acceptance of our products and product candidates;
- changing market conditions for our products and product candidates;
- the outcome of any patent infringement or other litigation that may be brought against us, including litigation with Purdue Pharma, L.P.;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- the success, cost and timing of our product development activities, studies and clinical trials;
- our ability to obtain funding for our operations;
- regulatory developments in the United States and foreign countries;
- our expectations regarding our ability to obtain and adequately maintain sufficient intellectual property protection for our products and product candidates:
- our ability to operate our business without infringing the intellectual property rights of others;
- the performance of our third-party suppliers and manufacturers;
- our ability to comply with stringent U.S. and foreign government regulation in the manufacture of pharmaceutical products, including U.S. Drug Enforcement Agency, or DEA, compliance;
- the loss of key scientific or management personnel;

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- · our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- the accuracy of our estimates regarding expenses, revenue, capital requirements and need for additional financing.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus supplement, particularly under "Risk Factors" that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations or investments we may make.

You should read this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein 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 this prospectus supplement by these cautionary statements.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. 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. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus supplement and in the accompanying base prospectus. See "Risk Factors."

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$60,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time.

We currently intend to use the net proceeds from the sale of the shares of common stock offered by us hereunder, if any, for (i) the continued commercialization of Xtampza; (ii) funding research and development efforts of our other product candidates, including clinical development for our Hydrocodone DETERx program, including abuse-deterrence studies and clinical trials; and (iii) funding working capital and general corporate purposes, which may include the acquisition or licensing of product candidates, technologies, compounds, other assets or complementary businesses.

The expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures depend on numerous factors. As a result, our management will have broad discretion in applying the net proceeds from this offering. Pending their ultimate use, we plan to invest the net proceeds from this offering in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted immediately to the extent of the difference between the public offering price per share you will pay in this offering and the as adjusted net tangible book value per share of our common stock after this offering. Our historical net tangible book value as of December 31, 2016 was \$134.9 million, or \$4.59 per share, based on 29,364,100 shares of common stock outstanding as of such date. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of December 31, 2016.

After giving effect to the sale of our common stock pursuant to this prospectus supplement and accompanying base prospectus in the aggregate amount of \$60,000,000 at an assumed offering price of \$16.19 per share, the last reported sale price of our common stock on The NASDAQ Global Select Market on March 10, 2017, and after deducting commissions and estimated aggregate offering expenses payable by us, our net tangible book value as of December 31, 2016 would have been approximately \$192.9 million, or \$5.83 per share. This represents an immediate increase in net tangible book value of \$1.24 per share to existing shareholders and immediate dilution in net tangible book value of \$10.36 per share to new investors purchasing our common stock in this offering. The following table illustrates this dilution on a per share basis.

Assumed public offering price per share	\$ 16.19
Net tangible book value per share as of December 31, 2016	\$ 4.59
Increase per share attributable to new investors in this offering	1.24
Pro forma as adjusted net tangible book value per share after this offering	5.83
Dilution per share to new investors in this offering	\$ 10.36

The table above assumes for illustrative purposes that an aggregate of 3,705,991 shares of our common stock are sold pursuant to this prospectus supplement and the accompanying base prospectus at a price of \$16.19 per share, the last reported sale price of our common stock on NASDAQ on March 10, 2017, for aggregate gross proceeds of \$60,000,000. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price to \$17.19 per share, assuming all of our common stock in the aggregate amount of \$60,000,000 is sold at that price, would result in an adjusted net tangible book value per share after the offering of \$5.87 per share and would increase the dilution in net tangible by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price to \$15.19 per share, assuming all of our common stock in the aggregate amount of \$60,000,000 is sold at that price, would result in an adjusted net tangible book value per share after the offering of \$5.79 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$9.40 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

To the extent that outstanding options or warrants are exercised or we issue shares of common stock under our stock incentive plans, investors purchasing our common stock in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

PRICE RANGE OF COMMON STOCK

Our common stock has been publicly traded on the NASDAQ Global Select Market under the symbol "COLL" since May 7, 2015. Prior to May 7, 2015, there was no public trading market for our common stock. The following table sets forth, for the periods indicated, the high and low sales prices for our common stock as reported on NASDAQ:

Year Ended December 31, 2017	<u></u>	High	¢.	Low
First quarter (through March 10, 2017)	\$	17.60	\$	13.06
Year Ended December 31, 2016		High		Low
First quarter	\$	28.47	\$	13.80
Second quarter	\$	20.03	\$	11.55
Third quarter	\$	20.25	\$	8.24
Fourth quarter	\$	20.55	\$	13.81
Year Ended December 31, 2015		High		Low
Second quarter (from May 7, 2015)	\$	20.62	\$	11.92
Third quarter	\$	24.88	\$	12.58
Fourth quarter	\$	30.58	\$	15.51
•				

On March 10, 2017, the last reported sale price of our common stock on NASDAQ was \$16.19 per share. As of March 1, 2017 we had approximately 45 holders of record of our common stock. The actual number of shareholders is greater than this number of record holders, and includes shareholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business and do not intend to declare or pay any cash dividends in the foreseeable future. As a result, you will likely need to sell your shares of common stock to realize a return on your investment, and you may not be able to sell your shares at or above the price you paid for them. Payment of cash dividends, if any, in the future will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant. See "Risk Factors—Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain."

PLAN OF DISTRIBUTION

We have entered into a Controlled Equity Offering SM Sales Agreement, or the Sales Agreement, with Cantor Fitzgerald & Co., or Cantor Fitzgerald, under which we may offer and sell shares of our common stock having an aggregate gross sales price of up to \$60,000,000 from time to time through Cantor Fitzgerald, acting as agent. The Sales Agreement has been filed as an exhibit to a report filed under the Exchange Act and incorporated by reference in this prospectus supplement.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Cantor Fitzgerald may sell our common stock by any method permitted by law deemed to be an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act. We may instruct Cantor Fitzgerald not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Cantor Fitzgerald may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Cantor Fitzgerald commissions for its services in acting as agent in the sale of common stock. Cantor Fitzgerald will be entitled to compensation at a commission rate of 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Cantor Fitzgerald for certain specified expenses, including the fees and disbursements of its legal counsel in an amount not to exceed \$50,000. We estimate that the total expenses for the offering, excluding compensation and reimbursements payable to Cantor Fitzgerald under the terms of the Sales Agreement, will be approximately \$110,000.

