

REPROS THERAPEUTICS INC.

FORM S-3

(Securities Registration Statement (simplified form))

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Address	2408 TIMBERLOCH PL SUITE B-7 WOODLANDS, TX 77380
Telephone	2817193400
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Sector	Healthcare
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

Repros Therapeutics Inc.

(Exact name of registrant as specified in its charter)

State of Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

76-0233274
(I.R.S. Employer
Identification No.)

2408 Timberloch Place, Suite B-7
The Woodlands, TX 77380
(281) 719-3400
(Address, including zip code, and telephone
number, including area code, of registrant's
principal executive offices)

Larry Dillaha, M.D.
President and Chief Executive Officer
Repros Therapeutics Inc.
2408 Timberloch Place, Suite B-7
The Woodlands, Texas 77380
(281) 719-3400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Justin W. Chairman
Morgan, Lewis & Bockius LLP
1701 Market Street
Philadelphia, Pennsylvania 19103
(215) 963-5000

Approximate date of commencement of proposed sale to the public:
From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Securities and Exchange Commission pursuant to Rule 462(e) under the Securities Act, check the following box:

If this Form is a post-effective amendment to a registration statement filed pursuant to the General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box:

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee(2)
Common Stock, par value \$.001 per share	4,487,500	—	—	—

(1) This replacement registration statement is filed pursuant to Rule 415(a)(6) under the Securities Act of 1933, as amended (the “Securities Act”) and includes solely 4,487,500 shares of common stock, par value \$.001 per share, of Repros Therapeutics Inc. (the “Company”) that were previously registered by the Company on the expiring registration statement on Form S-3 (Registration No. 333-197253) initially filed by the Company with the Securities and Exchange Commission (the “Commission”) under the Securities Act on July 3, 2014, as amended by Amendment No. 1 on Form S-3 filed with the Commission on July 16, 2014 and declared effective by the Commission on July 24, 2014, which was subsequently amended by Post-Effective Amendment No. 1 on Form S-3 filed with the Commission on June 14, 2016 and declared effective by the Commission on June 23, 2016 (as amended and declared effective by the Commission, the “Prior Registration Statement”), and were not sold thereunder. The shares of common stock registered hereunder are the shares of common stock that we may issue from time to time upon the exercise of currently outstanding Series A Warrants of the Company (the “Series A Warrants”) to purchase 3,742,500 shares of common stock and Series B Warrants of the Company (the “Series B Warrants” and, together with the Series A Warrants, the “Warrants”) to purchase 745,000 shares of common stock by the holders of the Warrants. Pursuant to Rule 416 under the Securities Act, this registration statement also includes an indeterminate number of shares which may be issued by the Company with respect to such shares of common stock by way of a stock dividend, stock split or in connection with a stock combination, recapitalization, merger, consolidation or otherwise.

(2) Series A Warrants have an exercise price of \$0.84 per share of common stock, and Series B Warrants have an exercise price of \$0.92 per share. The proposed maximum aggregate offering price of Series A Warrants to purchase 3,742,500 shares of common stock and Series B Warrants to purchase 745,000 shares of common stock is \$3,829,100. Pursuant to Rule 415(a)(6) under the Securities Act, the filing fee of \$497.22 related to the 4,487,500 shares of common stock at an aggregate offering price of \$3,829,100 included in this replacement registration statement that were previously registered on the Prior Registration Statement, and were not sold thereunder, will continue to be applied to such unsold securities. In accordance with Rule 415(a)(6), no registration fee is due and the Prior Registration Statement will be deemed terminated as of the date of effectiveness of this replacement registration statement.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

This replacement registration statement on Form S-3 is filed pursuant to Rule 415(a)(6) under the Securities Act of 1933, as amended (the "Securities Act") and includes solely 4,487,500 shares (the "Shares") of common stock, par value \$.001 per share, of Repros Therapeutics Inc. (the "Company") that were previously registered by the Company on the expiring registration statement on Form S-3 (Registration No. 333-197253) initially filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act on July 3, 2014, as amended by Amendment No. 1 on Form S-3 filed with the Commission on July 16, 2014 and declared effective by the Commission on July 24, 2014, which was subsequently amended by Post-Effective Amendment No. 1 on Form S-3 filed with the Commission on June 14, 2016 and declared effective by the Commission on June 23, 2016 (as amended and declared effective by the Commission, the "Prior Registration Statement"), and were not sold thereunder.

The Shares registered hereunder are the shares of common stock that the Company may issue from time to time upon the exercise of currently outstanding Series A Warrants of the Company (the "Series A Warrants") to purchase 3,742,500 shares of common stock and Series B Warrants of the Company (the "Series B Warrants" and, together with the Series A Warrants, the "Warrants") to purchase 745,000 shares of common stock by the holders of the Warrants. The Company is filing this replacement registration statement on Form S-3 in accordance with Instruction I.B.4 of Form S-3.

Pursuant to Rule 415(a)(5) under the Securities Act, securities registered on the Prior Registration Statement may be offered and sold only if not more than three years have elapsed since the initial effective date of the Prior Registration Statement. Accordingly, we are filing this registration statement to cover unsold securities covered by the Prior Registration Statement. In addition, under Rule 415(a)(5), the Company may continue to offer and sell the Shares during the grace period permitted by Rule 415(a)(5). In accordance with Rule 415(a)(6), effectiveness of this registration statement will be deemed to terminate the offering of securities on the Prior Registration Statement.

The information in this prospectus is not complete and may be changed. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion. Dated July 24, 2017.

PROSPECTUS



Common Stock

This prospectus relates to 4,487,500 shares of common stock, par value \$.001 per share, of Repros Therapeutics Inc. (the “Company”) that the Company may issue from time to time upon the exercise of currently outstanding Series A Warrants of the Company (the “Series A Warrants”) to purchase 3,742,500 shares of common stock and Series B Warrants of the Company (the “Series B Warrants” and, together with the Series A Warrants, the “Warrants”) to purchase 745,000 shares of common stock by the holders of the Warrants. The Company sold the Warrants to certain investors in a public offering of the Company’s shares and warrants in May 2017, as disclosed a related final prospectus supplement the Company filed with the Securities and Exchange Commission (the “Commission”) on May 18, 2017 pursuant to Rule 424(b)(5) under the Securities Act of 1933, as amended (the “Securities Act”).

We will receive any net cash proceeds from the exercise of the Warrants. We will pay all expenses of registration incurred in connection with this offering.

