REPROS THERAPEUTICS INC.
Form 424B5
September 08, 2009

This filing is made pursuant to Rule 424(b)(5)
under the Securities Act of 1933, as amended, in connection
with Registration No. 333-155265

1,500,000 Shares
$0.65 per share

Common Stock

We are offering 1,500,000 shares of our common stock.

Our common stock is listed on the Nasdaq Global Market under the symbol "RPRX." On September 4, 2009, the last reported sale price of our common stock on the Nasdaq Global Market was $0.92 per share.

Investing in our common stock involves risks. See "Risk Factors" beginning on page S-6 of this prospectus supplement.

	Per Share	Total
Price to the public	$ 0.65	$ 975,000
Placement agent's fees	$ 0.05	$ 68,250
Proceeds, before expenses, to Repros Therapeutics Inc.	$ 0.60	$ 906,750

We have engaged Ladenburg Thalmann & Co. Inc. as our placement agent in connection with this offering. The placement agent is not purchasing or selling any of the common stock in this offering, nor is it required to sell any specific number or dollar amount of common stock, but will use its commercially reasonable best efforts to arrange for the sale of the common stock offered. We have agreed to pay placement agent fees equal to 7% of the total purchase price of the common stock placed by the placement agent. See "Plan of Distribution" beginning on page S-14 of this 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 supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

We expect to deliver shares against payment in New York, New York on September 11, 2009.

The date of this prospectus supplement (to the prospectus dated November 20, 2008) is September 8, 2009.

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About this Prospectus Supplement

We provide information to you about this offering of shares of our common stock in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this "prospectus," we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

You should rely only on information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not, and the placement agents have not, authorized anyone to provide you with information that is different. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein are accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement or of any sale of our common stock.

ProellexTM and AndroxalTM are our trademarks. This prospectus supplement and the accompanying prospectus also contain trademarks, trade names and service marks of other companies, which are the property of their respective owners.

Prospectus Supplement Summary

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary may not contain all the information that you should consider before investing in our common stock. You should read the entire prospectus supplement and the accompanying prospectus carefully, including "Risk Factors" contained in this prospectus supplement and the financial statements incorporated by reference in the accompanying prospectus, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

ABOUT REPROS THERAPEUTICS INC.

Overview

Repros Therapeutics Inc. ("the Company", or "we," "us" or "our"), was organized as a Delaware corporation on August 20, 1987. We are a development stage biopharmaceutical company focused on the development of oral small molecule drugs for major unmet medical needs associated with male and female reproductive disorders. The clinical trials relating to Proellex® have been placed on clinical hold by the FDA due to safety-related concerns resulting from elevated liver enzymes in a number of patients enrolled in the clinical trials. Completion of our ongoing clinical trial activities relating to our other product candidate, Androxal®, is subject to, among other things, adequate cash being available.

As of June 30, 2009, we had approximately $4.0 million in cash and cash equivalents, and our accounts payable and accrued expenses were approximately $7.5 million. Our accumulated losses were $162.9 million. Furthermore, as of August 14, 2009, we had approximately $2.7 million in cash and cash equivalents. Our accounts payable and accrued expenses as of August 14, 2009 are significantly higher than they were at the end of the second quarter. In addition, we are reviewing our obligations under our agreements with our contract research organizations to determine the extent of our obligations thereunder. Furthermore, the amount of cash on hand is not sufficient to continue to fund our ongoing clinical trials of Androxal®, complete all necessary activities relating to the suspension of our clinical trial program for Proellex®, and pay our accounts payable and accrued expenses as well as our normal corporate overhead and expenses. Effective August 16, 2009, we adopted a 50% salary reduction program for all salaried employees in an effort to reduce expenses while maintaining our current effort without diminution. Even taking into account the offering to which this prospectus supplement relates, we continue the process of exploring potential additional financing alternatives that may allow us to maintain our current reduced level of operations; however, there can be no assurance that we will be successful in raising any such additional funds on a timely basis or at all. Significant additional capital will be required for us to continue development of either of our product candidates. Failure to raise sufficient funds in the immediate short term as described above will likely result in the filing of bankruptcy and dissolution of the Company.

Our portfolio of products includes:

- Androxal®, a single isomer of clomiphene citrate, is being developed for men of reproductive age with low testosterone levels who want to maintain their fertility while being treated for low testosterone.

- Proellex®, a new chemical entity that acts as a selective blocker of the progesterone receptor, is being developed, subject to the current FDA clinical hold on the Proellex® clinical trials described below, for the treatment of symptoms associated with uterine fibroids and endometriosis. We are also developing Proellex® as an acute treatment for anemia associated with excessive menstrual bleeding related to uterine fibroids.

On August 6, 2009, we announced that the Company received verbal notice from the United States Food and Drug Administration (FDA) during a teleconference with the Division of Reproductive and Urologic Products that the Company's Investigational New Drug Applications (INDs) for Proellex® had been placed on clinical hold for safety reasons. This action followed the Company's voluntary decision to suspend dosing of all patients in its clinical trials of Proellex® after discovering elevated liver enzymes in a number of patients enrolled in the clinical trials.

The Company and the FDA are scheduled to discuss the safety of Proellex® and the overall direction and scope of the Company's clinical trials of Proellex® at a meeting in late September 2009. The FDA requested that the Company provide it with weekly information about the patients who experienced a “Serious Adverse Event” and still have elevated liver enzymes. The Company is in the process of gathering the information from its vendors and will provide the information to the FDA to the extent available. The Company intends to provide the FDA with a detailed analysis of all of the women with elevated liver enzymes at the September 2009 meeting and to discuss with the FDA the events that led to the suspension of the clinical trials, and determine whether and under which conditions, if any, the clinical hold may be lifted and the clinical trials of Proellex® be safely resumed.

If the FDA were to lift the clinical hold on Proellex® following the upcoming meeting in September 2009, and if the FDA requires a lower dosage of Proellex® to be used for future clinical trials, the Company would be required to commence Phase 2 studies again with the required lower dosage, thereby resulting in extensive additional costs and delays.

Several of the Company's contract research organizations have notified the Company that they have claims against the Company, which include amounts due upon termination of the clinical trials, and in two cases vendors have sued the Company for an amount aggregating to approximately $600,000 for amounts they claim they are owed under their agreements with the Company. We have a dispute with another clinical research organization regarding the suitability of work provided to the Company.

Since our currently available cash and cash equivalents are not adequate to meet our accounts payable and accrued expenses, we have engaged a law firm that specializes in work-out and bankruptcy matters to assist us in attempting to negotiate with and reduce amounts owed to our vendors. The Company intends, to the extent possible, to ensure that our available cash is used for patient safety in connection with our study closeout activities. However, due to our constrained cash position, the Company does not have sufficient funds at this time to comply with all of our financial obligations under the agreements with the clinical research organizations unless acceptable work-out arrangements are completed.

Based on our existing and projected accounts payable and commitments, we believe we do not have sufficient cash to continue normal operations and need to raise additional capital immediately in order to continue operations on a normal basis. In the event that we are unable to obtain adequate financing to meet our immediate short term liquidity needs, we will pursue other options, including but not limited to, additional reductions of expenses, sale of the Company, sale or license of a portion or all of our assets, a bankruptcy filing or the liquidation of the Company.

Our capital requirements depend on numerous factors, including our ability to resume our clinical trials should the current clinical trial hold on Proellex® by the FDA be removed, and whether we determine to pursue all of the previous clinical development plans for Proellex® and Androxal® . Our announcements regarding the liver toxicity in our Proellex® clinical trials and the clinical hold imposed by the FDA along with the receipt of the Nasdaq letter regarding our failure to meet the current Nasdaq listing requirements have significantly depressed our stock price and severely impaired our ability to raise additional capital funds to where it could be difficult or impossible for us to raise any additional capital.

The Company has experienced negative cash flows from operations since inception and has funded its activities to date primarily from equity financings and corporate collaborations. No assurance can be given that we will be successful in obtaining financing on acceptable terms or at all. We anticipate that if we are able to secure financing, such financing will result in significant dilution of the ownership interests of the Company's current stockholders and may provide certain rights to the new investors senior to the rights of its current stockholders, including but not limited to voting rights and rights to proceeds in the event of a sale or liquidation of the Company. In the event that we are unable to obtain adequate financing to meet our immediate short term liquidity needs, we will pursue other options, including but not limited to, reductions of personnel and other expenses, sale of the Company, sale or license of a portion or all of our assets, a bankruptcy filing or the liquidation of the Company.