Settlement for sales of common stock will occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and Cantor Fitzgerald in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Cantor Fitzgerald may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Cantor Fitzgerald will use its commercially reasonable efforts, consistent with its normal trading and sales practices, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the Sales Agreement. Cantor Fitzgerald will act as sales agent on a commercially reasonable efforts basis. In connection with the sale of the common stock on our behalf, Cantor Fitzgerald may be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cantor Fitzgerald may be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Cantor Fitzgerald against certain civil liabilities, including liabilities under the Securities Act.

The offering pursuant to the Sales Agreement will terminate upon the earlier of (i) the sale of all shares of our common stock subject to the Sales Agreement, or (ii) termination of the Sales Agreement as permitted therein. We and Cantor Fitzgerald may each terminate the sales agreement at any time upon ten days' prior notice.

Cantor Fitzgerald and its affiliates may in the future provide various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Cantor Fitzgerald will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

This prospectus supplement and the accompanying prospectus may be made available on a website maintained by Cantor Fitzgerald and Cantor Fitzgerald may distribute this prospectus supplement and the accompanying prospectus electronically.

LEGAL MATTERS

The validity of the issuance of the securities offered in this prospectus supplement will be passed upon for us by Pepper Hamilton LLP, Philadelphia, Pennsylvania. The underwriters are being represented in connection with this offering by Latham & Watkins LLP, San Diego, California.

EXPERTS

The consolidated financial statements of Collegium Pharmaceutical, Inc. as of December 31, 2016 and for the year ended December 31, 2016 incorporated in this Prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2016 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

The consolidated financial statements of Collegium Pharmaceutical, Inc. as of December 31, 2015 and for the years ended December 31, 2015 and December 31, 2014 appearing in our Annual Report on Form 10-K for the year ended December 31, 2015 have been audited by Grant Thornton LLP, an independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement 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 supplement 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 herein by reference for a copy of such contract, agreement or other document.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, DC 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing us at 780 Dedham Street, Suite 800, Canton, MA 02021 or telephoning us at (781) 713-3699.

We also maintain a website at www.collegiumpharma.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement, and you should not consider such information contained on, or accessed through, our website as part of this prospectus supplement.

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. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement, while information

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that we file later with the SEC will automatically update and supersede the information in this prospectus supplement. We incorporate by reference into this prospectus supplement and the registration statement of which this prospectus supplement is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-37372):

- Our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 10, 2017; and
- The description of our common stock contained in our registration statement on Form 8-A (File No. 001-3732) filed with the SEC on May 1, 2015, under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than any filings or portions of such reports that are not deemed "filed" under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished 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 supplement is a part, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement and will become a part of this prospectus supplement 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. 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.

To obtain copies of these filings, see "Where You Can Find More Information" on page S-15 of this prospectus supplement.

COLLEGIUM PHARMACEUTICAL, INC.



\$250,000,000

Common Stock
Preferred Stock
Debt Securities
Warrants
Units
Subscription Rights

We may offer to the public from time to time in one or more series or issuances:

- · shares of our common stock;
- shares of preferred stock;
- debt securities consisting of debentures, notes or other evidences of indebtedness;
- warrants to purchase shares of our common stock, preferred stock and/or debt securities;
- units consisting of a combination of the foregoing securities;
- subscription rights to purchase any of the foregoing securities;
- or any combination of these securities.

This prospectus provides a general description of the securities that we may offer and sell. Each time that we offer securities under this prospectus, we will provide the specific terms of the securities offered, including the public offering price, in a supplement to this prospectus. Any prospectus supplement may add to, update or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement together with additional information described under the heading "Where You Can Find More Information" before you make your investment decision.

The securities may be sold by us to or through underwriters or dealers, directly to purchasers or through agents designated from time to time. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and the comparable section of any applicable prospectus supplement. If any underwriters are involved in the sale of the securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in the applicable prospectus supplement.

Our common stock is traded on The NASDAQ Global Select Market, or NASDAQ, under the symbol "COLL." On October 4, 2016, the closing sale price of our common stock on NASDAQ was \$20.12 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on NASDAQ or any other securities exchange of the securities covered by the applicable prospectus supplement.

Investing in our securities involves a high degree of risk. Risks associated with an investment in our securities will be described in the applicable prospectus supplement and certain of our filings with the Securities and Exchange Commission incorporated by reference into this prospectus, as described under "Risk Factors" on page 4.

This prospectus may not be used to consummate a sale of securities unless accompanied by 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.

Prospectus dated October 18,	2016.

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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, utilizing a "shelf" registration process. Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, up to a total dollar amount of \$250,000,000 of any combination of the securities described in this prospectus. To the extent required for any offer and sale, a prospectus supplement will set forth the type and number of securities being offered, the offering price, the names of any underwriters, dealers, brokers or agents and the applicable sales commission or discount. The prospectus supplement may also add, update or change information contained in this prospectus. You should read carefully the entire prospectus and any prospectus supplement, as well as the documents incorporated by reference into this prospectus and/or any prospectus supplement, before making an investment decision.

This prospectus provides you only with a general description of the securities that we may offer and sell. Each time securities are offered and sold under this shelf registration statement, we will provide a prospectus supplement that will contain specific information about the terms of those securities and the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement, including all documents incorporated herein by reference herein and therein, together with the additional information described under "Where You Can Find More Information" below.

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus or in any prospectus supplement, or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying prospectus supplement, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus and the accompanying prospectus supplement, if any, is accurate on any date subsequent to the date set forth on the front of such document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date.

References in this prospectus to the terms "the Company," "Collegium," "we," "our" and "us" or other similar terms mean Collegium Pharmaceutical, Inc. and our wholly owned subsidiary, unless we state otherwise or the context indicates otherwise.