Our common stock is traded on the NASDAQ Capital Market under the symbol “RPRX”. On July 21, 2017, the last reported sale price of our common stock on the NASDAQ Capital Market was \$0.37 per share.

YOU SHOULD READ THIS PROSPECTUS CAREFULLY BEFORE YOU INVEST, INCLUDING THE “RISK FACTORS” SECTIONS BEGINNING ON PAGE 6 OF THIS PROSPECTUS AND IN THE DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2017.

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You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any person, including any salesman or broker, to provide information other than that provided in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of the securities in any jurisdiction where the offer is not permitted. The information in this prospectus is accurate only as of the date on the cover page of this prospectus and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference.

ABOUT THIS PROSPECTUS

This document is called a prospectus and is part of a registration statement on Form S-3 that we filed with the Commission using a “shelf” registration process. Under this shelf process, we may offer and sell, from time to time in one or more offerings, the securities described in this prospectus..

The registration statement of which this prospectus is a part contains additional information about us and the securities we may offer by this prospectus. Specifically, we have filed and incorporated by reference certain legal documents that control the terms of the securities offered by this prospectus as exhibits to the registration statement. We will file or incorporate by reference additional legal documents (if any) that will control the terms of the securities we may offer by this prospectus as exhibits to the registration statement or to reports we file with the Commission that are incorporated by reference into this prospectus. You should read both this prospectus together with additional information described under the heading “Where You Can Find More Information.”

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference, in particular the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” incorporated herein by reference, contain certain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements represent our expectations, beliefs, intentions or strategies concerning future events, including, but not limited to, any statements regarding our assumptions about financial performance; the continuation of historical trends; the sufficiency of our cash balances for future liquidity and capital resource needs; the expected impact of changes in accounting policies on our results of operations, financial condition or cash flows; anticipated problems and our plans for future operations; and the economy in general or the future of the medical device industry, all of which are subject to various risks and uncertainties.

When we use in this prospectus as well as in reports, statements, and information we have filed with the Commission, in our press releases, in presentations to securities analysts or investors, or in oral statements made by or with the approval of an executive officer, the words or phrases “believes,” “may,” “will,” “expects,” “should,” “continue,” “anticipates,” “intends,” “will likely result,” “estimates,” “projects” or similar expressions and variations thereof, we intend to identify forward-looking statements. However, any statements contained in this prospectus that are not statements of historical fact may be deemed to be forward-looking statements. We caution that these statements by their nature involve risks and uncertainties, certain of which are beyond our control, and actual results may differ materially depending on a variety of important factors.

SUMMARY

This is only a summary and does not contain all of the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, including the "Risk Factors" section and the information incorporated by reference from our other filings with the Commission.

Company Overview

Repros Therapeutics Inc. (the "Company," "Repros," or "we," "us" or "our") was organized on August 20, 1987. We are a biopharmaceutical company focused on the development of new drugs to treat hormonal and reproductive system disorders.

We are developing Proellex®, an orally administered selective blocker of the progesterone receptor in women, for the treatment of uterine fibroids and endometriosis. Uterine fibroids and endometriosis affect millions of women of reproductive age. Proellex® has shown statistically significant results in previous Phase 2 studies for uterine fibroids and endometriosis. We completed a low dose escalating study as permitted by the Food and Drug Administration ("FDA") in late 2011, to determine both signals of efficacy and safety for low oral doses of the drug. There was no evidence of elevations of liver enzymes over baseline, suggesting these lower doses avoid the type of adverse events seen at much higher doses in earlier studies. On March 17, 2014, we announced that the FDA indicated that we may proceed to conduct Phase 1 and Phase 2 studies of low dose oral Proellex® for uterine fibroids and endometriosis while remaining on partial clinical hold. This guidance indicated that the highest allowed dose will be 12 mg daily. On December 29, 2014, we announced that we have initiated a Phase 2B study for low dose oral Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. On April 10, 2017, we announced we had a meeting with the FDA to discuss the progress and next steps in the development of Proellex® for the treatment of uterine fibroids. Shortly before the meeting, we were notified that the meeting would be a type C/Guidance meeting, rather than a type B/End of phase 2 meeting as previously anticipated. At the meeting, the FDA confirmed that Proellex® will continue on the current partial clinical hold while they consult with liver experts within the FDA regarding previously disclosed effects on the liver. On July 17, 2017, the Company announces that it received preliminary feedback from the FDA on the oral Proellex® clinical development program. The Proellex® program will remain on partial clinical hold, and based upon the FDA's review of all the existing liver function safety data, the FDA has indicated that the Company will be required to compile a large pre-approval safety data base to support future development.

We have an active Investigational New Drug Application ("IND") for the vaginal delivery of Proellex® for the treatment of uterine fibroids. Since the clinical hold relates only to oral delivery of Proellex®, this IND has no clinical hold issues. In the first quarter of 2012, we initiated a Phase 2 vaginal administration study for the treatment of uterine fibroids and subsequently reported the final study results in January 2013. We held an end of Phase 2 meeting with the FDA in May 2013, to discuss a Phase 3 study design for vaginally delivered Proellex as a treatment for uterine fibroids. The FDA recommended that a Phase 2B study should be conducted prior to commencing a Phase 3 program. On December 29, 2014, we announced that we have initiated a Phase 2B study for vaginally delivered Proellex® in the treatment of uterine fibroids. This study was fully enrolled in January 2016 and on November 14, 2016, we announced positive clinical data from this study after two 18-week courses of treatment as compared to placebo. In light of the FDA guidance on the oral Proellex® development program, the Company is assessing increasing its focus on the vaginal delivery of Proellex®.

We are also developing enclomiphene, a single isomer of clomiphene citrate which is an orally active proprietary small molecule compound. Enclomiphene is for the treatment of secondary hypogonadism in overweight men wishing to restore normal testicular function. Men with secondary hypogonadism exhibit low testosterone levels due to under stimulated testes but they are generally fertile. Enclomiphene is designed to treat the underlying mechanism, insufficient stimulation of the testes by the pituitary, which causes secondary hypogonadism. Secondary hypogonadism due to being overweight or obese is the single greatest cause of hypogonadism in general.