The uncertainties relating to the foregoing matters raise substantial doubt about Repros' ability to continue as a going concern.

Deficiency Letter from the Nasdaq Global Market

On August 7, 2009, the Company received a letter from Nasdaq advising that the Company's market value was below the minimum $50,000,000 requirement for continued listing on the Nasdaq Global Market. The Company is provided 90 days until November 5, 2009, to regain compliance, at which time the Company's securities will be delisted from such market unless the market value of the Company's securities listed on the Nasdaq Global Market is $50,000,000 or

more for a minimum of 10 consecutive business days. The letter also recited that the Company's total assets and total revenue fell below certain required thresholds under related rules and suggested that the Company consider applying for transfer of its securities to the Nasdaq Capital Market, which has substantially lower listing requirements. The Company is considering its options at this time and intends to take whatever actions it can to best protect shareholder value; however, there can be no assurance that the Company's securities will continue to be traded on any Nasdaq trading market.

Shareholder Class Action Lawsuits

On August 7, 2009, R.M. Berry filed a putative class action lawsuit naming the Company, Joseph Podolski, Paul Lammers, and Louis Ploth, Jr. as defendants. The lawsuit is pending in the United States District Court for the Southern District of Texas, Houston Division. The lawsuit, styled R.M. Berry, on Behalf of Himself and all Others Similarly Situated v. Repros Therapeutics, Inc., Joseph Podolski, Paul Lammers, and Louis Ploth, Jr., alleges that the defendants made certain misleading statements related to the Company's Proellex drug. Among other claims, the lawsuit contends that the defendants misrepresented the side effects of the drug related to liver function, and the risk that these side effects could cause a suspension of clinical trials of Proellex. The lawsuit seeks to establish a class of shareholders allegedly harmed by the misleading statements, and asserts causes of action under the Securities Exchange Act of 1934. On August 14, 2009, a lawsuit making similar allegations and naming the same defendants was also filed in the United States District Court for the Southern District of Texas. This suit is styled Josephine Medina, Individually and On Behalf of all Others Similarly Situated v. Repros Therapeutics, Inc., Joseph Podolski, Paul Lammers, and Louis Ploth, Jr. To date, no proceedings of any kind have occurred in the lawsuits, and an estimate of the possible loss or range of losses in connection with the lawsuits cannot be made. The Company has retained counsel to assist it in defending both of these actions.

Androxal® (male reproductive health):

We believe our product candidate for male reproductive health, Androxal®, is a new chemical entity. Androxal® is a single isomer of clomiphene citrate and is an orally active proprietary small molecule compound.

We are developing Androxal® for men of reproductive age with low testosterone levels who want to maintain their fertility while being treated for their low testosterone condition. During the second quarter of 2008, we initiated a Phase 2b proof-of-concept clinical trial in which we are monitoring the effects of Androxal® on male fertility and testicular function in patients being treated for low testosterone as compared to Testim®, a popular marketed topical testosterone medication. We anticipate holding a meeting with the FDA during the second half of 2009, provided that sufficient funds can be raised to continue development of this product. Given that there is an acceptable treatment regimen for men with low testosterone, there is significant uncertainty as to whether or not an additional approach such as Androxal® would be approved by the FDA or accepted in the market. At this time it is too early in the clinical development process to estimate when or even if an NDA for Androxal® will be submitted for this indication.

In April 2008, we submitted a White Paper, based on the results from a previously conducted non-pivotal Phase 2 clinical trial with Androxal® for the treatment of testosterone deficiency due to secondary hypogonadism, to the FDA's Division of Reproductive and Urology Products. The data demonstrated that in subjects with serum glucose levels of greater than 105 mg/dL, there was a statistically significant reduction in fasting serum glucose and a higher response rate in the treatment group with Androxal® as compared with groups receiving either placebo or Androgel®, the current standard of care for the treatment of testosterone deficiency. In November 2008, after the FDA reviewed this paper we received guidance suggesting that we open a new IND with the Division of Metabolic and Endocrine Products, or DMEP, for the investigation of Androxal® as a potential treatment for type 2 diabetes. Provided that sufficient cash is available, we plan to submit a new IND for this indication to the DMEP in the second half of 2009. Should we raise adequate funds to continue our operations, we anticipate conducting a Phase 2b proof-of-concept clinical trial with Androxal® for glucose regulation after receiving additional feedback from the FDA. At this time it is too early in the clinical development process to estimate when or even if a NDA for Androxal® will be submitted for this indication. The plan to develop Androxal® in this new indication replaces our previously announced plan to develop Androxal® in men with adult-onset idiopathic hypogonadotrophic hypogonadism, or AIHH, with concomitant plasma glucose and lipid elevations, all of which are components of Metabolic Syndrome.

We were previously developing Androxal® in the United States to treat testosterone deficiency due to secondary hypogonadism by restoring normal testosterone production in males with functional testes and diminished pituitary function, a common condition in the aging male. After a Type "C" meeting held with the FDA on October 15, 2007, we believed that there was no clear clinical path to develop Androxal® for this indication in the U.S. Androxal® might be developed outside of the U.S. for this indication if our future financial resources are sufficient.

Proellex® (female reproductive health):

Our estimates regarding the timing of our Proellex® clinical development program are completely on hold at this time in light of the FDA clinical hold and our recent discontinuation of ongoing clinical trials. In addition, any future development efforts are totally dependent on our ability to raise sufficient capital or find an appropriate partner to proceed and on decisions by the FDA regarding the current clinical hold on Proellex® clinical trials. If the FDA were to lift the clinical hold on Proellex® following the upcoming meeting in September 2009, and if the FDA requires a lower dosage of Proellex® to be used for future clinical trials, the Company would be required to commence Phase 2 studies again with the required lower dosage, thereby resulting in extensive additional costs and delays. The length of time required to complete Phase 1, Phase 2 and Phase 3 clinical trials and long-term Open Label Safety Trials may

vary substantially according to factors relating to the particular trial, such as the type and intended use of the drug candidate, the clinical, trial design and the ability to enroll suitable patients. We have also, in the past, had difficulty recruiting patients into our Proellex® clinical trials primarily due to the various test procedures that are required, including multiple endometrial biopsies. Recruiting patients would likely be even more difficult due to the recent liver toxicity exhibited by Proellex®.

Business Strategy

Our immediate short-term business objective is to concentrate our remaining resources on ensuring the safety of those patients recently discontinued from the suspended Proellex® studies. Pending our ability to obtain sufficient funds to continue our business we plan to focus our clinical program on Androxal® to determine if a clear clinical path can be realized via discussion with the FDA pending completion of "proof of concept" Phase II studies.

Should the FDA permit the resumption of the Proellex® clinical trials, we will assess whether there are sufficient funds available to continue development ourselves of such product candidate or whether such program would be more appropriately funded by a corporate partner. Therefore, we will continue to explore corporate partnering opportunities for assistance in the clinical development funding and commercialization of our products, as appropriate; however, there can be no assurance that a corporate partnering opportunity will be found.

Corporate Information

Our principal executive offices are located at 2408 Timberloch Place, Suite B-7, The Woodlands, Texas, 77380, and our telephone number is (281) 719-3400. We maintain an internet website at www.reprosrx.com. The information on our website or any other website is not incorporated by reference into this prospectus supplement and does not constitute a part of this prospectus supplement. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and all amendments to such reports are made available free of charge through the Investor Relations section of our website as soon as reasonably practicable after they have been filed or furnished with the SEC.

	The Offering
Common stock offered by Repros	1,500,000 shares
Common stock to be outstanding after this offering	16,677,404 shares
Use of proceeds	We intend to use the net proceeds from this offering to pay down our obligations to our trade creditors. Any remaining proceeds will be used for general corporate purposes.
Nasdaq Global Market symbol	RPRX

The number of shares of common stock to be outstanding immediately after this offering is based on the number of shares outstanding as of June 30, 2009, which was 15,177,404 shares, and does not include:

- 2,316,065 shares of common stock issuable upon the exercise of outstanding options at a weighted average exercise price of $5.81 per share;
- 1,155,744 shares of common stock available for future issuance under our stock option plans; and
- shares of common stock issuable upon the exercise by certain of our stockholders, until September 29, 2009, of a right to purchase an aggregate of $10,000,000 of our common stock at a per share price equal to the greater of (i) the average of the closing prices of our common stock over the thirty-day period immediately prior to the date of exercise of the right, or (ii) $7.80 per share.

Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below and all other information contained in or incorporated by reference in this prospectus supplement and the accompany prospectus, including the risk factors discussed in the section entitled "Risk Factors" contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2008 and our other public filings, before making an investment decision. You should also refer to the other information in this prospectus supplement and the accompanying prospectus, including our financial statements and the related notes incorporated by reference in the accompanying prospectus. The risks and uncertainties described in these sections and documents are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations. If any of these risks actually occur, our business, results of operations and financial condition could suffer. In that event the trading price of our common stock could decline, and you may lose all or part of your investment in our common stock. This prospectus supplement, the accompanying prospectus and the incorporated documents also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements, including the risks mentioned above.

Risks Relating to our Business

Our ability to continue as a going concern requires that we raise additional funds immediately, without which we will need to cease our business operations and begin bankruptcy or liquidation proceedings.

Our ability to continue as a going concern is dependent upon our ability to obtain immediate financing, our ability to control our operating expenses and our ability to achieve a level of revenues adequate to support our capital and operating requirements. In particular, we are exploring various financing alternatives to address our immediate short term liquidity needs. No assurance can be given that we will be successful in obtaining financing on acceptable terms or at all. We anticipate that if we are able to secure financing, that such financing will result in significant dilution of the ownership interests of our current stockholders and may provide certain rights to the new investors senior to the rights of our current stockholders, including but not limited to voting rights and rights to proceeds in the event of a sale or liquidation of the Company. The current FDA clinical hold of our clinical trials for Proellex® will make it more difficult for us to obtain additional financing. In addition, the recently filed class action lawsuits will make our ability to raise funds even more difficult. As described above, we expect to continue to incur significant losses for the foreseeable future, and we may never achieve or sustain profitability. In the event that we are unable to obtain adequate financing to meet our immediate short term liquidity needs, we will need to cease our business operations and begin bankruptcy or liquidation proceedings.

We may need to seek protection under the provisions of the U.S. Bankruptcy Code or we may face an involuntary bankruptcy filing, and in that event, it is unlikely that stockholders would receive any value for their shares.

We have not generated any significant revenues to date, and we have incurred losses in each year since our inception. As of June 30, 2009, we had approximately $4.0 million in cash and cash equivalents and our accounts payable and accrued expenses were approximately $7.5 million. Furthermore, as of August 14, 2009, we had approximately $2.7 million in cash and cash equivalents. Our accounts payable and accrued expenses as of August 14, 2009 is significantly higher than it was at the end of the second quarter. Several vendors have ceased performing any work for us and have recently notified the Company of claims, which include amounts due upon termination of work, and in two cases filed suit against us for payments aggregating approximately $600,000, which such vendors claim they are owed under their agreements with the Company. We have a dispute with one clinical research organization regarding the suitability of work provided to the Company. We are investigating such invoices and claims. In addition, we are reviewing our obligations under our agreements with our contract research organizations to determine the extent of our obligations thereunder. Furthermore, the amount of cash on hand is not sufficient to continue to fund our ongoing

clinical trials of Androxal®, complete all necessary activities relating to the suspension of our clinical trial program for Proellex®, and pay our accounts payable and accrued expenses as well as our normal corporate overhead and expenses. We cannot assure you that any actions that we take would raise or generate sufficient capital to fully address the uncertainties of our financial position. As a result, we may be unable to realize value from our assets and discharge our liabilities in the normal course of business. If we are unable to settle our obligations to our creditors or if we are unable to obtain financing to support continued satisfaction of our obligations, we may need to seek protection under the provisions of the U.S. Bankruptcy Code. In addition, our creditors may seek to involuntarily place us in bankruptcy. In either event, we may seek to reorganize our business, or we or a trustee appointed by the court may be required to liquidate our assets. In either of these events, whether the stockholders receive any value for their shares is highly uncertain. If we needed to liquidate our assets, we would likely realize significantly less from them than the values at which they are carried on our financial statements. The funds resulting from the liquidation of our assets would be used first to pay off the debt owed to any secured and unsecured creditors before any funds would be available to pay our stockholders, and any shortfall in the proceeds would directly reduce the amounts available for distribution, if any, to our creditors and to our stockholders. In the event we were required to liquidate under the federal bankruptcy laws, it is highly unlikely that stockholders would receive any value for their shares.

In addition, the Company's Exclusive License Agreement, as amended, with the National Institutes of Health (NIH) dated April 16, 1999 relating to Proellex® requires that the Company raise no less than $6,000,000 on or before September 30, 2009, and additionally provides that the license may be terminated by the NIH immediately upon notice to the Company following a filing of a petition in bankruptcy or a letter from the Company to the NIH stating that it is insolvent. The Company intends to discuss with the NIH its current financial status and obtain appropriate assurances that the license will not be terminated in order to facilitate a financing, but there can be no assurance that the Company will be successful in its efforts. In the event that any of the conditions contained in the license agreement for termination by the NIH are triggered, the Company's license agreement may be terminated and the Company would lose its exclusive rights to Proellex®. Any such termination of the license agreement could have a material adverse effect on the Company's operations, and in such event, the value of your stockholdings in the Company would be materially adversely affected.

We have identified a dose-related increase in liver enzymes in Proellex® clinical trial patients, leading to the suspension of Proellex® studies and the FDA's notice of clinical hold on all Proellex® clinical trials.

In our clinical trials program for Proellex®, we identified a dose-related increase in liver enzymes in a number of patients that resulted in our decision to suspend all clinical trials relating to Proellex®. Shortly thereafter, the FDA placed all Proellex® clinical studies on hold. There can be no assurance whether and when the FDA will remove the clinical hold; whether Proellex® can be further developed, financed or commercialized in a timely manner without significant additional studies or patient data or significant expense; and whether any future development will be sufficient to support product approval. If we are unable to resolve the FDA's concerns, we will not be able to proceed further to obtain regulatory approval for Proellex®.

We have no clear clinical path for Androxal® at this time.

We are developing Androxal® for men of reproductive age with low testosterone levels who want to maintain their fertility while being treated for their low testosterone condition. During the second quarter of 2008, we initiated a Phase 2b proof-of-concept clinical trial in which we are monitoring the effects of Androxal® on male fertility and testicular function in patients being treated for low testosterone as compared to Testim®, a popular marketed topical testosterone medication. We anticipate holding a meeting with the FDA during the second half of 2009, provided that sufficient funds can be raised to continue development of this product. Given that there is already an acceptable treatment regimen for men with low testosterone, there is significant uncertainty as to whether or not an additional approach such as Androxal® would be approved by the FDA or accepted in the market. At this time it is too early in the clinical development process to estimate when or even if an NDA for Androxal® will be submitted for this indication.

We are currently not in compliance with Nasdaq rules for continued listing on the Nasdaq Global Market and are at risk of being delisted, which may subject us to the SEC's penny stock rules and decrease the liquidity of our common stock.

On August 7, 2009, we received notice from Nasdaq that the market value of our listed securities has been below the minimum $50,000,000 requirement for continued inclusion on the Nasdaq Global Market by Nasdaq Listing Rule 5450(b)(2)(A). We have been provided until November 5, 2009 to regain compliance. If we do not demonstrate compliance by such date, our securities will be delisted from the Nasdaq Global Market.

If we are delisted from the Nasdaq Global Market, and are unsuccessful in moving to the Nasdaq Capital Market, our common stock may be traded over-the-counter on the OTC Bulletin Board or in the "pink sheets." These alternative markets, however, are generally considered to be less efficient than Nasdaq markets. Many over-the-counter stocks trade less frequently and in smaller volumes than securities traded on Nasdaq markets, which would likely have a

material adverse effect on the liquidity of our common stock.