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 (as supplemented and amended), including the risks of investing in our securities discussed under the heading "Risk Factors" contained in this prospectus (as supplemented and amended), and under similar headings in the other documents that are incorporated by reference into this prospectus. You also should carefully read the information incorporated by reference into this prospectus, including our financial data and related notes, and the exhibits to the registration statement of which this prospectus is a part.

THE COMPANY

Overview

We are a specialty pharmaceutical company developing and beginning to commercialize next-generation abuse-deterrent products that incorporate our patented DETERx platform technology for the treatment of chronic pain and other diseases. Our first product, Xtampza, is an abuse-deterrent, extended-release, oral formulation of oxycodone, a widely prescribed opioid medication. On April 26, 2016, the U.S. Food and Drug Administration, or FDA, approved our new drug application, or NDA, filing for Xtampza for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. Certain human abuse potential studies are included in the approved label, as well as data supporting the administration of the product as a sprinkle or administered via an NG/G Tube. On June 20, 2016, we announced the commercial launch of Xtampza.

Xtampza has the same active ingredient as OxyContin OP, which is the largest selling abuse-deterrent, extended-release opioid in the United States by dollars, with \$2.3 billion in U.S. sales in 2015. We conducted a comprehensive preclinical and clinical program for Xtampza consistent with FDA guidance on abuse-deterrence. These studies and clinical trials demonstrated that chewing, crushing and/or dissolving Xtampza, and then taking it orally or smoking, snorting, or injecting it did not meaningfully change its drug release profile or safety characteristics. By contrast, clinical trials performed by us and others—including a head-to-head clinical trial comparing Xtampza with OxyContin OP—have shown that drug abusers can achieve rapid release and absorption of the active ingredient by manipulating OxyContin OP using common household tools and methods commonly available on the Internet.

In addition, our preclinical studies and clinical trials have shown that the contents of the Xtampza capsule can be removed from the capsule and sprinkled on food or into a cup, and then directly into the mouth, or administered through feeding tubes, without compromising their drug release profile, safety or abuse-deterrent characteristics. By contrast, OxyContin OP, which is formulated in hard tablets, has a black box warning label stating that crushing, dissolving, or chewing can cause rapid release and absorption of a potentially fatal dose of the active ingredient. We believe that Xtampza can address the pain management needs of the approximately 11 million patients in the United States who suffer from chronic pain and have difficulty swallowing.

In May 2016, we entered into a License and Development Agreement with BioDelivery Science International, Inc., or BDSI, which grants us an exclusive license to make, use, sell, offer for sale, import, develop and commercialize ONSOLIS in the United States. We plan to commercialize ONSOLIS upon receipt of FDA approval of a Prior Approval Supplement for the manufacturing transfer. Subject to such approval, we expect to launch ONSOLIS during the second half of 2017.

Since 2010, when we divested our former subsidiary, Onset Therapeutics, LLC, to PreCision Dermatology, Inc., we have devoted substantially all of our resources to the development of our

patented DETERx platform technology, the preclinical and clinical advancement of our product candidates, and the creation and protection of related intellectual property. Since 2011, we have not generated any revenue from product sales and we continue to incur significant research, development and other expenses related to our ongoing operations. Prior to our initial public offering of common stock, or IPO, in May 2015, we funded our operations primarily through the private placement of preferred stock, convertible notes and commercial bank debt. Since our IPO, we have funded our operations primarily through the public offering and sale of our equity securities.

You can get more information regarding our business and industry by reading our most recent Annual Report on Form 10-K and the other reports we file with the SEC. See "Where You Can Find More Information" and "Incorporation of Information by Reference."

Company Information

Our predecessor was incorporated in Delaware in April 2002 under the name Collegium Pharmaceuticals, Inc. In October 2003, our predecessor changed its name to Collegium Pharmaceutical, Inc. In 2010, our predecessor divested its former subsidiary, Onset Therapeutics, LLC to PreCision Dermatology, Inc. Since then, we have devoted substantially all of our resources to the development of our patented DETERx platform technology, the preclinical and clinical advancement of our product candidates and the creation and protection of related intellectual property. In July 2014, we reincorporated in the Commonwealth of Virginia pursuant to a merger, whereby Collegium Pharmaceutical, Inc., a Delaware corporation, merged with and into Collegium Pharmaceutical, Inc., a Virginia corporation, with the Virginia corporation surviving the merger.

Our global headquarters are located at 780 Dedham Street, Suite 800, Canton, MA 02021 and our telephone number is (781) 713-3699. Our website address is www.collegiumpharma.com. The content contained in, or that can be accessed through, our website is not part of this prospectus. See "Where You Can Find More Information" and "Incorporation of Information by Reference."

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. We will cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.0 billion or more; (ii) December 31, 2020; (iii) the date on which we have issued more than \$1.0 billion in non-convertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

NASDAQ Global Select Market Listing

Our common stock is listed on NASDAQ under the symbol "COLL."

The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on NASDAQ or the other securities exchange of the securities covered by the applicable prospectus supplement.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, 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 in the section titled "Risk Factors" contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2015, as well as any amendments thereto reflected in subsequent filings with the SEC, including our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, our quarterly reports, and documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering. See "Where You Can Find More Information." The risks described in the Annual Report and such subsequent filings are not the only risks that we face. Additional risks not presently known to us or that we do not currently consider significant may also have an adverse effect on us. If any of the risks actually occur, our business, results of operations, cash flows or financial condition could suffer. We cannot assure you that any of the events discussed in the risk factors will not occur. These risks could have a material and adverse impact on our business, results of operations, financial condition and cash flows and if so our future prospects would likely be materially and adversely affected. If any of such events were to happen, the trading price and value of our securities could decline, and you could lose all or part of your investment. You should understand that it is not possible to predict or identify all such risks. Consequently, you should not consider the risk factors to be a complete discussion of all potential risks or uncertainties. Please also read carefully the section below titled "Special Note Regarding Forward-Look

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus and the documents incorporated by reference herein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" or the negative of those terms and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus and the documents incorporated by reference herein include, among other things, statements about:

