REPROS THERAPEUTICS INC.
Form 424B3
July 07, 2010

This filing is made pursuant to Rule 424(b)(3)
under the Securities Act of 1933, as amended, in connection
with Registration No. 333-167409

PROSPECTUS

Up to 294,671 Shares
Common Stock

From time to time, certain selling stockholders of Repros Therapeutics Inc. (“the Company”, "Repros," or "we," "us" or "our") may offer and sell up to 294,671 shares of common stock issued to such selling stockholders in connection with the Settlement Agreements described in “Selling Stockholders” below.

Our common stock is quoted on the Nasdaq Capital Market under the trading symbol “RPRX.” On June 30, 2010, the last reported sale price of our common stock on the Nasdaq Capital Market was $0.36 per share.

The selling stockholders 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 stockholders, you should refer to the section entitled “Plan of Distribution” beginning on page 10 of this prospectus. We will not receive any proceeds from the sale of the shares of common stock by the selling stockholders. 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, 2009, 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 5 OF THIS PROSPECTUS.

The date of this prospectus is July 6, 2010

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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, whereby certain selling stockholders may offer to sell up to 294,671 shares of common stock issued to such selling stockholders in connection with the Settlement Agreements described in “Selling Stockholders” below.

This prospectus provides you with a general description of the securities the selling stockholders may offer. We may provide a prospectus supplement to add, update or change 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 “the Company,” “Repros,” “we,” “us,” “our” or similar references mean Repros Therapeutics Inc.

ABOUT REPROS THERAPEUTICS INC.

Overview

Repros Therapeutics Inc. ("the Company", "RPRX," “Repros”, or "we," "us" or "our") was organized 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. As of March 31, 2010, we had accumulated losses of $175.6 million, approximately $974,000 in cash and cash equivalents, and our accounts payable and accrued expenses were approximately $1.9 million. As of April 30, 2010, we had cash and cash equivalents of approximately $4.0 million. The amount of cash on hand is not sufficient to fund our future clinical trials of Androxal® and Proellex® and pay our accounts payable and accrued expenses as well as our normal corporate overhead and expenses. The foregoing and other matters raise substantial doubt about our ability to continue as a going concern. We continue to explore potential additional financing alternatives that would provide sufficient funds to enable us to continue to develop our two product candidates through completion of clinical trials; 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 complete development of either of our product candidates.

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

Androxal® (male reproductive health):

- Completed Phase 2b proof-of-concept trial in men being treated for low testosterone levels who want to improve or maintain their fertility and/or sperm number and function; and

- Our Investigational New Drug Application, or IND, for the study of oral Androxal® in the treatment of hypogonadal men with type 2 diabetes was accepted by the FDA and, thus, we may initiate a Phase 2 trial.

Proellex® (female reproductive health): All ongoing clinical trial activities for Proellex® have been put on partial hold by the FDA; however, the FDA has allowed us to run a single study to explore both safety and signals of efficacy in an escalating dose fashion. The new study will test 5 different doses of Proellex® (1, 3, 6, 9 and 12mg) with 1mg being the first dose tested.

We also continue to maintain our patent portfolio of our phentolamine-based products for the treatment of sexual dysfunction and in order to create value from these assets in various ways which includes product out-licensing.

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Androxal®

Product Overview

Our primary product candidate, Androxal® (the trans isomer of clomiphene), 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 improve or maintain their fertility and/or sperm function while being treated for low testosterone. In addition, we submitted 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. On February 1, 2010, we received confirmation from the DMEP that our new IND was accepted and, as a result, we may initiate a Phase 2 trial, subject to available funding.Our findings from a retrospective review of the clinical data from our 200 patient non-pivotal U.S. Phase 3 clinical trial showed that Androxal® therapy resulted in a significant reduction in mean glucose levels in men with glucose levels >104 mg/dL, an outcome not seen in the placebo or AndroGel® arms of this study. There can be no assurance that clinical trials performed for this new indication will be successful.

We believe Androxal® may have advantages over current therapies for the treatment of low testosterone due to secondary hypogonadism because it is designed as an oral therapy that acts centrally to restore testicular function and hence normal testosterone in the body, as compared to currently approved products that simply replace diminished testosterone either through injections, nasal spray or the application of a gel or cream containing testosterone over a percentage of body area.