If our common stock is delisted from the Nasdaq Global Market, there may be a limited market for our stock, trading in our stock may become more difficult and our share price could decrease even further. In addition, if our common stock is delisted, our ability to raise additional capital may be impaired.

In addition, our common stock may become subject to penny stock rules. The SEC generally defines "penny stock" as an equity security that has a market price of less than $5.00 per share, subject to certain exceptions. We are not currently subject to the penny stock rules because our common stock qualifies for an exception to the SEC's penny stock rules for companies that have an equity security that is quoted on a Nasdaq stock market. However, if we were delisted, our common stock would become subject to the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell our common stock. If our common stock were considered penny stock, the ability of broker-dealers to sell our common stock and the ability of our stockholders to sell their shares in the secondary market would be limited and, as a result, the market liquidity for our common stock would be adversely affected. We cannot assure you that trading in our securities will not be subject to these or other regulations in the future.

The Company and certain of its officers and directors were named as a party in two class action lawsuits which could result in a material adverse affect on our business and financial condition.

The Company and certain of its officers were named as parties in two shareholder class action lawsuits alleging, among other things, that the Company and such officers violated certain provisions of the Securities Exchange Act of 1934 by issuing materially false and misleading press releases regarding the results of clinical trials for its drug Proellex. Our bylaws require us to indemnify our officers in certain proceedings, subject to certain limited exceptions. In addition, each of our directors has an indemnification agreement with the Company providing for certain additional indemnification benefits for such persons in the event of a lawsuit. As a result of the class action lawsuits, we are obligated to pay for certain costs and expenses of our officers and directors and may be liable for substantial damages, costs and expenses if such class action is successful. Such litigation could also divert the attention of our management and our resources in general from day-to-day operations. Further, it is possible that additional claims beyond those that have already been filed will be brought by the current plaintiffs or by others in an effort to seek monetary relief from us.

Additionally, such class action lawsuits are covered by the Company's director and officer insurance policy. In the event there is an adverse judgment against the Company in either lawsuit, the Company's insurance coverage may not be adequate to cover such judgment and the Company's cash position may not be sufficient to satisfy such judgment. Such adverse judgment could have a material and adverse affect on the Company.

Risks Relating to our Securities

Our stock price will likely be volatile, and your investment in our stock could decline in value.

Our stock price has fluctuated historically. From January 1, 2009 to September 4, 2009, the market price of our stock was as low as $0.65 per share and as high as $13.94 per share.

Very few biotechnology drug candidates being tested will ultimately receive FDA approval, and a biotechnology company may experience a significant drop in its stock price based on a clinical trial result or regulatory action. Our stock price may fluctuate significantly, depending on a variety of factors, including:

- the success or failure of, or other results or decisions affecting, our clinical trials;
- the timing of the discovery of drug leads and the development of our drug candidates;
- the entrance into a new collaboration or the modification or termination of an existing collaboration;
- changes in our research and development budget or the research and development budgets of our existing or potential collaborators;
- the introduction of new drug discovery techniques or the introduction or withdrawal of drugs by others that target the same diseases and conditions that we or our collaborators target;
- regulatory actions;
- expenses related to, and the results of, litigation and other proceedings relating to intellectual property rights or other matters; and
- accounting changes, including the expense impact of SFAS No. 123R.

We are not able to control all of these factors. Period-to-period comparisons of our financial results are not necessarily indicative of our future performance. In addition, if our revenues or results of operations in a particular period do not meet stockholders' or analysts' expectations, our stock price may decline and such decline could be significant.

There are a substantial number of shares of our common stock eligible for future sale in the public market, and the sale of these shares could cause the market price of our common stock to fall.

There were 15,177,404 shares of our common stock outstanding as of August 14, 2009. In addition, as of June 30, 2009, there were options to purchase 2,316,065 shares of our common stock issued and outstanding under all of our stock option plans at a weighted average exercise price of $5.81, 746,326 additional shares of common stock issuable under our 2004 Stock Option Plan and 409,418 shares of common stock reserved for issuance under our 2000 Non-Employee Director Stock Option Plan. In addition, until September 29, 2009, certain of our stockholders have a right to purchase an aggregate of $10,000,000 of our common stock at a per share price equal to the greater of (i) the average of the closing prices of our common stock over the thirty-day period immediately prior to the date of exercise

of the right, or (ii) $7.80 per share. A substantial number of the shares described above, when issued upon exercise, will be available for immediate resale in the public market. The market price of our common stock could decline as a result of such resales due to the increased number of shares available for sale in the market.

Any future equity or debt issuances by us may have dilutive or adverse effects on our existing stockholders.

We have financed our operations, and we expect to continue to finance our operations, primarily by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. In light of our need for additional financing, we may issue additional shares of common stock or convertible securities that could dilute your ownership in our company and may include terms that give new investors rights that are superior to yours. Moreover, any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline.

We may also raise additional funds through the incurrence of debt, and the holders of any debt we may issue would have rights superior to your rights in the event we are not successful and are forced to seek the protection of bankruptcy laws.

Our largest stockholders may take actions that are contrary to your interests, including selling their common stock.

A small number of our stockholders hold a significant amount of our outstanding common stock, including Efficacy Capital, which alone owns 28.3% of our common stock immediately prior to the offering. These stockholders may have interests that are different from yours and may support competing transactions; provided that, in the case of Efficacy Capital, such support is in accordance with that certain Standstill Agreement dated January 9, 2008, as amended. Sales of a large number of shares of our common stock by these large stockholders or other stockholders within a short period of time could adversely affect our stock price.

Our rights agreement and certain provisions in our charter documents and Delaware law could delay or prevent a change in management or a takeover attempt that you may consider to be in your best interest.

We have adopted certain anti-takeover provisions, including a Rights Agreement, dated as of September 1, 1999, as amended, between us and Computershare Trust Company, Inc., as Rights Agent. The Rights Agreement will cause substantial dilution to any person who attempts to acquire us in a manner or on terms not approved by our board of directors.

The Rights Agreement and Certificate of Designations for the Series One Junior Participating Preferred Stock dated September 2, 1999, as well as other provisions in our certificate of incorporation and bylaws and under Delaware law, could delay or prevent the removal of directors and other management and could make a merger, tender offer or proxy contest involving us that you may consider to be in your best interest more difficult. For example, these provisions:

- allow our board of directors to issue preferred stock without stockholder approval;
- limit who can call a special meeting of stockholders; and
- establish advance notice requirements for nomination for election to the board of directors or for proposing matters to be acted upon at stockholders meetings.

We may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

We intend to use the net proceeds from this offering to pay down our current debt to our trade creditors. Any remaining proceeds will be used for general corporate purposes. Our management will, however, have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock.

Forward-Looking Statements

Some of the statements contained (i) in this prospectus supplement and the accompanying prospectus or (ii) incorporated by reference into this prospectus supplement are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created by the Securities Litigation Reform Act of 1995. Examples of these forward-looking statements include, but are not limited to:

- our ability to continue as a going concern and to immediately raise additional capital on acceptable terms or at all;
- timing and amount of future contractual payments, product revenue and operating expenses;
- our ability to successfully defend the recently filed class action lawsuits;
- our ability to maintain the Company’s listing on the Nasdaq Global Market;
- the removal of the current clinical hold on further clinical trials for Proellex® by the Food and Drug Administration, or FDA, and the reestablishment of safe dosing in clinical trials for Proellex®;
- having available funding for the continued development of Proellex® and Androxal®;
- uncertainty related to our ability to obtain approval of our products by the FDA and regulatory bodies in other jurisdictions;
- whether a clear clinical path for Androxal® can be realized;
- uncertainty relating to our patent portfolio and license rights to such patents;
- market acceptance of our products and the estimated potential size of these markets; and
- any other risks and uncertainties described in the Company's filings with the Securities and Exchange Commission.

While these forward-looking statements made by us are based on our current intent, beliefs and judgments, they are subject to risks and uncertainties that could cause actual results to vary from the projections in the forward-looking statements. You should consider the risks above carefully in addition to other information contained in this report before engaging in any transaction involving shares of our common stock. If any of these risks occur, they could harm our business, financial condition or results of operations. In such case, the trading price of our common stock could decline, and you may lose all or part of your investment.