- our ability to obtain and maintain regulatory approval of our products and product candidates, and any related restrictions, limitations, and/or warnings in the label of an approved product;
- our plans to commercialize our product candidates and grow sales of our products;
- the size and growth potential of the markets for our products and product candidates, and our ability to service those markets;
- the success of competing products that are or become available;
- our ability to obtain reimbursement for our products;
- the costs of commercialization activities, including marketing, sales and distribution;
- our ability to develop sales and marketing capabilities, whether alone or with potential future collaborators;

- the rate and degree of market acceptance of our products and product candidates;
- changing market conditions for our products and product candidates;
- the outcome of any patent infringement or other litigation that may be brought against us, including litigation with Purdue Pharma, L.P.;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- the success, cost and timing of our product development activities, studies and clinical trials;
- our ability to obtain funding for our operations;
- regulatory developments in the United States and foreign countries;
- our expectations regarding our ability to obtain and adequately maintain sufficient intellectual property protection for our products and product candidates;
- our ability to operate our business without infringing the intellectual property rights of others;
- the performance of our third-party suppliers and manufacturers;
- the loss of key scientific or management personnel;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- the accuracy of our estimates regarding expenses, revenue, capital requirements and need for additional financing.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus, particularly under "Risk Factors" that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations or investments we may make.

You should read this prospectus and the documents that we incorporate by reference herein and therein 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 this prospectus by these cautionary statements.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. 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. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus and in the applicable prospectus supplement. See "Risk Factors."

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement relating to a specific offering, we intend to use the net proceeds from the sale of securities by us under this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures, acquisitions of new technologies or businesses, and investments. Additional information on the use of net proceeds from the sale of securities by us under this prospectus will be set forth in the prospectus supplement relating to the specific offering.

CONSOLIDATED RATIOS OF EARNINGS TO FIXED CHARGES AND RATIOS OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

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

GENERAL DESCRIPTION OF SECURITIES

We may offer and sell, up to a total dollar amount of \$250,000,000, at any time and from time to time:

- shares of our common stock;
- shares of preferred stock;
- debt securities consisting of debentures, notes or other evidences of indebtedness;
- warrants to purchase shares of our common stock, preferred stock and/or debt securities;
- units consisting of a combination of the foregoing securities;
- subscription rights to purchase any of the foregoing securities; or
- any combination of these securities.

This prospectus provides you with a general description of the securities that we may offer. The terms of any securities we offer will be determined at the time of sale. We may issue debt securities that are exchangeable for and/or convertible into common stock or any of the other securities that may be sold under this prospectus. In connection with each offering, we will provide a prospectus supplement that will describe the specific amounts, prices and terms of the securities being offered, including, to the extent applicable:

- designation or classification;
- aggregate offering price;
- rates and times of payment of dividends;
- redemption, conversion or exchange terms;
- conversion or exchange prices or rates and any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- restrictive covenants;
- voting or other rights; and
- important federal income tax considerations.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement will offer a security that is not included in the registration statement at the time of its effectiveness or offer a security of a type that is not described in this prospectus.

DESCRIPTION OF CAPITAL STOCK

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

As of September 30, 2016, our capital stock was held of record by 45 shareholders. Our authorized capital stock consists of 105,000,000 shares, 100,000,000 of which are designated as common stock with a par value of \$0.001 per share and 5,000,000 of which are designated as preferred stock with a par value of \$0.001.

As of September 30, 2016, there were 23,588,985 shares of common stock outstanding, no shares of preferred stock or warrants outstanding and options to purchase an aggregate of 2,284,346 shares of common stock outstanding.

Common Stock

As of September 30, 2016, we had 23,588,985 shares of common stock outstanding. Shares of our common stock have the following rights, preferences and privileges:

Voting Rights. 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 the shareholders. With certain exceptions, a majority of the votes cast at a shareholder meeting at which a quorum is present must approve all shareholder matters. Our amended and restated articles of incorporation provide that an amendment to our amended and restated articles of incorporation, a merger, share exchange, domestication, entity conversion, sale of assets that requires shareholder approval or our dissolution must be approved by a majority of all the votes entitled to be cast at a shareholder meeting. Our amended and restated articles of incorporation provide that an amendment to our amended and restated bylaws by the shareholders must be approved by more than two thirds of all the votes entitled to be cast. Our amended and restated bylaws also provide that our directors are elected by a plurality of the votes cast.

Dividends. Subject to the preferences applicable to any shares of preferred stock outstanding at any time, holders of our common stock are entitled to receive dividends when and as declared by our board of directors from assets or funds legally available therefor. The timing, declaration, amount and payment of future dividends will depend on our financial condition, earnings, capital requirements and debt service obligations, as well as legal requirements, regulatory constraints, industry practice and other factors that our board of directors deems relevant. Our board of directors will make all decisions regarding our payment of dividends from time to time in accordance with applicable law.

Liquidation. Subject to any preferential liquidation rights of holders of preferred stock that may be outstanding, upon our dissolution, the holders of our common stock will be entitled to share ratably in our assets legally available for distribution to our shareholders.

No Preemptive or Similar Rights. The holders of our common stock do not have any preemptive rights or preferential rights to subscribe for shares of our capital stock or any other securities. Our common stock is not subject to any redemption or sinking fund provisions.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Listing

Our common stock is listed on NASDAQ under the symbol "COLL."

Preferred Stock

Our board of directors may, without further action by our shareholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the rights, preferences and limitations of each series, including voting rights, dividend rights and redemption and liquidation preferences. Satisfaction of any dividend preferences of outstanding shares of our preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of our preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of the Company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without shareholder approval, we may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock.

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

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock or other securities of the Company, and, if applicable, the conversion price (or how it will be calculated), the conversion period and any other terms of conversion (including any anti-dilution provisions, if any);
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated), the exchange period and any other terms of exchange (including any anti-dilution provisions, if any);
- voting rights, if any, of the preferred stock; and
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights.

Transfer Agent and Registrar

The transfer agent and registrar for any series of preferred stock will be set forth in each applicable prospectus supplement.

Anti-Takeover Effects of Provisions of our Articles of Incorporation, our Bylaws and Virginia Law

Various provisions contained in our amended and restated articles of incorporation, our amended and restated bylaws and Virginia law could delay, deter or discourage some transactions involving an actual or potential change in control of the Company.