In December 2011, we completed a Phase 2B study of enclomiphene in men with secondary hypogonadism, but naïve to testosterone treatment, at the recommendation of the FDA. Top line results of this study demonstrated that enclomiphene was generally well tolerated compared to placebo and that there were no drug related serious adverse events that led to discontinuation. We met with the FDA in May 2012 to discuss the design of pivotal Phase 3 efficacy studies for enclomiphene as well as the components of the overall drug development program required for a New Drug Application (“NDA”) submission and agreed on registration requirements for enclomiphene oral therapy for the treatment of secondary hypogonadism. In July 2012, we announced that we reached an agreement with the FDA for the design of the pivotal efficacy studies for enclomiphene for the treatment of secondary hypogonadism. The pivotal studies were conducted under a Special Protocol Assessment (“SPA”). We have completed both Phase 3 pivotal efficacy studies. On March 27, 2013, we announced that the top-line results from our first pivotal Phase 3 study, ZA-301, met both co-primary endpoints mandated by the FDA, and we announced on September 16, 2013, that we met both co-primary endpoints in the second pivotal study, ZA-302. Additionally, on September 16, 2013, we announced the results from ZA-300, a six-month safety study. This study identified no new safety issues. On October 22, 2013, we announced that we received guidance from the FDA instructing us to request a meeting to discuss the adequacy of studies ZA-301 and ZA-302. In addition to this guidance, the FDA further noted that they would allow us to run head-to-head studies against approved testosterone replacement products. These head-to-head studies, ZA-304 and ZA-305, were initiated in January 2014 and subsequently completed in September and August 2014, respectively. Both of these head-to-head studies achieved superiority for both co-primary endpoints and most secondary endpoints as compared to the approved testosterone replacement product. On October 21, 2014, we announced the results from ZA-303, a 52 week, single-blind, placebo-controlled Phase 3 study to evaluate the effects on bone mineral density. In this study, no new safety signals were identified, including no evidence of negative effects on bone mineral density. On February 2, 2015, we announced that we electronically submitted our NDA to the FDA for enclomiphene. The FDA accepted the NDA for review on April 1, 2015 and later assigned a Prescription Drug User Fee (“PDUFA”) goal date of November 30, 2015. In addition, the Division of Bone, Reproductive and Urologic Products (the “Division”) of the FDA scheduled an advisory committee meeting to review the NDA for November 3, 2015. However, the Division subsequently cancelled the scheduled advisory committee meeting due to questions that arose late in the review regarding the bioanalytical method validation that could affect interpretability of certain pivotal study data. On December 1, 2015, we announced that we had received a Complete Response Letter (“CRL”) from the FDA. A CRL informs companies that an NDA cannot be approved in its present form. In the CRL, the FDA stated that, based on recent scientific developments, the design of the enclomiphene Phase 3 studies is no longer adequate to demonstrate clinical benefit and recommended that Repros conduct an additional Phase 3 study or studies to support approval in the target population. The FDA also noted concerns regarding study entry criteria, titration and bioanalytical method validation in the Phase 3 program.

Subsequently, on February 4, 2016, we attended a meeting with the FDA reviewers and senior leaders to discuss resolution of issues identified during the NDA review. The meeting covered a broad range of topics surrounding the NDA data as well as emerging agency and expert thinking regarding the treatment of hypogonadism. We believe based on the meeting that the FDA is not closed to considering secondary hypogonadism as an indication. Additionally, in January 2016, we initiated a Phase 2 double-blind, placebo controlled, proof of concept study, ZA-205, in obese secondary hypogonadal men to assess the impact of enclomiphene on metabolic parameters and quality of life under a diet and exercise regimen. This study was fully enrolled in February 2016 and on August 15, 2016, we reported six month interim results from this study.

Additionally, on September 12, 2016, we reported that we successfully submitted a European centralized marketing authorization application (“MAA”) for enclomiphene for the treatment of secondary hypogonadism. This MAA was subsequently accepted by the European Medicines Agency (“EMA”) which, as previously reported, has assigned the United Kingdom as the primary rapporteur and France as the co-rapporteur for the application review. As part of the ongoing review process, the Company expects to file responses to the EMAs questions in the third quarter of 2017.

On December 6, 2016, we participated in the industry presentation at the Bone, Reproductive and Urologic Drugs' Advisory Committee meeting. The advisory panel provided the FDA with advice regarding a clinical and regulatory path to approval for products, such as enclomiphene, in subjects with obesity-related hypogonadism who wish to maintain spermatogenesis. The panel voted 16 to 5 that the achievement of testosterone improvement while maintaining evidence of spermatogenesis was not sufficient, in and of itself, to provide evidence of clinical benefit. At the meeting, numerous panel members suggested that an additional endpoint related to symptoms should be assessed.

Risks Associated with our Business

We have experienced substantial operating losses since inception. As of March 31, 2017, we had accumulated losses of \$325.4 million, approximately \$3.2 million in cash and cash equivalents, and accounts payable and accrued expenses of approximately \$3.8 million, in the aggregate. We anticipate that our current liquidity will be sufficient to continue the development of our product candidates through the end of 2017. We continue to explore potential additional financing alternatives, including corporate partnering opportunities, that would provide sufficient funds to enable us to continue to develop our two product candidates through FDA approval; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all. The foregoing matters raise substantial doubt about our ability to continue as a going concern.

Recent Developments

On May 23, 2017, we completed a public offering (the "May Public Offering") of (i) 2,744,125 shares of our common stock, each share sold together with a Series A Warrant and a Series B Warrant, and (ii) pre-funded Series C Warrants to purchase up to 2,245,875 shares of common stock, sold together with a Series A Warrant for each share of common Stock issuable upon exercise of the Pre-Funded Series C Warrant and a Series B Warrant for each share of common stock issuable upon exercise of the Pre-Funded Series C Warrant, to certain investors. The combined public offering price per share and accompanying warrants was \$0.60 per share. The net proceeds to the Company from the May Public Offering, after deducting the underwriting discount and commissions and other offering expenses, were approximately \$2.5 million. The Company intended to use the proceeds from the May Public Offering to fund general corporate purposes.

As of July 20, 2017, all pre-funded Series C Warrants were exercised and we issued 2,245,875 shares of common stock in connection therewith. As of July 20, 2017, we had 36,910,570 shares of common stock issued and outstanding.

Our Contact Information

Our executive offices are located at 2408 Timberloch Place, Suite B-7, The Woodlands, Texas. Our telephone number is (281) 719-3400. Our website address is www.reprosr.com. Our website and the information contained on our website are not incorporated by reference into this prospectus or the registration statement of which this prospectus forms a part.