We believe Androxal® will be superior to the existing administration of exogenous testosterone products used to normalize testosterone as only Androxal® has the property of restoring both LH and FSH levels. LH and FSH are the pituitary hormones that stimulate testicular testosterone and sperm production, respectively.

Testosterone is an important male hormone. Testosterone deficiency in men is linked to several negative physical and mental conditions, including loss of muscle tone, reduced sexual desire, and deterioration of memory and certain other cognitive functions. Testosterone production normally decreases as men age, sometimes leading to testosterone deficiency. According to the Urology Channel, recent estimates show that approximately 13 million men in the United States experience testosterone deficiency. The leading therapy is AndroGel®, a commercially available testosterone replacement cream marketed by Solvay Pharmaceuticals for the treatment of low testosterone, which we believe has had and continues to have significant sales in North America.

Based on our own clinical trial screening data, we believe over 70% of men that have low testosterone suffer from secondary hypogonadism, caused by failure of the pituitary to provide appropriate hormone signaling to the testes, which we believe causes testosterone levels to drop to the point where pituitary secretions fall under the influence of estrogen. In this state, we also believe that estrogen further suppresses the testicular stimulation from the pituitary. These men are readily distinguished from those that have primary testicular failure via assessment of the levels of secretions of pituitary hormones (i.e., men with primary testicular failure experience elevated secretions of pituitary hormones). Secondary hypogonadism is not relegated only to older men although the condition becomes more prevalent as men age.

Androxal® is considered a new chemical entity by the FDA which means that the compound will be required to undergo the full regulatory approval process. We must still meet additional clinical requirements including pre-clinical, Phase 1, Phase 2, pivotal Phase 3 trials and long-term Open Label Safety Studies as well as other requirements. Although Androxal® is considered a new chemical entity for purposes of requirements for approval, it is closely related chemically to the drug, Clomid®, which is approved for use in women to treat certain infertility

disorders. The FDA has indicated that testicular tumors, gynecomastia and adverse ophthalmologic events, which have been reported in males taking Clomid®, are potential risks that should be included in informed consent forms for our Androxal® clinical trials. We do not believe that Androxal® will present with the same adverse events given its reduced half-life in the human body as compared to Clomid®. In our preclinical studies and our clinical trials to date, we have observed no evidence of any of these events except for certain ophthalmologic events in our preclinical dog study at doses significantly higher than those administered in the clinical trials.

All clinical trial results are subject to review by the FDA, and the FDA may disagree with our conclusions about safety and efficacy. We caution that the results discussed herein are based on data from non-pivotal trials and that our Phase 2 trials, pivotal Phase 3 and long-term Open Label Safety Trial data may not agree with these results which will be based upon significantly larger and more diverse patient populations treated for longer periods of time.

Secondary Hypogonadism with Fertility Maintenance/Improvement

During the second quarter of 2008, we initiated a 24-patient Phase 2b proof-of-concept clinical trial (ZA-201) for a new indication 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. On October 6, 2009 we announced that Androxal® was able to maintain sperm counts in men being treated for their low testosterone levels. Testim® resulted in suppressed sperm levels while men were being treated with that topical gel. We requested a meeting with the FDA to discuss such results. In correspondence leading up to such meeting, the FDA stated that it could not agree with such proposed indication for Androxal® at that time because the patient population had not been adequately defined and that it was not aware of certain data to support our position. On January 25, 2010, we participated in a teleconference with the FDA relating to the future clinical path for Androxal®. During such teleconference, the FDA requested that we (i) propose a label that better defines the population of individuals for whom we believe will benefit from the use of Androxal® and (ii) conduct a literature review of the incidence of infertility associated with the use of exogenous testosterone as supportive of our data. The FDA suggested that if it finds the submission appropriate, no additional clarifying meeting regarding this indication for Androxal® may be required. On February 8, 2010, we announced that we submitted the requested information to the FDA and we are currently awaiting the FDA's response to such submissions. Given that there is currently 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.