Articles of Incorporation and Bylaws

Preferred stock

Our amended and restated articles of incorporation authorize our board of directors to establish one or more series of preferred stock and to determine, with respect to any series of preferred stock, the preferences, rights and other terms of such series. See "—Preferred Stock" for additional information. Under this authority, our board of directors could create and issue a series of preferred stock with rights, preferences or restrictions that have the effect of discriminating against an existing or prospective holder of our capital stock as a result of such holder beneficially owning or commencing a tender or exchange offer for a substantial amount of our common stock. One of the effects of authorized but unissued and unreserved shares of preferred stock may be to render it more difficult for, or to discourage an attempt by, a potential acquiror to obtain control of us by means of a merger, tender or exchange offer, proxy contest or otherwise, and thereby protect the continuity of our management. The issuance of shares of preferred stock may have the effect of delaying, deferring or preventing a change in control of our Company without any action by our shareholders.

Qualification and election of directors

Our amended and restated bylaws provide that to be eligible to be nominated by a shareholder for election to our board of directors, a person must submit a written questionnaire regarding his or her background and qualifications and must agree to other representations as set forth in our amended and restated bylaws.

Under our amended and restated articles of incorporation, our board of directors is divided into three classes, each serving three-year terms and until each director's successors are duly elected and qualified. The election of the classes is staggered, such that only approximately one third of our board of directors is up for election in any given year. Our amended and restated articles of incorporation do not provide for cumulative voting in the election of directors.

Board vacancies: removal

Our amended and restated articles of incorporation provide that any vacancy occurring on our board of directors will be filled by a majority of directors then in office, even if less than a quorum. Our amended and restated articles of incorporation also provide that our directors can only be removed for cause upon the vote of more than two thirds of the votes entitled to be cast by holders of common stock.

Special meetings of shareholders; number of directors and unanimous written consent of shareholders

Our amended and restated articles of incorporation provide that only the board of directors, the chairman of the board of directors or the president may call a special meeting of the shareholders. Our amended and restated bylaws provide that the authorized number of our directors be changed only by resolution of our board of directors. Our amended and restated bylaws prohibit shareholders from acting by less-than-unanimous written consent.

Advance notification of shareholder nominations and proposals

Our amended and restated bylaws establish advance notice procedures with respect to shareholder proposals and the nomination of persons for election as directors, other than nominations made by or at the direction of our board of directors.

Virginia Anti-Takeover Statutes

Affiliated transactions statute

Virginia law contains provisions governing certain material transactions, or affiliated transactions, between the Company and any holder of more than 10% of any class of its outstanding voting shares, or an interested shareholder. In general, these provisions prohibit a Virginia corporation from engaging in an affiliated transaction with an interested shareholder for a period of three years following the date such person became an interested shareholder, unless (i) a majority of the disinterested directors and the holders of at least two-thirds of the voting shares, other than those beneficially owned by the interested shareholder, approved the affiliated transaction, or (ii) before the date that the person became an interested shareholder, a majority of the disinterested directors approved the transaction that resulted in the person becoming an interested shareholder. After three years, any such transaction must be at a "fair price," as statutorily defined, or must be approved by the holders of at least two-thirds of the voting shares, other than those beneficially owned by the interested shareholder. Affiliated transactions subject to this approval requirement include mergers, share exchanges, material dispositions of corporate assets not in the ordinary course of business, the sale of shares of the corporation or any of its subsidiaries to an interested shareholder having an aggregate fair market value of greater than 5% of the aggregate fair market value of the corporation's outstanding shares, any dissolution of the Company proposed by or on behalf of an interested shareholder or any reclassification, including reverse stock splits, recapitalization or merger of the Company with its subsidiaries, if any, that increases the percentage of voting shares beneficially owned by an interested shareholder by more than 5%.

The shareholders of a Virginia corporation may adopt an amendment to the corporation's articles of incorporation or bylaws opting out of the provisions of Virginia law governing affiliated transactions but such amendment shall not be effective until 18 months after its adoption. Neither our amended and restated articles of incorporation nor our amended and restated bylaws contain a provision opting out of the provisions of Virginia law governing affiliated transactions.

Control share acquisitions statute

Virginia law also contains provisions relating to control share acquisitions, which are transactions causing the voting strength of any person acquiring beneficial ownership of shares of a Virginia public corporation to meet or exceed certain threshold percentages (20%, 33¹/3% or 50%) of the total votes entitled to be cast for the election of directors. Shares acquired in a control share acquisition have no voting rights unless (i) the voting rights are granted by a majority vote of all outstanding shares other than those held by the acquiring person or any officer or employee director of the corporation or (ii) the articles of incorporation or bylaws of the corporation provide that these Virginia law provisions do not apply to acquisitions of its shares. The acquiring person may require that a special meeting of the shareholders be held to consider the grant of voting rights to the shares acquired in the control share acquisition.

As permitted by Virginia law, our amended and restated articles of incorporation contain a provision opting out of the Virginia anti-takeover law regulating control share acquisitions.

Indemnification and limitation of directors' and officers' liability

We are a Virginia corporation. As permitted by Virginia law, our amended and restated articles of incorporation provide that no director or officer shall be liable in any proceeding brought by or in the right of us or our shareholders for monetary damages arising out of any transaction, occurrence or other course of conduct, except for liability resulting from willful misconduct or a knowing violation of criminal law or of any federal or state securities laws.

Our amended and restated articles of incorporation require us to indemnify any director or officer who was or is a party to a proceeding, including a proceeding brought by or in the right of the Company, due to his or her status as our director or officer unless he or she engaged in willful misconduct or a knowing violation of criminal law. Our amended and restated articles of incorporation also require us to advance expenses to such person prior to the final disposition of any such proceeding.

We have obtained policies that insure our directors and officers against certain liabilities they may incur in their capacity as directors and officers.

We have entered into indemnification agreements with our directors and executive officers. These agreements contain provisions that may require us, among other things, to advance expenses to and indemnify these directors and officers against certain liabilities that may arise because of their status or service as directors or officers of us.