RISK FACTORS

An investment in the securities offered by this prospectus involves a high degree of risk. Before deciding to invest, you should carefully consider the risks described below and discussed under the section captioned "Risk Factors" contained in our most recent Annual Report on Form 10-K, as well as the risks, uncertainties and additional information set forth in our Commission reports on Forms 10-K, 10-Q and 8-K and in other documents incorporated by referenced herein. If any of these risks actually occurs, our business, the financial condition, results of operations or cash flow could be harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. The risks described below and in the documents referenced above are not the only ones we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business.

Risks Related to our Common Stock

Purchasers in this offering will experience immediate and substantial dilution.

As of March 31, 2017, we had a net tangible book value of \$1.6 million, or \$0.06 per share, based on 26,685,419 shares of our common stock outstanding as of March 31, 2017. The net tangible book value per share is less than the current market price per share. Series A Warrants have an exercise price of \$0.84 per share, and Series B Warrants have an exercise price of \$0.92 per share. If you pay more than the net tangible book value per share for common stock in this offering, you will experience immediate dilution. See the section titled "Dilution" on page 8 of this prospectus. The exercise of outstanding options will result in further dilution in your investment. In addition, if we issue additional equity securities in the future, the newly issued securities may further dilute your ownership interest.

Our inability to comply with the listing requirements of the NASDAQ Capital Market could result in our common stock being delisted, which could affect our common stock's market price and liquidity and reduce our ability to raise capital.

We are required to meet certain qualitative and financial tests to maintain the listing of our common stock on the NASDAQ Capital Market. As of March 31, 2017, our stockholders' equity was \$1.6 million. As a result, we did not comply with the NASDAQ's \$2.5 million minimum stockholders' equity requirement under NASDAQ Listing Rule 5550(b)(1). Further, as of March 31, 2017, we did not meet the alternative compliance standards relating to the market value of listed securities or net income from continuing operations. On May 11, 2017, we received a letter from NASDAQ notifying us of our noncompliance with the minimum stockholders' equity requirement. We are evaluating various courses of actions to regain compliance and have submitted to NASDAQ a plan to regain compliance. On July 19, 2017, we were notified by NASDAQ that our common stock will remain listed on NASDAQ through at least September 30, 2017, during which time we will seek to take actions to regain compliance. If, prior to such date, we do not regain compliance, but provide additional information as to a plan to do so, we may be eligible for an extension of the September 30 date, through early November. However, there can be no assurance that we will be granted this additional time, or that we will ultimately be able to regain compliance.

In addition, on June 14, 2017, we received another letter from NASDAQ advising us that for 30 consecutive business days preceding the date of the letter, the closing bid price of our common stock had been below the \$1.00 per share minimum required for continued listing on the NASDAQ Capital Market pursuant to NASDAQ Listing Rule 5550(a)(2) (the "Minimum Bid Price Rule"). The letter also stated that we would be provided 180 calendar days, or until December 11, 2017, to regain compliance with the Minimum Bid Price Rule. To do so, the closing bid price of our common stock must be at or above \$1.00 per share for a minimum of ten consecutive business days prior to that date. If by December 11, 2017 we cannot demonstrate compliance with the Minimum Bid Price Rule, we may be eligible for additional time. To qualify, the NASDAQ staff will determine whether or not we meet the NASDAQ Capital Market initial listing criteria set forth in NASDAQ Listing Rule 5550, except for the Minimum Bid Price Rule. If we meet the initial listing criteria (with the exception of the Minimum Bid Price Rule) and provides written notice of our intention to cure the deficiency during the second compliance period, the NASDAQ staff will inform us that we have been granted an additional 180 calendar day compliance period. If we are not eligible for an additional 180-day compliance period, the NASDAQ staff will provide written notice that our securities will be subject to delisting. At that time, we may appeal the NASDAQ staff's determination to delist its securities to a NASDAQ Hearings Panel. There can be no guarantee that we will be able to maintain its NASDAQ listing.

If we do not regain compliance with the continued listing requirements for the NASDAQ Capital Market within specified periods and subject to permitted extensions (if any), our common stock may be recommended for delisting (subject to any appeal we would file). If our common stock is delisted, it could be more difficult to buy or sell our common stock and to obtain accurate quotations, and the price of our common stock could suffer a material decline. Delisting would also impair our ability to raise capital.

USE OF PROCEEDS

We currently intend to use the net proceeds from this offering for general corporate purposes, including for research and development, sales and marketing initiatives, general and administrative expenses, working capital and capital expenditures.

We have not determined the amount of net proceeds from this offering that we will use specifically for the foregoing purposes. Pending use of the net proceeds, we intend to invest the proceeds in a variety of capital preservation instruments, including short-term, investment-grade, interest-bearing instruments.

DIVIDEND POLICY

General

We have never declared or paid cash dividends on our capital stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs.

Rights Plan

Our shareholder rights plan expired in accordance with its terms on September 13, 2015. While we did not extend or renew the plan, we are not prohibited from adopting, without shareholder approval, a shareholder rights plan that may discourage any potential acquirer from acquiring more than a specific percentage of our outstanding common stock. Upon this type of acquisition without approval of our board of directors, all other holders of common stock would have the right to purchase a specified amount of shares at a substantial discount from market price.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted to the extent of the difference between the warrant exercise price per share and the net tangible book value per share of our common stock after this offering. As of March 31, 2017, our historical net tangible book value was \$1.6 million, or \$0.06 per share, based on 26,685,419 shares of our common stock outstanding as of March 31, 2017. Our historical net tangible book value per share represents the amount of our total tangible assets reduced by the amount of our total liabilities, divided by the total number of shares of our common stock outstanding as of March 31 2017.

After giving effect to our sale in this offering of 4,487,500 shares of common stock, with Series A Warrants exercisable for 3,742,500 shares of common stock at a purchase price of 0.84 per share, and Series B Warrants exercisable for 745,000 shares of common stock at a purchase price of \$0.92 per share, and after deducting estimated offering expenses payable by us, our net tangible book value as of March 31, 2017 would have been \$5.4 million, or \$0.17 per share. This represents an immediate increase of net tangible book value of \$0.11 per share to our existing stockholders and an immediate dilution of \$0.67 per share to Series A Warrant holders purchasing shares of common stock in this offering and an immediate dilution of \$0.75 per share to Series B Warrant holders purchasing shares of common stock in this offering. The following table illustrates this per share dilution.