The words “believe,” “should,” “predict,” “future,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “plan,” “e
“continue,” or “opportunity,” or other words and terms of similar meaning, as they relate to us, our business, future financial or operating performance or our management, are intended to identify forward-looking statements. Any forward-looking statement speaks only as of the date on which it is made, and except as required by law we undertake no obligation to update or revise any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Past financial or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate

results or future period trends.

Use of Proceeds

We expect to receive approximately $850,000 in net proceeds from the sale of the 1,500,000 shares of common stock offered by us in this offering based on the offering price of $0.65 per share. “Net proceeds” is what we expect to receive after paying the expenses of this offering, including the placement agent fees, as described in “Plan of Distribution,” and other estimated offering expenses payable by us, which include legal, accounting and printing fees.

We intend to use the net proceeds from this offering to pay down our obligations to our trade creditors for expenses incurred during our clinical trials primarily with our contract research organizations. Any remaining proceeds will be used for general corporate purposes.

Until we use the net proceeds of this offering, we intend to invest the funds in short-term, investment grade, interest-bearing securities.

Price Range of Common Stock

Our common stock is quoted on the Nasdaq Global Market under the symbol “RPRX”. The following table shows the high and low sale prices per share of our common stock as reported by the Nasdaq Global Market during the periods presented.

	Price Range	
	High	Low
2007		
First Quarter	$ 14.67	$ 9.16
Second Quarter	15.09	9.51
Third Quarter	14.38	9.88
Fourth Quarter	12.96	6.99
2008		
First Quarter	$ 10.20	$ 8.11
Second Quarter	11.09	8.21
Third Quarter	10.00	5.31
Fourth Quarter	11.25	5.68
2009		
First Quarter	$ 13.94	$ 5.84
Second Quarter	8.30	5.70
Third Quarter (through September 4, 2009)	6.01	0.65

All of the foregoing prices reflect interdealer quotations, without retail mark-up, markdowns or commissions and may not necessarily represent actual transactions in the common stock.

On September 4, 2009, the last sale price of the common stock, as reported by the Nasdaq Global Market, was $0.92 per share. On September 4, 2009, there were approximately 169 holders of record.

Dividend Policy

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.

Dilution

Our unaudited net tangible book value as of June 30, 2009 was approximately $(1.3) million, or approximately $(0.09) per share of common stock. Net tangible book value per share represents total assets minus capitalized patent costs and total liabilities, divided by the number of shares of common stock outstanding. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of common stock in this offering and the net tangible book value per share of our common stock immediately after the offering.

After giving effect to the sale of 1,500,000 shares of common stock in this offering at the offering price of $0.65 per share and after deduction of estimated offering expenses payable by us, our pro forma net tangible book value as of June 30, 2009 would have been approximately $(450,000), or $(0.03) per share. The adjustments made to determine pro forma net tangible book value per share are the following:

- An increase in total assets to reflect the net proceeds of the offering as described under “Use of Proceeds; and
- The addition of the number of shares offered by this prospectus supplement to the number of shares outstanding.

The following table illustrates the pro forma increase in net tangible book value of $0.06 per share and the dilution (the difference between the offering price per share and net tangible book value per share) to new investors:

Offering price per share		$ 0.65
Net tangible book value per share as of June 30, 2009	$ (0.09)	
Increase per share attributable to new investors	0.06	
Pro forma net tangible book value per share as of June 30, 2009, after giving effect to the offering		(0.03)
Dilution per share to new investors		$ 0.68

The number of shares in the table above excludes as of June 30, 2009:

- 2,316,065 shares of common stock issuable upon the exercise of outstanding options at a weighted average exercise price of $5.81 per share;
- 1,155,744 shares of common stock available for future issuance under our stock option plans; and
- shares of common stock issuable upon the exercise by certain of our stockholders, until September 29, 2009, of a right to purchase an aggregate of $10,000,000 of our common stock at a per share price equal to the greater of (i) the average of the closing prices of our common stock over the thirty-day period immediately prior to the date of exercise of the right, or (ii) $7.80 per share.

Plan of Distribution

We are selling 1,500,000 shares of our common stock under this prospectus supplement to certain investors at a price of $0.65 per share pursuant to separate purchase agreements. The purchase price for the shares of common stock was determined in arms-length negotiations with the investors. We currently anticipate that the closing of the sale of such common shares under these agreements will take place on or about September 11, 2009. On the closing date, we will issue the shares of common stock to the investors and we will receive funds in the amount of the aggregate purchase price.

We have engaged Ladenburg Thalmann & Co. Inc. as our placement agent in connection with this offering. The placement agent arranged for the sale of the common stock offered hereby to selected institutional investors through direct purchase agreements between the purchasers and us. The placement agent is not purchasing or selling any of the common stock in this offering, nor is it required to sell any specific number or dollar amount of common stock, but will use its commercially reasonable best efforts to arrange for the sale of the common stock offered. We will pay the placement agent a cash fee equal to 7% of the total purchase price of the common stock placed by the placement agent.

The following table shows the per share and total fees we will pay to the placement agent in connection with the sale of the common stock offered pursuant to this prospectus supplement.

	Per Share	Total
Placement agent's fee	$ 0.05	$ 68,250

Because there is no minimum offering amount required as a condition to closing in this offering, the actual total placement agent fees, if any, are not presently determinable and may be substantially less than the maximum amount set forth above. The estimated offering expenses payable by us, in addition to the placement agent's fee, are expected to be approximately $64,000, which includes legal, accounting and printing costs and various other fees associated with registering and listing the shares of common stock. After deducting the fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately $850,000.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and liabilities arising from breaches of representations and warranties contained in the securities purchase agreement. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

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

Legal Matters

The validity of the common stock being offered hereby will be passed upon by Winstead PC, The Woodlands, Texas. Jeffrey R. Harder, a member of the law firm, beneficially owned as of June 30, 2009, an aggregate of 11,899 shares of our common stock. Mr. Harder also holds options to purchase 52,500 shares of our common stock.

Experts

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 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 consolidated 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 have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other material we file with the SEC, at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Repros. The SEC's Internet site can be found at http://www.sec.gov.

Important Information Incorporated By Reference

The SEC allows us to "incorporate by reference" into this prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus supplement. Later information filed with the SEC will update and supersede this information. The SEC's Internet site can be found at http://www.sec.gov.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed:

- our Annual Report on Form 10-K for the year ended December 31, 2008;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009;
- our Current Reports on Form 8-K (other than information furnished rather than filed), filed with the SEC on January 13, 2009, January 27, 2009, February 3, 2009, February 24, 2009, March 9, 2009, March 12, 2009, March 16, 2009, March 17, 2009, March 20, 2009, April 20, 2009, May 11, 2009, May 20, 2009, May 27, 2009, June 8, 2009, July 2, 2009, July 8, 2009, July 10, 2009, July 23, 2009, August 3, 2009, August 7, 2009, August 11, 2009 and August 18, 2009 (excluding the information furnished in Item 2.02 and Item 7.01 thereof, which is not

deemed filed and which is not incorporated by reference herein);

- the description of our Rights Agreement contained in our registration statement on Form 8-A filed on September 3, 1999, as amended on September 6, 2002, October 30, 2002, June 30, 2005 and January 10, 2008, including any amendments or reports filed for the purposes of updating this description; and

- the description of our common stock contained in our registration statement on Form 8-A filed on February 2, 1993, including any amendments or reports filed for the purposes of updating this description.

You may request a copy of these filings, at no cost, by contacting us at:

Repros Therapeutics Inc.
Attention: Secretary
2408 Timberloch Drive, Suite B-7
The Woodlands, Texas 77380
Telephone number: (281) 719-3400

In accordance with Section 412 of the Exchange Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

PROSPECTUS

Up to 6,282,052 Shares of
Common Stock

From time to time, we may sell up to an aggregate of 5,000,000 shares of common stock in one or more offerings, and certain selling stockholders may offer and sell up to 1,282,052 shares of common stock issuable upon exercise of certain option rights granted to such selling stockholders. This means:

- we will provide this prospectus and a prospectus supplement each time we sell the common stock;
- the prospectus supplement will inform you about the specific terms of that offering and may also add, update or change information contained in this prospectus; and
- you should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference in this prospectus and any prospectus supplement, carefully before you invest in our common stock.