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of the debt securities that we may offer under this prospectus, any of which may be issued as convertible or exchangeable debt securities. We will set forth the particular terms of the debt securities we offer in a prospectus supplement. The extent, if any, to which the following general provisions apply to particular debt securities will be described in the applicable prospectus supplement. The following description of general terms relating to the debt securities and the indenture under which the debt securities will be issued are summaries only and therefore are not complete. You should read the indenture and the prospectus supplement regarding any particular issuance of debt securities.

We may offer under this prospectus up to \$250,000,000 aggregate principal amount of secured or unsecured debt securities, or if debt securities are issued at a discount, or in a foreign currency or composite currency, such principal amount as may be sold for a public offering price of up to \$250,000,000. The debt securities may be either senior debt securities, senior subordinated debt securities. We will issue any debt securities under an indenture to be entered into between us and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and any amendment or supplement thereto and those made part of the indenture by reference to the Trust Indenture Act of 1939, or the Trust Indenture Act, as in effect on the date of the indenture. We have filed or will file a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included.

The following statements relating to the debt securities and the indenture are summaries, qualified in their entirety by reference to the detailed provisions of the indenture and the final form indenture which will be filed with a future prospectus supplement and any amendment or supplement thereto.

General

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

- the title of the series;
- the aggregate principal amount;
- the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;
- any limit on the aggregate principal amount;
- the date or dates on which principal is payable;
- the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates;
- the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;
- the place or places where principal and, if applicable, premium and interest, is payable;
- the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;

- the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;
- whether the debt securities are to be issuable in the form of certificated securities (as described below) or global securities (as described below);
- the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities:
- the currency of denomination;
- the designation of the currency, currencies or currency units in which payment of principal and, if applicable, premium and interest, will be made;
- if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined;
- if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;
- the provisions, if any, relating to any collateral provided for such debt securities;
- any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture;
- any events of default, if not otherwise described below under "Defaults and Notice";
- the terms and conditions, if any, for conversion into or exchange for shares of our common stock or preferred stock;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents;
- any guaranties of the debt securities;
- the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to other indebtedness of the Company;
 and
- the terms and conditions, if any, pursuant to which the debt securities, in whole or in part, shall be defeasible.

All debt securities of one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of any holder, for issuances of additional debt securities of that series with the same terms as the original debt securities of that series (other than the issue price and the interest accrued prior to the issue date of the additional debt securities). We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement. We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Exchange and/or Conversion Rights

We may issue debt securities which can be exchanged for or converted into shares of our common stock or preferred stock. If we do, we will describe the terms of exchange or conversion in the prospectus supplement relating to these debt securities.

Transfer and Exchange

We may issue debt securities that will be represented by either:

- "book-entry securities," which means that there will be one or more global securities registered in the name of a depositary or a nominee of a depositary; or
- "certificated securities," which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

Certificated Debt Securities

If you hold certificated debt securities issued under an indenture, you may transfer or exchange such debt securities in accordance with the terms of the indenture. You will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

Global Securities

The debt securities of a series may be issued in the form of one or more global securities that will be deposited with a depositary or its nominees identified in the prospectus supplement relating to the debt securities. In such a case, one or more global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal amount of outstanding debt securities of the series to be represented by such global security or securities.

Unless and until it is exchanged in whole or in part for debt securities in definitive registered form, a global security may not be registered for transfer or exchange except as a whole by the depositary for such global security to a nominee of the depositary and except in the circumstances described in the prospectus supplement relating to the debt securities. The specific terms of the depositary arrangement with respect to a series of debt securities will be described in the prospectus supplement relating to such series.

Protection in the Event of Change of Control

Any provision in an indenture that governs our debt securities covered by this prospectus that includes any covenant or other provision providing for a put or increased interest or that would otherwise afford holders of our debt securities additional protection in the event of a recapitalization transaction, a change of control of the Company, or a highly leveraged transaction will be described in the applicable prospectus supplement.

Covenants

Unless otherwise indicated in this prospectus or the applicable prospectus supplement, our debt securities may not have the benefit of any covenant that limits or restricts our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We will describe in the applicable prospectus supplement any material covenants in respect of a series of debt securities.

Consolidation, Merger and Sale of Assets

We may agree in any indenture that governs the debt securities of any series covered by this prospectus that we will not consolidate with or merge into any other person or convey, transfer, sell or lease our properties and assets substantially as an entirety to any person, unless:

- we are the surviving entity of any such merger or consolidation or the entity formed by such merger or consolidation shall be organized under the laws of the United States of America, or any state thereof or the District of Columbia, and shall expressly assume by a supplemental indenture all of our obligations related to such debt securities; and
- immediately before and immediately after the merger or consolidation, no default or event of default shall have occurred and be continuing.

Notwithstanding the foregoing, the indenture may allow certain transactions, including, but not limited to, a merger between us and our wholly owned subsidiary or a merger between us and our affiliate for the purpose of converting us into a corporation under the laws of the United States of America, or any state thereof or the District of Columbia, or for the purpose of creating or collapsing a holding company structure.

Defaults and Notice

The debt securities of any series will contain events of default to be specified in the applicable prospectus supplement, which may include, without limitation:

- failure to pay the principal of, or premium, if any, on, any debt security of such series when due and payable (whether at maturity, upon redemption, acceleration or otherwise);
- failure to make a payment of any interest on any debt security of such series when due and payable and such failure continues for a period of 30 days;
- our failure to perform or observe any other covenants or agreements in the indenture with respect to the debt securities of such series and such
 failure continues for a period of 60 days after written notice from the trustee or holders of 25% in the aggregate principal amount of the thenoutstanding debt securities of such series; and
- · certain events relating to our or our significant subsidiaries' bankruptcy, insolvency or reorganization.