Series A Warrants common stock purchase price per share	\$	0.84
Series B Warrants common stock purchase price per share	\$	0.92
Historical net tangible book value per share at March 31, 2017	\$	0.06
Increase in net tangible book value per share attributable to investors purchasing our common stock in this offering		0.11
As adjusted net tangible book value per share as of March 31, 2017 after giving effect to this offering		0.17
Dilution per share to Series A Warrant Holders exercising for our common stock in this offering	\$	0.67
Dilution per share to Series B Warrant Holders exercising for our common stock in this offering	\$	0.75

The above discussion and table are based 26,685,419 shares outstanding on March 31, 2017, and excludes as of that date:

- 2,897,690 shares of common stock issuable upon exercise of outstanding stock options under our stock incentive plans at a weighted average exercise price of \$7.65 per share;
- 188,890 shares of common stock issuable upon the vesting of unvested restricted stock units under our stock incentive plans; and
- 223,802 additional shares of common stock reserved for future issuance under our stock incentive plans.

On May 23, 2017, we completed the May Public Offering. As disclosed in the final prospectus supplement the Company filed with the Commission on May 18, 2017 in connection with the May Public Offering, the as adjusted net tangible book value per share as of March 31, 2017 after giving effect to the May Public Offering was \$0.14 per share. As of July 20, 2017, all pre-funded Series C Warrants were exercised and we issued 2,245,875 shares of common stock in connection therewith. As of July 20, 2017, we had 36,910,570 shares of common stock issued and outstanding.

To the extent that the outstanding options are exercised, you will 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 stockholders.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 75,000,000 shares of common stock, par value \$.001 per share, and 5,000,000 shares of preferred stock, par value \$.001 per share.

As of July 20, 2017, we had 36,910,570 outstanding shares of common stock and no outstanding shares of preferred stock.

As of July 20, 2017, we had outstanding stock options to purchase 2,562,523 shares of common stock at prices ranging from \$35.20 to \$1.14.

Common Stock

Subject to any special voting rights of any series of preferred stock that we may issue in the future, each share of common stock has one vote on all matters voted on by our stockholders, including the election of our directors. Because holders of common stock do not have cumulative voting rights, the holders of a majority of the shares of common stock can elect all of the members of the board of directors standing for election, subject to the rights, powers and preferences of any outstanding series of preferred stock.

No share of common stock affords any preemptive rights or is convertible, redeemable, assessable or entitled to the benefits of any sinking or repurchase fund. Holders of common stock will be entitled to dividends in the amounts and at the times declared by our board of directors in its discretion out of funds legally available for the payment of dividends.

Holders of common stock will share equally in our assets on liquidation after payment or provision for all liabilities and any preferential liquidation rights of any preferred stock then outstanding. All outstanding shares of common stock are fully paid and non-assessable.

Our board of directors may authorize the issuance of preferred stock with voting, conversion, dividend, liquidation and other rights that may adversely affect the rights of the holder of our common stock.

Preferred Stock

Our certificate of incorporation provides that shares of preferred stock may be issued from time to time in one or more series. Our board of directors has authority to issue up to 5,000,000 shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by our stockholders. The rights of holders of our common stock may be subject to, and adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change of control and may adversely affect the voting and other rights of holders of our common stock.

Warrants

In connection with the May Public Offering, we sold Series A Warrants, Series B Warrants and pre-funded Series C Warrants. As of July 20, 2017, Series A Warrants to purchase 3,742,500 shares of common stock was outstanding, Series B Warrants to purchase 745,000 shares of common stock was outstanding, and no series C pre-funded Warrants were outstanding.

Series A Warrants

Exercise price. The exercise price per share of common stock purchasable upon exercise of the warrants is \$0.84 per share of common stock being purchased. If we, at any time while the Series A Warrants are outstanding, pay a stock dividend on our common stock or otherwise make a distribution on any class of capital stock that is payable in shares of our common stock, subdivide outstanding shares of our common stock into a larger number of shares or combine the outstanding shares of our common stock into a smaller number of shares, then, the number, class and type of shares available under the Series A Warrants and the exercise price will be correspondingly adjusted to give the holder of the warrants, on exercise for the same aggregate exercise price, the total number, class, and type of shares or other property as the holder would have owned had the warrants been exercised prior to the event and had the holder continued to hold such shares until the event requiring adjustment. The exercise price of the Series A Warrants is subject to full ratchet adjustment in certain circumstances, subject to a floor price of \$0.17 per share. If we fail to timely deliver the shares underlying the warrants, we will be subject to certain buy-in provisions

Exercisability. Holders may exercise the Series A Warrants beginning on the issuance date and at any time up to the date that is five years from the initial date that the warrants become exercisable.

Cashless exercise. If, at the time a holder exercises its warrant, there is no effective registration statement covering the issuance of the shares underlying the warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of common shares determined according to a formula set forth in the warrants.

Transferability. The Series A Warrants may be transferred at the option of the warrant holder upon surrender of the warrants with the appropriate instruments of transfer.

Rights as a stockholder. Except by virtue of such holder's ownership of shares of our common stock, the holders of the Series A Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Company Optional Redemption. If at any time after the issuance date, (i) the closing bid price of our common stock is equal to or greater than \$1.75 per share (as adjusted for stock splits, stock combinations and the like occurring from and after the issuance date) for a period 30 consecutive trading days following the applicable determination date (the 30 consecutive trading days on which the condition in this clause (i) is satisfied are referred to herein as the "Measuring Period"), (ii) no Equity Conditions Failure (as defined in the warrants) have occurred, and (iii) the aggregate dollar trading volume (as reported on Bloomberg Financial Markets) of the common stock on the applicable eligible market for each trading day during the Measuring Period exceeds \$225,000 per day, then we have the right to purchase the entire then-remaining portion of warrants from the holders as set forth below, subject to certain conditions.

Extraordinary transactions: In the event of any extraordinary transaction, and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, the holder will have the right to have the Series A Warrants and all obligations and rights thereunder assumed by the successor or acquiring corporation. In the event of an extraordinary transaction, we or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the extraordinary transaction, an amount of cash equal to the value of the Series A warrants as determined in accordance with the Black Scholes option pricing model and the terms of the warrants.

Limits on exercise of warrants. A holder of a Series A Warrant will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A Warrants; provided that at the election of a holder and notice to us such percentage ownership limitation may be increased or decreased to any other percentage, not to exceed 9.99%; provided that any increase will not be effective until the 61st day after such notice is delivered from the holder to us.