Our common stock is quoted on the Nasdaq Global Market under the trading symbol "RPRX." On November 18, 2008, the last reported sale price of our common stock on the Nasdaq Global Market was $9.73 per share.

THIS PROSPECTUS MAY NOT BE USED TO OFFER OR SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

The common stock may be sold directly by us to purchasers, to or through underwriters or dealers designated from time to time, or through agents designated from time to time. For additional information on the methods of sale, you should refer to "Plan of Distribution" in this prospectus and to the accompanying prospectus supplement. If any underwriters are involved in a sale of the common stock, their names and any applicable commissions or discounts will be set forth in a prospectus supplement. The net proceeds we expect to receive from the sale will also be set forth in a prospectus supplement.

The selling shareholders may offer and sell any of the shares of common stock from time to time at fixed prices, at market prices or at negotiated prices, and may engage a broker, dealer or underwriter to sell the shares. For additional information on the possible methods of sale that may be used by the selling shareholders, you should refer to the section entitled "Plan of Distribution" beginning on page 8 of this prospectus. We will not receive any proceeds from the sale of the shares of common stock by the selling shareholders. We will pay all expenses incurred in effecting the registration statement of which this prospectus constitutes a part.

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.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY CONSIDER THE "RISK FACTORS" CONTAINED IN OUR ANNUAL REPORT ON FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2007, UPDATES IN PART II, ITEM 1A OF OUR FORM 10-Q FILINGS, AND IN OUR FUTURE FILINGS MADE WITH THE SECURITIES AND EXCHANGE COMMISSION, WHICH ARE INCORPORATED BY REFERENCE IN THIS PROSPECTUS. SEE THE SECTION ENTITLED "RISK FACTORS" ON PAGE 4 OF THIS PROSPECTUS.

The date of this prospectus is November 20, 2008

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We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and the accompanying supplement to this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. This prospectus and the accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy common stock, nor do this prospectus and the accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy common stock 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 is accurate on any date subsequent to the date set forth on the front of the 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 common stock sold on a later date.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission using a "shelf" registration process. Under this shelf registration process, we may sell common stock in one or more offerings, up to an aggregate number of 5,000,000 shares. In addition, certain selling stockholders may offer to sell up to 1,282,052 shares of common stock issuable upon exercise of certain option rights held by such selling stockholders.

This prospectus provides you with a general description of the securities we may offer. Each time we sell common stock, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus. This prospectus, together with applicable prospectus supplements, includes all material information relating to this offering. If there is any inconsistency between the information in this prospectus and the information in the accompanying prospectus supplement, you should rely on the information in the prospectus supplement.

Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under "Where You Can Find More Information."

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to "Repros," "we," "us," "our" or similar references mean Repros Therapeutics Inc.

ABOUT REPROS THERAPEUTICS INC.

Overview

Repros Therapeutics Inc. ("the Company", or "we," "us" or "our"), was organized on August 28, 1987. We are a development stage biopharmaceutical company focused on the development of oral small molecule drugs to treat male and female reproductive disorders.

Our current product pipeline consists of the following (with the respective status of development):

Proellex® (female reproductive health)

- Phase 3 three-month short course treatment of symptomatic uterine fibroids associated with anemia in women who may consider having a subsequent hysterectomy
- Phase 3 for the chronic treatment of symptomatic uterine fibroids
- Phase 2 for the treatment of symptomatic endometriosis

Androxal® (male reproductive health)

- Phase 2b proof-of-concept trial in men with low testosterone levels wanting to improve or maintain their fertility and/or sperm number and function
- Request pre-IND meeting with the Food and Drug Administration's, or FDA's, Division of Metabolic and Endocrine Products to investigate Androxal as a treatment for type 2 diabetes

Proellex

Our lead drug, Proellex, is a selective progesterone receptor modulator (PRM) and is being developed for the treatment of symptoms associated with uterine fibroids and endometriosis. We are also developing Proellex as a short course pre-surgical treatment for anemia associated with excessive menstrual bleeding related to uterine fibroids. During the first quarter of 2008, we filed an Investigational New Drug Application, or IND, for Proellex for the treatment of anemia associated with uterine fibroids and also initiated two 65-patient Phase 3 pivotal clinical trials with Proellex for this indication. Our goal is to file a New Drug Application, or NDA, for this indication in late 2009.

During the first quarter of 2008, we initiated two 75-patient Phase 3 pivotal clinical trials with Proellex for the chronic treatment of uterine fibroids and anticipate filing a NDA for this indication in late 2010. In addition, during the first quarter of 2008, we also initiated two 400 patient Proellex Open Label Safety Studies. We intend to complete patient enrollment for one 400 patient Open Label Safety Study then start enrollment in the second Open Label Safety study.

The initiation of these Phase 3 clinical trials and Open Label Studies included awarding the trials to three clinical research organizations, the process of identifying and contracting the clinical sites to be used as well as other various activities required to complete these clinical trials. During the second quarter of 2008, we implemented a centralized patient recruitment advertising campaign for our Phase 3 Proellex clinical trials and in July 2008 we took the necessary steps to begin additional patient recruitment advertising for one of our 400 patient Proellex Open Label Safety Studies.

During 2008 we disclosed the following clinical trial and animal safety data relating to Proellex:

- initial results from 13 women who had endometrial biopsies post menses following last dose of drug in a two drug cycle extension study showed that results of assessments of the post menses tissues are that of a benign endometrium. While previous end of drug cycle biopsies from these subjects all had histological changes consistent with those induced by progesterone receptor modulators (Proellex class of drugs), none of these post drug cessation biopsies reflected any of those histological changes. These key findings indicate that the effects of Proellex on the endometrium are present during drug exposure and are reversible upon cessation of drug treatment;

- results from a pilot study of the potential for adverse cardiac events associated with administration of doses of Proellex up to four times higher than the intended marketed dose showed that despite up to a four fold increase in Proellex plasma concentrations over seven days the QTc did not change; and

- initial macroscopic findings from a two-year rat carcinogenicity study and a six-month mouse carcinogenicity study showed no potential for tumor induction as compared to placebo.

We are also currently conducting a Phase 2 clinical trial with Proellex for the treatment of endometriosis. We provided initial interim data from this trial in July 2008 which showed that severe pain, the most troublesome symptom associated with endometriosis, was significantly reduced in one to two months of treatment. We intend to file a NDA for this indication in late 2010.

Uterine fibroids, anemia associated with uterine fibroids and endometriosis affect a significant number of women of childbearing age in the developed world. There is no currently-approved effective long-term drug treatment for uterine fibroids or endometriosis. In the United States alone, 300,000 women per year undergo a hysterectomy as a result of severe uterine fibroids.

In addition to the clinical trials discussed above we are also conducting additional human clinical trials and animal safety studies with Proellex to support our future NDA submissions.

Androxal

Our second product candidate, Androxal, is a single isomer of clomiphene citrate and is an orally active proprietary small molecule compound.

During the second quarter of 2008, we initiated a Phase 2b proof-of-concept Androxal clinical trial in men of reproductive age with low testosterone levels who want to improve or maintain their fertility and/or sperm function while being treated for low testosterone. This trial includes a control group that will be given Testim®, a popular testosterone replacement therapy. We believe Androxal will be superior to the existing drugs used to normalize testosterone as, to our knowledge, only Androxal has the property of restoring both luteinizing hormone, or LH, and follicle stimulating hormone, or FSH, levels. LH and FSH are the pituitary hormones that stimulate testicular testosterone and sperm production, respectively. We intend to have an End of Phase 2 Meeting with the FDA in the

second half of 2009. According to the Urology Channel, recent estimates show that approximately 13 million men in the United States experience testosterone deficiency.

In November 2008, we received guidance from the FDA suggesting submission of a new IND to the Division of Metabolic and Endocrine Products, or DMEP, for the investigation of Androxal as a potential treatment for type 2 diabetes. We plan to submit a new IND for this indication to the DMEP as soon as practicable.

In addition to the clinical trials discussed above, we are also conducting a long-term Open Label Safety Study and animal safety study with Androxal to support our future NDA submissions.