If an event of default with respect to debt securities of any series shall occur and be continuing, we may agree that the trustee or the holders of at least 25% in aggregate principal amount of the then-outstanding debt securities of such series may declare the principal amount of all debt securities of such series or such other amount or amounts as the debt securities or supplemental indenture with respect to such series may provide, to be due and payable immediately. Any provisions pertaining to events of default and any remedies associated therewith will be described in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus may require that the trustee under such indenture shall, within 90 days after the trustee knows of the occurrence of a default, give to holders of debt securities of any series notice of all uncured defaults with respect to such series known to it. However, except in the case of a default that results from the failure to make any payment of the principal of, or interest or premium, if any, on the debt securities of any series, the trustee may withhold such notice if it in good faith determines that the withholding of such notice is in the interest of the holders of debt securities of such series. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

Any indenture that governs our debt securities covered by this prospectus will contain a provision entitling the trustee to be indemnified by holders of debt securities before instituting a proceeding or pursuing a remedy under the indenture at the request of such holders. Any such indenture may provide that the holders of at least a majority in aggregate principal amount of the then-outstanding debt securities of any series may direct the time, method and place of conducting any proceedings for any remedy available to the trustee, or of exercising any trust or power conferred upon the trustee with respect to the debt securities of such series. However, the trustee under any such indenture may decline to follow any such direction if, among other reasons, the trustee determines that the actions or proceedings as directed may not lawfully be taken, would involve the trustee in personal liability or would be unduly prejudicial to the holders of the debt securities of such series not joining in such direction.

Any indenture that governs our debt securities covered by this prospectus may permit the holders of such debt securities to institute a proceeding with respect to such indenture, subject to certain conditions, which will be specified in the applicable prospectus supplement and which may include that the holders of at least 25% in aggregate principal amount of the debt securities of such series then-outstanding make a prior written request upon the trustee to exercise its power under the indenture and offer reasonable indemnity to the trustee. Even so, such holders may have an absolute right to receipt of the principal of, or premium, if any, and interest when due, to require conversion or exchange of debt securities if such indenture provides for convertibility or exchangeability at the option of the holder and to institute suit for the enforcement of such rights. Any terms and provisions relating to the foregoing types of provisions will be described in further detail in the applicable prospectus supplement.

Modification of the Indenture

We and the trustee may modify any indenture that governs our debt securities of any series covered by this prospectus with or without the consent of the holders of such debt securities, under certain circumstances to be described in a prospectus supplement.

Defeasance; Satisfaction and Discharge

The prospectus supplement will outline the conditions under which we may elect to have certain of our obligations under the indenture discharged and under which the indenture obligations will be deemed to be satisfied.

Any indenture that governs our debt securities covered by this prospectus may provide that we may discharge our obligations under such debt securities and the indenture with respect to such debt securities if:

- either (A) there shall have been canceled by the trustee under the indenture, or delivered to the trustee for cancellation, all debt securities of such series theretofore authenticated and delivered or (B) all such debt securities not theretofore delivered to the trustee for cancellation have become due and payable or will become due and payable within one year or are to be called for redemption within one year under irrevocable arrangements for the giving of notice of redemption by the trustee;
- we have irrevocably deposited or caused to be deposited with the trustee funds in an amount sufficient to pay and discharge the entire indebtedness on the debt securities not theretofore delivered to the trustee for cancellation, for principal, premium, if any, and interest to the maturity or date of redemption;
- · we have paid all other sums payable by us under the indenture or deposited all other required sums with the trustee; and

 the deposit will not result in a breach or violation of, or constitute a default under, any other instrument or agreement to which we are a party or to which we are bound.

Any indenture that governs our debt securities covered by this prospectus may provide that we may be discharged from our obligations with respect to any debt securities, subject to certain exceptions. Further, any indenture that governs our debt securities covered by this prospectus may provide that we may be released from our obligations under certain sections of such indenture, subject to certain exceptions. In either case, such indenture may provide that certain conditions must be satisfied prior to such discharge or release, including, but not limited to:

- we shall have irrevocably deposited with the trustee, in trust, for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the holders of the debt securities, (a) money, (b) U.S. or foreign government obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment, money, or (c) a combination thereof, in an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal, accrued interest and premium, if any;
- there shall be no continuing default or event of default with respect to such debt securities at the time of the deposit or after giving effect thereto;
- there shall not be certain conflicting interest for purposes of the Trust Indenture Act;
- such actions shall not result in a breach or violation of, or constitute a default under, any other agreement or instrument to which we are bound;
- we shall have delivered a legal opinion relating to certain tax matters; and
- we shall have delivered a legal opinion and certain other certificates relating to the satisfaction of the required conditions.

Regarding the Trustee

We will identify the trustee and any relationship that we may have with such trustee, with respect to any series of debt securities, in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of the Company, the indenture and the Trust Indenture Act limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee acquires any "conflicting interest" within the meaning of the Trust Indenture Act, it must eliminate such conflict or resign.

Governing Law

The indenture and the debt securities will be governed by, and construed in accordance with, the internal laws of the State of New York.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in each applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the applicable warrant agreements and the applicable prospectus supplement for the warrants. We will incorporate by reference into the registration statement of which this prospectus forms a part the form of warrant agreement, including a form of warrant certificate, if any, that describes the terms of the series of warrants we are offering before the issuance of the related series of warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise of the warrants, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of our debt securities to be received upon exercise of the warrants, and a
 description of that series of debt securities;
- · any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if the warrants may not be continuously exercised throughout that period, the specific date or dates on which the warrants may be exercised;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other
 agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange or market;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;

- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. Units may be offered independently or together with common stock, preferred stock, debt securities and/or warrants offered by any prospectus supplement, and may be attached to or separate from those securities. While the terms we have summarized below will generally apply to any future units that we may offer under this prospectus, we will describe the particular terms of any series of units that we may offer in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will incorporate by reference into the registration statement of which this prospectus forms a part the form of unit agreement, including a form of unit certificate, if any, that describes the terms of the series of units we are offering before the issuance of the related series of units. The following summaries of material provisions of the units, and the unit agreements, are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the units that we sell under this prospectus, as well as the complete unit agreements that contain the terms of the units.

General

We may issue units comprised of one or more shares of common stock or preferred stock, debt securities and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units and of the securities comprising the units, including whether, and under what circumstances, those securities may be held or transferred separately;
- the rights and obligations of the unit agent, if any;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Capital Stock," "Description of Debt Securities" and "Description of Warrants," will apply to each unit and to any common stock, preferred stock, debt securities or warrants included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

DESCRIPTION OF SUBSCRIPTION RIGHTS

As specified in any applicable prospectus supplement, we may issue subscription rights consisting of one or more shares of common stock, shares of preferred stock, debt securities, or any combination of such securities.