Series B Warrants

Exercise price. The exercise price per share of common stock purchasable upon exercise of the warrants is \$0.92 per share of common stock being purchased. If we, at any time while the Series B Warrants are outstanding, pay a stock dividend on our common stock or otherwise make a distribution on any class of capital stock that is payable in shares of our common stock, subdivide outstanding shares of our common stock into a larger number of shares or combine the outstanding shares of our common stock into a smaller number of shares, then, the number, class and type of shares available under the Series B Warrants and the exercise price will be correspondingly adjusted to give the holder of the warrants, on exercise for the same aggregate exercise price, the total number, class, and type of shares or other property as the holder would have owned had the warrants been exercised prior to the event and had the holder continued to hold such shares until the event requiring adjustment. The exercise price of the Series B Warrants is subject to full ratchet adjustment in certain circumstances, subject to a floor price of \$0.17 per share. If we fail to timely deliver the shares underlying the warrants, we will be subject to certain buy-in provisions.

Exercisability. Holders may exercise the Series B Warrants beginning on the issuance date and at any time up to the date that is two years from the initial date that the warrants become exercisable.

Cashless exercise. If, at the time a holder exercises its warrant, there is no effective registration statement covering the issuance of the shares underlying the warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of common shares determined according to a formula set forth in the warrants. In addition, in lieu of the cashless exercise described in the immediate preceding sentence, beginning 30 days from the issuance date during the warrant exercisability period, the holder is permitted to effect a cashless exercise of the Series B Warrants (in whole or in part) by having the holder surrendering the warrants to us, together with delivery to us of a duly executed exercise notice, and will receive a Net Number of shares of our common stock purchased upon such exercise. The Net Number is equal to the (i) 200% of the applicable warrant exercise percentage of the initial warrant amount and (ii) the quotient obtained by dividing (A) the difference obtained by subtracting (x) the market price, from (y) the initial exercise price per share of Series B Warrants by (B) the market price.

Transferability. The Series B Warrants may be transferred at the option of the warrant holder upon surrender of the warrants with the appropriate instruments of transfer.

Rights as a stockholder. Except by virtue of such holder's ownership of shares of our common stock, the holders of the Series B Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Company Optional Redemption. If at any time after the issuance date, (i) the closing bid price of our common stock is equal to or greater than \$1.75 per share (as adjusted for stock splits, stock combinations and the like occurring from and after the issuance date) for a period 30 consecutive trading days following the applicable determination date (the 30 consecutive trading days on which the condition in this clause (i) is satisfied are referred to herein as the "Measuring Period"), (ii) no Equity Conditions Failure (as defined in the warrants) have occurred, and (iii) the aggregate dollar trading volume (as reported on Bloomberg Financial Markets) of the common stock on the applicable eligible market for each trading day during the Measuring Period exceeds \$225,000 per day, then we have the right to purchase the entire then-remaining portion of warrants from the holders as set forth below, subject to certain conditions.

Extraordinary transactions: In the event of any extraordinary transaction, and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer, or reclassification of our common stock, the holder will have the right to have the Series B Warrants and all obligations and rights thereunder assumed by the successor or acquiring corporation. In the event of an extraordinary transaction, we or any successor entity will pay at the holder's option, exercisable at any time concurrently with or within 30 days after the consummation of the extraordinary transaction, an amount of cash equal to the value of the Series B warrants as determined in accordance with the Black Scholes option pricing model and the terms of the warrants.

Limits on exercise of warrants. A holder of a Series B Warrant will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series B Warrants; provided that at the election of a holder and notice to us such percentage ownership limitation may be increased or decreased to any other percentage, not to exceed 9.99%; provided that any increase will not be effective until the 61st day after such notice is delivered from the holder to us.

Transfer Agent

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

Anti-Takeover Effects of Our Certificate of Incorporation, Bylaws and Delaware Law

General

Our certificate of incorporation and bylaws contain provisions that are designed in part to make it more difficult and time-consuming for a person to obtain control of our company. The provisions of our certificate of incorporation and bylaws reduce the vulnerability of our company to an unsolicited takeover proposal. These provisions may also have an adverse effect on the ability of stockholders to influence the governance of our company and may result in entrenchment of management. This may adversely affect the liquidity and price of our common stock in certain situations. We have summarized the material terms of our certificate of incorporation and bylaws below. You may read our certificate of incorporation and bylaws in their entirety for the full terms of the rights of holders of our common stock.

Delaware Business Combination Statute

Section 203 of the Delaware General Corporation Law provides that, subject to specified exceptions, an “interested stockholder” of a Delaware corporation may not engage in any “business combination,” including general mergers or consolidations or acquisitions of additional shares of the corporation, with the corporation for a three-year period following the time that such stockholder becomes an interested stockholder unless:

- before such time, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an “interested stockholder,” the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding specified shares; or
- on or after such time, the business combination is approved by the board of directors of the corporation and authorized not by written consent, but at an annual or special meeting of stockholders, by the affirmative vote of at least 66 2/3% of the outstanding voting stock not owned by the interested stockholder.

Under Section 203, the restrictions described above also do not apply to specified business combinations proposed by an interested stockholder following the announcement or notification of a transaction specified in Section 203 and involving the corporation and a person who:

- had not been an interested stockholder during the previous three years; or
- became an interested stockholder with the approval of a majority of the corporation’s directors;
- if such transaction is approved or not opposed by a majority of the directors who were directors prior to any person becoming an interested stockholder during the previous three years or were recommended for election or elected to succeed such directors by a majority of such directors.

Except as otherwise specified in Section 203, an “interested stockholder” is defined to include:

- any person that is the owner of 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation at any time within three years immediately before the date of determination; and
- the affiliates and associates of any such person.

Under some circumstances, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with a corporation for a three-year period.

Advance Notice Requirements for Director Nominations and Other Stockholder Proposals

In order to nominate a director at an annual meeting, our bylaws require that a stockholder follow certain procedures. In order to recommend a nominee for director, a stockholder must be a stockholder of record at the time the stockholder gives notice of its recommendation and the stockholder must be entitled to vote for the election of directors at the meeting at which such nominee will be considered. Stockholder recommendations must be made pursuant to written notice delivered to our principal executive offices no less than 50 days nor more than 75 days prior to the date of the annual or special meeting at which directors are to be elected; provided, that if less than 65 days’ notice or prior public disclosure of the date of the meeting is given or made to the stockholders, notice by the stockholder must be received at our principal executive offices not later than the close of business on the 15th day following the day on which such notice of the date of the meeting was mailed or such public disclosure was made.