We were previously developing Androxal in the United States to treat testosterone deficiency due to secondary hypogonadism by restoring normal testosterone production in males with functional testes and diminished pituitary function, a common condition in the aging male. Based on a Type “C” meeting held with the FDA on October 15, 2007 we do not believe we have a clear clinical path to develop Androxal for this indication in the United States at this time. Although we believe Androxal could be developed outside of the United States, due to the limited European market for this indication and our limited internal resources we do not intend to pursue approval outside of the United States at this time.

Other Programs

We continue to maintain our patent portfolio of our phentolamine-based products for the treatment of sexual dysfunction. However, no R&D investments are being made in these programs at this time.

General

The clinical development of pharmaceutical products is a complex undertaking, and many products that begin the clinical development process do not obtain regulatory approval. The costs associated with our clinical trials may be impacted by a number of internal and external factors, including the number and complexity of clinical trials necessary to obtain regulatory approval, the number of eligible patients necessary to complete our clinical trials and any difficulty in enrolling these patients, and the length of time to complete our clinical trials. Given the uncertainty of these potential costs, we recognize that the total costs we will incur for the clinical development of our product candidates may exceed our current estimates. We do, however, expect these costs to increase substantially in future periods as we continue later-stage clinical development trials. Any failure by us to obtain, or any delay in obtaining, regulatory approvals could cause our research and development expenditures to increase and, in turn, have a material adverse effect on our results of operations.

Corporate Information

Our principal executive offices are located at 2408 Timberloch Place, Suite B-7, The Woodlands, Texas 77380 and our telephone number is (281) 719-3400. Our website address is www.reprosrx.com. The information contained in our website is not a part of this prospectus supplement or the accompanying prospectus.

Registered Direct Offering

On October 2, 2008, we completed a direct registered offering of 2.4 million shares of our common stock at a purchase price of $6.50 per share for aggregate proceeds after expenses of approximately $15.5 million. Certain of the purchasers under this offering were granted in their purchase agreements an option to purchase an aggregate of up to $10 million of additional shares of our common stock at the greater of the fair market value, defined as the average of the closing prices for the 30 trading days immediately prior to the date of exercise, or $7.80 per share. Such option becomes exercisable at such time as we have less than $10 million in cash and cash equivalents and expires on September 29, 2009. In addition, the purchasers who received such option also received a right of first offer to purchase their respective pro-rata portion of any future financings, excluding certain corporate activities, that expires on September 29, 2010.

As part of the terms of the October 2, 2008 financing, we amended our Standstill Agreement with Efficacy Capital Ltd. to permit Efficacy Capital to own up to 40% of our outstanding shares of stock and to permit Efficacy Capital to designate two directors to serve on our Board of Directors. Pursuant to that amendment, the Board increased its number to nine and appointed Mark Lappe, a Managing Partner of Efficacy Capital, and John C. Reed, M.D., Ph.D., President and CEO of Burnham Institute for Medical Research, to the vacancies on the Board created by such increase. The Company amended its Rights Agreement to reflect the increase to 40% described above.

The shares of common stock offered by us in the offering were registered under our existing shelf registration statement on Form S-3 (File No. 333-137109), which was filed with the Securities and Exchange Commission on September 5, 2006 and declared effective by the Securities and Exchange Commission on September 15, 2006.

In addition, the option described above also included our agreement to file a registration statement with the Securities and Exchange Commission to register the resale of the shares issuable upon exercise of such option and to have such registration statement declared effective by the Securities and Exchange Commission as soon thereafter as possible. The registration statement containing this prospectus is being filed pursuant to this option.

RISK FACTORS

Investment in our securities involves a high degree of risk. You should consider carefully the risk factors in any prospectus supplement and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, updates in Part II, Item 1A of our Form 10-Q filings, and in our future filings with the Securities and Exchange Commission, as well as other information in this prospectus and any prospectus supplement and the documents incorporated by reference herein or therein, before purchasing any of our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

FORWARD-LOOKING INFORMATION

Some of the statements contained (i) in this prospectus and any accompanying prospectus supplement or (ii) incorporated by reference into this prospectus are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are subject to the safe harbor created by the Securities Litigation Reform Act of 1995. Examples of these forward-looking statements include, but are not limited to:

- our anticipated future capital requirements and the terms of any capital financing agreements;
- timing and amount of future contractual payments, product revenue and operating expenses;
- progress and results of clinical trials;
- anticipated regulatory filings, requirements and future clinical trials;
- protection of our intellectual property; and
- market acceptance of our products and the estimated potential size of these markets.

While these forward-looking statements made by us are based on our current intent, beliefs and judgments, they are subject to risks and uncertainties that could cause actual results to vary from the projections in the forward-looking statements. You should consider the risks below carefully in addition to other information contained in this report before engaging in any transaction involving shares of our common stock. If any of these risks occur, they could seriously harm our business, financial condition or results of operations. In such case, the trading price of our common stock could decline, and you may lose all or part of your investment.

The discussion and analysis set forth in this document contains discussions of regulatory status and other forward-looking statements. Actual results could differ materially from those projected in the forward-looking statement as a result of the following factors, among others:

- future capital requirements and additional fundings through equity or debt financings;
- uncertainty of governmental regulatory requirements and lengthy approval process;
- inability to fulfill our obligations under our license with the National Institutes of Health, or NIH, for Proellex may result in forfeiture of our rights to Proellex;
- results of the current Phase 2b trial for Androxal and the ongoing Phase 2 and 3 trials for Proellex;

- history of operating losses and uncertainty of future financial results;
- dependence on third parties for clinical development and manufacturing;
- dependence on a limited number of key employees;
- competition and risk of competitive new products;
- ability to obtain and defend patents, protect trade secrets and avoid infringing patents held by third parties;

- limitations on third-party reimbursement for medical and pharmaceutical products;
- acceptance of our products by the medical community;
- potential for product liability issues and related litigation;
- potential for claims arising from the use of hazardous materials in our business;
- continued listing on the Nasdaq Global Market;
- volatility in the value of our common stock;
- volatility in the financial markets generally; and
- other factors set forth under "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007 filed with the Securities and Exchange Commission on March 17, 2008, updates in Part II, Item 1A of our Form 10-Q filings, and in our future filings made with the Securities and Exchange Commission, which are incorporated by reference in this prospectus, and any risk factors set forth in the accompanying prospectus supplement.

In addition, in this prospectus, any prospectus supplement and the documents incorporated by reference into this prospectus, the words "believe," "should," "predict," "future," "may," "will," "estimate," "continue," "anticipate," "intend," "p "potential," "continue," or "opportunity," or other words and terms of similar meaning, as they relate to us, our business, future financial or operating performance or our management, are intended to identify forward-looking statements. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update or revise any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Past financial or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends.

USE OF PROCEEDS

Unless the applicable prospectus supplement states otherwise, the net proceeds we receive from the sale of the securities offered by us under this prospectus will be used for general corporate purposes, which may include:

- funding clinical trials and regulatory submissions for our two lead product candidates, Proellex and Androxal, currently in human clinical trials;
- financing potential acquisitions of complementary businesses, assets, technologies and products that we may consider from time to time; and
- general working capital.

Although we currently have no plans to acquire any complementary businesses, our management has broad discretion as to the allocation of the net proceeds received in this offering and may use these proceeds for that purpose in the future. Pending these uses, we may temporarily use the net proceeds to make short-term investments.

We will not receive any of the proceeds from the sale of the shares by the selling stockholders.

SELLING STOCKHOLDERS

On October 2, 2008 we sold 2,400,000 shares of our common stock in a direct registered offering to certain investors. We provided rights to certain of such investors, the selling stockholders under this prospectus, to purchase up to an aggregate of 1,282,052 shares of our common stock at a purchase price equal to the fair market value at the time of exercise of such purchase right or $7.80 per share, whichever is greater. In addition to the 5,000,000 shares to be available for future offerings, this prospectus relates to the resale from time to time of up to a total of 1,282,052 shares of common stock by the selling stockholders.

Pursuant to the terms of the purchase agreements relating to such purchase option rights, we filed a Registration Statement on Form S-3, of which this prospectus constitutes a part, in order to permit the selling stockholders, including their transferees who are affiliates, pledgees, assignees and successors-in-interest, to resell to the public any or all of the shares of our common stock issuable upon exercise of such purchase option rights, or any interests therein. When we refer to the “selling stockholders” in this prospectus, we mean the entities listed in the table below, as well as their transferees, pledgees or donees or its respective successors.