PLAN OF DISTRIBUTION

We may sell the offered securities in any of the ways described below or in any combination or any other way set forth in an applicable prospectus supplement from time to time:

- to or through underwriters or dealers in a public offering and sale by them;
- through one or more agents; or
- directly to purchasers or to a single purchaser.

Any underwritten offering may be on a best efforts or a firm commitment basis. We may also make direct sales through subscription rights distributed to our shareholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to shareholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties. We may also sell securities to our shareholders as part of a dividend on our common shares if our board of directors, in the future, should elect to pay dividends with a combination of cash and common shares.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Any of the prices may present a discount to the then prevailing market prices.

In connection with each offering, a prospectus supplement will describe the method of distribution of the securities and any applicable restrictions. The prospectus supplement will also describe the specific terms of the offering of the securities, including the following:

- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;
- the public offering price of the securities and the proceeds to us and any discounts, commissions or concessions allowed or reallowed or paid to dealers;
- · the compensation payable to each participant in the offer and sale of the securities, including discounts, concessions and commissions;
- the nature of the underwriters' obligation to take the securities, including best efforts or firm commitment obligations; and
- any securities exchanges on which the securities may be listed.

Any offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

In compliance with the guidelines of the Financial Industry Regulatory Authority, the maximum compensation to the underwriters or dealers in connection with the sale by the Company of its securities pursuant to this prospectus and the accompanying supplement to this prospectus may not exceed 8% of the aggregate offering price of the securities as set forth on the cover page of any prospectus supplement.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

Agents and underwriters may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution from us with respect to payments which the agents or underwriters may be required to make in respect thereof. Agents and underwriters may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale.

We may sell any of the securities through agents designated by us from time to time. We will name any agent involved in the offer or sale of these securities and will list commissions payable by us to these agents in the applicable prospectus supplement. These agents will be acting on a best efforts basis to solicit purchases for the period of its appointment, unless stated otherwise in the applicable prospectuses.

We may sell any of the securities directly to purchasers. In this case, we will not engage underwriters or agents in the offer and sale of these securities.

The securities we offer may be new issues of securities and may have no established trading market. The securities may or may not be listed on a securities exchange. Underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of, or the existence of trading markets for, any of the securities.

Until the distribution of the securities is completed, rules of the SEC may limit the ability of any underwriters and selling group members to bid for and purchase the securities. As an exception to these rules, underwriters are permitted to engage in some transactions that stabilize the price of the securities. Such transactions consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the securities.

If any underwriters create a short position in the securities in an offering in which they sell more securities than are set forth on the cover page of the applicable prospectus supplement, the underwriters may reduce that short position by purchasing the securities in the open market.

The lead underwriters may also impose a penalty bid on other underwriters and selling group members participating in an offering. This means that if the lead underwriters purchase securities in the open market to reduce the underwriters' short position or to stabilize the price of the securities, they may reclaim the amount of any selling concession from the underwriters and selling group members who sold those securities as part of the offering.

In general, purchases of a security for the purpose of stabilization or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases. The imposition of a penalty bid might also have an effect on the price of a security to the extent that it were to discourage resales of the security before the distribution is completed.

We do not make any representation or prediction as to the direction or magnitude of any effect that the transactions described above might have on the price of the securities. In addition, we do not make any representation that underwriters will engage in such transactions or that such transactions, once commenced, will not be discontinued without notice.

Underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business.

If indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by particular institutions to purchase securities from us at the public offering price set forth in such prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in such prospectus supplement. Each delayed delivery contract will be for an amount no less than, and the aggregate principal amounts of securities sold under delayed delivery contracts shall be not less nor more than, the respective amounts stated in the applicable prospectus supplement. Institutions with which such contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others, but will in all cases be subject to our approval. The obligations of any purchaser under any such contract will be subject to the conditions that (a) the purchase of the securities shall not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject, and (b) if the securities are being sold to underwriters, we shall have sold to the underwriters the total principal amount of the securities less the principal amount thereof covered by the contracts. The underwriters and such other agents will not have any responsibility in respect of the validity or performance of such contracts.

To comply with applicable state securities laws, the securities offered by this prospectus will be sold, if necessary, such jurisdictions only through registered or licensed brokers or dealers. In addition, securities may not be sold in some states unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

LEGAL MATTERS

Unless indicated otherwise in the applicable prospectus supplement, the validity of the issuance of the securities offered hereby will be passed upon for us by Pepper Hamilton LLP, Philadelphia, Pennsylvania. As appropriate, legal counsel representing the underwriters, dealers or agents will be named in the accompanying prospectus supplement and may opine to certain legal matters.

EXPERTS

The audited financial statements incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE 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 herein by reference for a copy of such contract, agreement or other document.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, DC 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing us at 780 Dedham Street, Suite 800, Canton, MA 02021 or telephoning us at (781) 713-3699.

We also maintain a website at www.collegiumpharma.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider such information contained on, or accessed through, our website as part of this prospectus.

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. 001-37372):

- Our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 18, 2016;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2016 filed with the SEC on May 11, 2016;

- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016 filed with the SEC on August 11, 2016;
- Our Definitive Proxy Statement on Schedule 14A filed with the SEC on April 29, 2016;
- Our Current Reports on Form 8-K filed with the SEC on January 26, 2016, April 15, 2016, May 12, 2016 and June 13, 2016; and
- The description of our common stock contained in our registration statement on Form 8-A (File No. 001-3732) filed with the SEC on May 1, 2015, under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than any filings or portions of such reports that are not deemed "filed" under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished 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, until we file a post-effective amendment that indicates the termination of the offering of the securities 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.

To obtain copies of these filings, see "Where You Can Find More Information" on page 26 of this prospectus.



Collegium Pharmaceutical, Inc.

Up to \$60,000,000

Common Stock

Prospectus Supplement

Cantor Fitzgerald

March 13, 2017