The stockholder notice must set forth the following:

1. As to each person the stockholder proposes to nominate for election as a director, all information relating to such person that would be required to be disclosed in solicitations of proxies for the election of such nominees as directors pursuant to rules promulgated under the Exchange Act;

2. The written consent to serve as a director if elected by each person nominated;
3. Name and address of the stockholder as they appear on our books; and
4. The class and number of shares of our common stock beneficially owned by such stockholder.

In addition to complying with the foregoing procedures, any stockholder nominating a director must also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder.

Additionally, with respect to other stockholder proposals, notice of the proposal must be received no less than 50 nor more than 75 days prior to the annual meeting at which such proposal is to be considered; provided, that if less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to the stockholders, notice by the stockholder must be received at our principal executive offices not later than the close of business on the 15th day following the day on which such notice of the date of the annual meeting was mailed or such public disclosure was made.

Authorized But Unissued Shares

Our authorized but unissued shares of common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

PLAN OF DISTRIBUTION

We will distribute the shares of common stock covered by this prospectus only upon the exercise of Series A Warrants or Series B Warrants, and no broker, dealer or underwriter has been engaged in connection with the redemption, retraction or purchase. We will pay all expenses incurred in connection with the distribution described in this prospectus. The estimated offering expenses payable by us in connection with this offering is \$33,000.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Morgan, Lewis & Bockius LLP, Philadelphia, Pennsylvania.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2016 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are required to file annual, quarterly and current reports, and other information with the Commission. You may read and copy any document which we have filed at the Commission's public reference room at:

Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549

Please call the Commission at 1-800-SEC-0330 for more information on the operation of the public reference room. Copies of our Commission filings are also available to the public from the Commission's web site at www.sec.gov.

Documents filed by us pursuant to the Exchange Act may be reviewed and/or obtained through the SEC's Electronic Data Gathering Analysis and Retrieval System, which is publicly available through the SEC's web site (www.sec.gov).

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the reports or documents that have been incorporated by reference in the prospectus contained in the registration statement of which this prospectus is a part but not delivered with this prospectus. We will provide those reports and documents upon written or oral request and at no cost to the requester. Requests for reports or documents should be submitted to the company at the following address or telephone number:

Repros Therapeutics Inc.
2408 Timberloch Place, Suite B-7
The Woodlands, Texas 77380
(281) 719-3400

Each of the reports and documents may also be accessed through our website which is located at www.reprosrx.com.

This prospectus is part of a registration statement that we have filed with the Commission relating to the securities offered hereby. As permitted by rules of the Commission, this prospectus does not contain all of the information we have included in the registration statement and the accompanying exhibits and schedules we file with the Commission. You may refer to the registration statement, exhibits and schedules for more information about us and such securities. The registration statement, exhibits and schedules are available at the Commission's public reference room or through its Internet website.

INCORPORATION OF INFORMATION BY REFERENCE

The Commission allows us to “incorporate by reference” information into this Prospectus, which means that we can disclose important information to you by referring you to another document or report filed separately with the Commission. The information incorporated by reference is deemed to be a part of this prospectus, except to the extent any information is superseded by this prospectus. The following documents which have been filed by us with the Commission and contain important information about us are incorporated into this prospectus:

- Repros’ Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Commission on March 31, 2017, as amended by Amendment No. 1 thereto filed with the Commission on April 28, 2017;
- Repros’ Quarterly Report on Form 10-Q for the quarter ended March 31, 2017 filed with the Commission on May 9, 2017;
- Repros’ Current Reports on Form 8-K filed with the Commission on February 2, 2017, April 13, 2017, May 17, 2017, May 22, 2017, May 31, 2017, June 16, 2017 and July 21, 2017;
- The description of Repros’ common stock contained in Repros’ Registration Statement on Form 8-A filed on September 3, 1999, as amended by amendments to such registration statement on Form 8-A/A filed on September 11, 2002, October 31, 2002, June 30, 2005, January 10, 2008, October 10, 2008 and September 9, 2010 .

Notwithstanding the foregoing, information that we elect to furnish, but not file, or have furnished, but not filed, with the Commission in accordance with Commission rules and regulations is not incorporated into the registration statement or this prospectus and does not constitute a part hereof.

All documents filed by Repros pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information furnished to the Commission) subsequent to the date of this filing and prior to the termination of this offering shall be deemed to be incorporated in this Prospectus and to be a part hereof from the date of the filing of such document. Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus .

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the fees and expenses in connection with the offering and distribution of the securities being offered hereunder. All amounts other than the filing fee for the registration statement are estimates. All of these fees and expenses will be borne by the registrant.

Securities and Exchange Commission registration fee	\$	(1)
Accounting fees and expenses	\$	13,000
Legal fees and expenses	\$	20,000
Total:	\$	<u>33,000</u>

(1) Previously paid. See Footnote (2) to the “Calculation of Registration Fee” table on the cover page of this Registration Statement.

Item 15. Indemnification of Officers and Directors

Section 145 of the Delaware General Corporation Law and the Company’s Restated Bylaws provide the Company with broad powers and authority to indemnify its directors and officers and to purchase and maintain insurance for such purposes.

Additionally, the Company’s Restated Certificate of Incorporation (as amended, the “Restated Certificate of Incorporation”), provides that a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director’s duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, as the same may be amended, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended to authorize the further elimination or limitation on personal liability of directors, then the liability of a director of the Company, in addition to the limitation on personal liability provided herein, shall be limited to the fullest extent permitted by the amended Delaware General Corporation Law.

The Company’s Restated Certificate of Incorporation further provides that each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a “proceeding”), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer, of the Company or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent shall be indemnified and held harmless by the Company to the fullest extent authorized by the Delaware General Corporation Law, as amended (but, in the case of any such amendment, only to the extent that such amendment permits the Company to provide broader indemnification rights than said law permitted the Company to provide prior to such amendment), against all expense, liability and loss (including attorneys’ fees, judgments, fines, ERISA excise taxes or penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith and such indemnification shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that except for certain exceptions set forth in the Restated Certificate of Incorporation, the Company shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the Board of Directors of the Company. The right to indemnification set forth in the Restated Certificate of Incorporation is a contract right and includes the right to be paid by the Company the expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, if the Delaware General Corporation Law requires, the payment of such expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of a proceeding, payment shall be made only upon delivery to the Company of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified under the Restated Certificate of Incorporation. The Company may, by action of its Board of Directors, provide indemnification to employees and agents of the Company with the same scope and effect as the foregoing indemnification of directors or officers.