The following table, to our knowledge, sets forth information regarding the beneficial ownership of our common stock by the selling stockholders as of October 31, 2008 and the number of shares being offered hereby by the selling stockholders. The information is based in part on information provided by or on behalf of the selling stockholders. Beneficial ownership is determined in accordance with Rule 13d-3 promulgated by the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and includes voting or investment power with respect to shares, as well as any shares as to which the selling stockholders have the right to acquire beneficial ownership within sixty (60) days after October 31, 2008 through the exercise or conversion of any stock options, warrants, convertible debt or otherwise. Unless otherwise indicated below, the selling stockholders have sole voting and investment power with respect to their shares of common stock. The inclusion of any shares in this table does not constitute an admission of beneficial ownership by the selling stockholders. We will not receive any of the proceeds from the sale of our common stock by the selling stockholders.

The actual number of shares of common stock that may be sold by the selling stockholders will be determined by the selling stockholders. Because the selling stockholders may sell all, some or none of the shares of common stock which they hold, no estimate can be given as to the number of shares of common stock that will be held by the selling stockholders after completion of the sales. The information set forth in the following table regarding the beneficial ownership after resale of shares is based on the assumption that the selling stockholders will sell all of their shares of common stock covered by this prospectus.

	Shares Beneficially Owned Before Offering(1)		Shares Offered	Shares Beneficially Owned After Offering(1)	
Name of Selling Stockholder	Number	Percent	Hereby(2)	Number	Percent
Efficacy Capital, Ltd.(3)	4,292,136	28.28%	961,539	4,292,136	26.60%
Cyan Opportunities Fund, Ltd.(4)	1,514,690	9.98%	294,872	1,514,690	9.79%
WR Multi Strategy Master Fund, Ltd.(4)	397,110	2.62%	25,641	397,110	2.61%

(1) The percentage of shares beneficially owned prior to the offering is based on 15,174,904 shares of our common stock issued and outstanding as of October 31, 2008 and the percentage of shares beneficially owned after the offering is based on the same number of shares and assumes the issuance of the shares offered by each particular selling stockholder..

(2) The shares listed in this column reflect the shares of common stock issuable upon exercise of the purchase rights described above. Such purchase rights are not currently exercisable and are thus not currently beneficially owned by the selling stockholders; therefore, the shares listed in this column are not reflected in the columns reflecting beneficial ownership before the offering.

(3) Efficacy Capital, Ltd., a Bermuda limited liability company, is the investment manager for, and shares the power to vote and dispose of all of the securities listed above with, the following entities: Efficacy Biotech Fund, L.P., a Delaware limited partnership, Efficacy Biotech Fund Limited, a Bermuda Exempted Mutual Fund Company and Efficacy Biotech Master Fund Ltd., a Bermuda Exempted Mutual Fund Company. Mark Lappe and Jon Faiz Kayyem, natural persons, have the power to vote and dispose of all of the securities listed above as managing partners of Efficacy Capital, LTD. Mark Lappe also serves on our board of directors.

(4) Vermillion Asset Management LLC is the investment advisor to a managed account for the WR Multi Strategy Master Fund, Ltd. and is the investment manager of the Cyan Opportunities Fund, Ltd.

PLAN OF DISTRIBUTION

We or the selling stockholders may sell the common stock through underwriters or dealers, through agents, or directly to one or more purchasers. One or more prospectus supplements will describe the terms of the offering of the common stock, including:

- the name or names of any agents or underwriters;
- the purchase price of the common stock and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional shares of common stock from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the common stock may be listed.

Only underwriters named in the prospectus supplement are underwriters of the common stock offered by the prospectus supplement.

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

We or the selling stockholders may sell the common stock directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of the common stock and we will describe any commissions we will pay the agent in the prospectus supplement.

We or the selling stockholders may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase the common stock from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

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

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934. Overallotment involves sales in excess of

the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying shares of common stock so long as the stabilizing bids do not exceed a specified maximum price. Short covering transactions involve exercise by underwriters of an over-allotment option or purchases of the common stock in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the shares of common stock originally sold by the dealer are purchased in a short covering transaction. Those activities may cause the price of the common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Our common stock is quoted on the Nasdaq Global Market. One or more underwriters may make a market in our common stock, but the underwriters will not be obligated to do so and may discontinue market making at any time without notice. We cannot give any assurance as to liquidity of the trading market for our common stock.

Any underwriters who are qualified market makers on the Nasdaq Global Market may engage in passive market making transactions in the securities on the Nasdaq Global Market in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker’s bid, however, the passive market maker’s bid must then be lowered when certain purchase limits are exceeded.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon by Winstead PC, The Woodlands, Texas. Jeffrey R. Harder, a member of the law firm Winstead PC, and a director of Repros, beneficially owned as of October 31, 2008, an aggregate of 13,424 shares of our common stock. Mr. Harder also holds options to purchase 55,000 shares of our common stock.

EXPERTS

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2007 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 2 to the consolidated 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 a reporting company and file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. We have filed with the Securities and Exchange Commission a registration statement on Form S-3 under the Securities Act with respect to the common stock we are offering under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the common stock we are offering under this prospectus, we refer you to the registration statement and the exhibits filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the Securities and Exchange Commission's public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the Securities and Exchange Commission and paying a fee for the copying cost. Please call the Securities and Exchange Commission at 1-800-SEC-0330 for more information about the operation of the public reference room. Our Securities and Exchange Commission filings are also available at the Securities and Exchange Commission's website at http://www.sec.gov.

The Securities and Exchange Commission allows us to "incorporate by reference" information 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 an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the Securities and Exchange Commission prior to the date of this prospectus, while information that we file later with the Securities and Exchange Commission will automatically update and supersede this information. We incorporate by reference into this registration statement and prospectus the documents listed below and any future filings we will make with the Securities and Exchange Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of the initial registration statement but prior to effectiveness of the registration statement and after the date of this prospectus but prior to the termination of the offering of the securities covered by this prospectus, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered "filed" under the Securities Exchange Act of 1934, as amended.

The following documents filed with the Securities and Exchange Commission are incorporated by reference in this prospectus:

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our Annual Report on Form 10-K for the year ended December 31, 2007 filed with the Securities and Exchange Commission on March 17, 2008;

- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008, June 30, 2008 and September 30, 2008 filed with the Securities and Exchange Commission on May 12, August 11 and November 10, 2008, respectively;

- our Current Reports on Form 8-K (other than information furnished rather than filed), filed with the Securities and Exchange Commission on January 8, 2008, January 10, 2008, February 1, 2008, February 11, 2008, February 12, 2008, February 22, 2008, March 7, 2008, March 14, 2008, March 18, 2008, March 31, 2008, April 4, 2008, May 8, 2008, May 12, 2008, May 28, 2008, May 29, 2008, June 10, 2008, June 30, 2008, July 11, 2008, July 15, 2008, July 21, 2008, July 28, 2008, August 11, 2008, August 18, 2008, August 21, 2008, September 29, 2008, October 2, 2008, October 10, 2008, October 29, 2008, November 10, 2008 and November 12, 2008; and

- the description of our common stock contained in our registration statement on Form 8-A filed with the Securities and Exchange Commission on February 2, 1993, including all amendments and reports filed for the purpose of updating such information.

Information furnished to the Securities and Exchange Commission under Item 2.02 or Item 7.01 in Current Reports on Form 8-K, and any exhibit relating to such information, filed prior to, on or subsequent to the date of this prospectus is not incorporated by reference into this prospectus.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Repros Therapeutics Inc., Attention: Secretary, 2408 Timberloch Place, Suite B-7, The Woodlands, Texas 77380. Our telephone number is (281) 719-3400.

1,500,000 Shares

Common Stock

PROSPECTUS SUPPLEMENT

September 8, 2009

You should rely only on the information contained or incorporated by reference in this prospectus supplement. No dealer, salesperson or other person is authorized to give information that is not contained or incorporated by reference in this prospectus supplement. This prospectus supplement is not an offer to sell nor is it seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus supplement is correct only as of the date of this prospectus supplement, regardless of the time of the delivery of this prospectus supplement or any sale of these securities.