Type 2 Diabetes

In April 2008, we submitted a White Paper, based on the results from a previously conducted non-pivotal Phase 2 clinical trial (ZA-003) with Androxal® for the treatment of testosterone deficiency due to secondary hypogonadism, to the Division of Reproductive and Urology Products. The data we believe demonstrated that in subjects with a serum glucose of greater than or equal to 105mg/dL, there was a statistically significant reduction in fasting serum glucose and a higher response rate to treatment in the Androxal®-group than the placebo or Androgel® groups. In November 2008, after the FDA reviewed this paper we received guidance from them 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 in mellitus. In December 2009, we submitted a new IND to the DMEP for the investigation of Androxal® for such purpose. On February 1, 2010, we received confirmation from the DMEP that our new IND was accepted and, as a result, we may initiate a Phase 2 trial, subject to available funding.

Proellex®

Proellex®, our product candidate for female reproductive health, is a new chemical entity that acts as a selective blocker of the progesterone receptor and is being developed for the treatment of symptoms associated with uterine fibroids and endometriosis. There is currently no FDA-approved orally administered drug treatment for the long-term treatment of uterine fibroids or endometriosis.

As a result of the previous liver toxicity exhibited by Proellex® in our previous Phase 2 and 3 clinical trials to endometriosis and uterine fibroids, respectively, all ongoing clinical trial activities have been put on partial hold by the FDA. Pursuant to the terms of such partial clinical hold, the FDA has allowed us to run a single study under the new partial clinical hold status. The new low dose study is designed to explore both safety and signals of efficacy in an escalating dose fashion. The new study will test 5 different doses of Proellex® (1, 3, 6, 9 and 12 mg) with 1 mg being the first dose tested. Each dose will be compared to placebo with weekly assessments of liver function during both the placebo and drug period. Higher doses will not be studied until we are confident that it is safe to proceed to

the next dose and have reported the safety findings to the FDA. Subjects will be dosed with the active drug for 10 weeks, which will allow for adequate time to determine the impact of a given dose on trends in liver function. Each dose will be tested in 12 different subjects and assessment of pharmacokinetic parameters will be obtained at start of dosing and end of the dosing period to determine overall and maximum drug exposure for a given dose. We will also monitor changes in menstrual bleeding patterns and ovulation as well as changes in endometrial thickness. The FDA requires that an independent Drug Safety Monitoring Board be established and that the informed consent clearly state the liver toxicity previously experienced with Proellex®.

In a 120 patient study of Proellex® as a treatment of uterine fibroids conducted in the United States (roughly 40 subjects per arm) both a 12.5 and 25 mg dose of Proellex® were compared to placebo. In this study both the 12.5 and 25 mg doses achieved highly statistically significant results when compared to placebo when menstrual bleeding was assessed ($p < 0.0001$). The two doses also achieved highly statistically significant improvement in quality of life measures using the Uterine Fibroid Symptom Quality of Life questionnaire developed and validated by Georgetown University and used in the development of device like treatments of uterine fibroids such as uterine artery embolization. There was no statistical difference in efficacy measures between the two doses. Importantly in the Phase II US trial a significant percentage of women stopped menstruating. Over 80% of women on both the 12.5 and 25 mg doses exhibited no menses during the three month trial whereas all women on placebo exhibited at least one menses. We believe that the evaluation of ovulation and menstrual bleeding patterns in the low dose trial will provide strong evidence for efficacy warranting further development.

We plan to proceed with the manufacture of the lower doses of Proellex® capsules and intend to begin dosing subjects in the third quarter of 2010. Though the new study is more complex than that originally submitted to the FDA, we believe we can complete the trial within roughly 18 months after first dose. Presuming a safe and effective dose is identified and the FDA is in agreement, we anticipate that we will be able to proceed with large efficacy trials for both uterine fibroids and endometriosis, subject to available funds, or outlicense of the product to a major pharmaceutical company.

Other Products

We continue limited out-licensing efforts for our phentolamine-based product candidates, including VASOMAX®, which had previously been approved for marketing in several countries in Latin America for the treatment of male erectile dysfunction under the brand name, Z-Max. VASOMAX® is currently on partial clinical hold in the U.S.

Business Strategy

Provided we are able to obtain sufficient funds to continue our business, we plan to initially focus our clinical program on Androxal®. 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 an acceptable corporate partnering opportunity will be found.