The Company's Restated Certificate of Incorporation and Bylaws also provide that the Company may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Company or another corporation, partnership, joint venture, trust or other enterprise against any such expense, liability or loss, whether or not the Company would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

Item 16. EXHIBITS

Exhibit Number	Identification Of Exhibit
4.1	Restated Certificate of Incorporation. Exhibit 3.3 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
4.2	Certificate of Amendment to the Company's Restated Certificate of Incorporation, dated as of May 2, 2006. Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on May 2, 2006 is incorporated herein by reference.
4.3	Certificate of Amendment to Restated Certificate of Incorporation, dated as of December 16, 2008. Exhibit 3.1(d) to the Company's Current Report on Form 8-K as filed with the SEC on December 23, 2008 is incorporated herein by reference.
4.4	Certificate of Amendment to Restated Certificate of Incorporation, dated as of November 18, 2009. Exhibit 3.1(e) to the Company's Current Report on Form 8-K dated November 19, 2009 is incorporated herein by reference.
4.5	Certificate of Amendment to Restated Certificate of Incorporation, dated October 14, 2010. Exhibit 3.1(f) to the Company's Current Report on Form 8-K dated October 14, 2010 is incorporated herein by reference.
4.6	Restated Bylaws of the Company. Exhibit 3.4 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
4.7	Specimen Certificate of Common Stock, \$.001 par value, of the Company. Exhibit 4.1 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
5.1*	Opinion of Morgan, Lewis & Bockius LLP
23.1*	Consent of PricewaterhouseCoopers LLP
23.2*	Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature pages)

* Filed herewith.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by us pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of this registration statement as of the date the filed prospectus was deemed part of and included in this registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in this registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of this registration statement or made in a document incorporated or deemed incorporated by reference into this registration statement or prospectus that is part of this registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was part of this registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act, each filing of the undersigned registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of The Woodlands, State of Texas, on July 24, 2017.

REPROS THERAPEUTICS INC.

By: /s/ Larry Dillaha, M.D.
Larry Dillaha, M.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>/s/ Larry Dillaha, M.D.</u> Larry Dillaha, M.D.	President, Chief Executive Officer (Principal Executive Officer) and Director	July 24, 2017
<u>/s/ Katherine A. Anderson</u> Katherine A. Anderson	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) and Secretary	July 24, 2017
<u>/s/ Patrick Fourteau</u> Patrick Fourteau	Chair of the Board and Director	July 24, 2017
<u>/s/ Daniel F. Cain</u> Daniel F. Cain	Director	July 24, 2017
<u>/s/ Nola Masterson</u> Nola Masterson	Director	July 24, 2017
<u>/s/ Saira Ramasastry</u> Saira Ramasastry	Director	July 24, 2017
<u>/s/ Michael Wyllie, Ph.D.</u> Michael Wyllie, Ph.D.	Director	July 24, 2017

Exhibit Index

Exhibit Number	Identification Of Exhibit
4.1	Restated Certificate of Incorporation. Exhibit 3.3 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
4.2	Certificate of Amendment to the Company's Restated Certificate of Incorporation, dated as of May 2, 2006. Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the SEC on May 2, 2006 is incorporated herein by reference.
4.3	Certificate of Amendment to Restated Certificate of Incorporation, dated as of December 16, 2008. Exhibit 3.1(d) to the Company's Current Report on Form 8-K as filed with the SEC on December 23, 2008 is incorporated herein by reference.
4.4	Certificate of Amendment to Restated Certificate of Incorporation, dated as of November 18, 2009. Exhibit 3.1(e) to the Company's Current Report on Form 8-K dated November 19, 2009 is incorporated herein by reference.
4.5	Certificate of Amendment to Restated Certificate of Incorporation, dated October 14, 2010. Exhibit 3.1(f) to the Company's Current Report on Form 8-K dated October 14, 2010 is incorporated herein by reference.
4.6	Restated Bylaws of the Company. Exhibit 3.4 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
4.7	Specimen Certificate of Common Stock, \$.001 par value, of the Company. Exhibit 4.1 to the Company's Registration Statement on Form SB-2 (No. 33-57728-FW), as amended, is incorporated herein by reference.
5.1*	Opinion of Morgan, Lewis & Bockius LLP
23.1*	Consent of PricewaterhouseCoopers LLP
23.2*	Consent of Morgan, Lewis & Bockius LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature pages)

* Filed herewith.

[Letterhead of Morgan, Lewis & Bockius LLP]

July 24, 2017

Repros Therapeutics Inc.
2408 Timberloch Place
Suite B-7
The Woodlands, Texas 77380

RE: Repros Therapeutics Inc. - Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Repros Therapeutics Inc., a Delaware corporation (the "Company"), in connection with the preparation of a registration statement on Form S-3 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof under the Securities Act of 1933, as amended (the "Securities Act"). The Registration Statement includes a prospectus (the "Prospectus") that relates to the proposed offering and sale from time to time, pursuant to Rule 415 under the Securities Act, of up to 4,487,500 shares (the "Shares") of the Company's common stock, par value \$0.001 per share (the "Common Stock"). The Shares registered under the Registration Statement are the shares of Common Stock that the Company may issue from time to time upon the exercise of currently outstanding Series A Warrants of the Company (the "Series A Warrants") to purchase 3,742,500 shares of Common Stock and Series B Warrants of the Company (the "Series B Warrants" and, together with the Series A Warrants, the "Warrants") to purchase 4,487,500 shares of Common Stock by the holders of the Warrants.

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of the Company's Restated Certificate of Incorporation, as amended, the Company's Restated Bylaws, and such other documents and records as we deemed appropriate for purposes of the opinions set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized by the Company and, when issued and sold by the Company as contemplated in the Registration Statement and the Prospectus, and upon the exercise of the Warrants in accordance with the terms of the Warrants, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the laws of the State of Delaware.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the Prospectus. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the Commission thereunder.

Very truly yours,

/s/ Morgan, Lewis & Bockius LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 31, 2017 relating to the financial statements, which appears in Repros Therapeutics Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP
Houston, Texas
July 24, 2017