Risks Affecting Us

Our business is subject to numerous risks as discussed more fully in “Risk Factors" below. We plan to continue to utilize the current Equity Distribution Agreement with Ladenburg to provide us with capital to fund our immediate and short term needs and to explore other various financing alternatives. 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. In the event that we are unable to obtain adequate financing to meet our future needs, we will pursue other options, including but not limited to, reductions of expenses, sale of the Company, sale or license of a portion or all of our assets or the liquidation of the Company.

In addition, we have not received regulatory approval for any of our product candidates, have not successfully earned any significant commercial revenues from any of our product candidates and may never launch either of our product candidates. If we do not successfully commercialize any of our product candidates, we will be unable to achieve our business objectives. In addition, the reported results of our clinical trials completed to date may not be indicative of results that will be achieved in later-stage clinical trials involving larger and more diverse patient populations. As of March 31, 2010, we had accumulated losses of $175.6 million, approximately $974,000 in cash and cash equivalents, and our accounts payable and accrued expenses were approximately $1.9 million. As of April 30, 2010, we had cash and cash equivalents of approximately $4.0 million. The amount of cash on hand is not sufficient to fund our future clinical trials of Androxal® and Proellex® and pay our accounts payable and accrued expenses as well as our normal corporate overhead and expenses. The foregoing and other matters raise substantial doubt about our ability to continue as a going concern and we expect to continue to incur significant losses over the next several years, and we may never become profitable. Our financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Corporate Information

We were organized as a Delaware corporation in August 1987. 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 Securities and Exchange Commission.

Recent Developments

On June 15, 2010, we received notification from the Nasdaq Stock Market that we had not regained compliance with Nasdaq Listing Rule 5550(a)(2) and, as a result, our securities will be delisted from the Nasdaq Capital Market. Pursuant to Nasdaq procedural rules, we have decided to appeal such determination to delist our securities. On June 17, 2010, we received notification from Nasdaq Stock Market that we were granted the opportunity for an oral hearing to plead our case for an extension of time before delisting. Such hearing is scheduled for July 22, 2010. We are required to submit our plan to Nasdaq supporting our appeal for additional time to regain compliance by July 2, 2010. Our board of directors and our management is appealing the Nasdaq ruling in order to allow adequate time for the FDA to respond to our pending submissions for our Androxal® drug candidate. There can be no assurance that Nasdaq will grant Repros sufficient time for the FDA to finish its deliberations.

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, 2009, 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 ability to continue as a going concern and to raise additional capital, as necessary, on acceptable terms or at all;
- our ability to successfully defend the class action lawsuits;
- our ability to maintain the Company's listing on the Nasdaq Capital Market;
- whether a clear clinical path for Androxal® can be realized;
- the removal of the current partial 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;
- uncertainty relating to our patent portfolio;
- market acceptance of our products and the estimated potential size of these markets;
- dependence on third parties for clinical development and manufacturing;
- dependence on a limited number of key employees;
- competition and risk of competitive new products;
- volatility in the value of our common stock;
- volatility in the financial markets generally; and

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§ 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 below carefully in addition to other information contained in this report before engaging in any transaction involving our securities. 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.

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,” “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

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

SELLING STOCKHOLDERS

Between November 30, 2009 and April 8, 2010, we entered into settlement agreements and mutual releases (the "Settlement Agreements") with certain of our creditors, pursuant to which we issued an aggregate of 294,671 shares of common stock (the "Settlement Shares") and paid a certain amount in cash as payment in full for our then-outstanding liabilities to such creditors. Pursuant to the Settlement Agreements, we agreed to use our best efforts to prepare and file a registration statement to register the sale of the Settlement Shares as soon as possible following the date of each Settlement Agreement, to use our best efforts to have such registration statement declared effective as soon as possible and to maintain such registration statement until all such Settlement Shares registered thereunder to such creditors have been sold or for a period of one year, whichever comes first.

Pursuant to the terms of the Settlement Agreements relating to such issuances, we filed a Registration Statement on Form S-3, of which this prospectus constitutes a part, in order to permit the selling stockholders to resell to the public any or all of the shares of our common stock issued in connection therewith. 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 June 7, 2010 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 Securities and Exchange Commission 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 June 7, 2010 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.

Name of Selling Stockholder	Shares Beneficially Owned Before Offering (1) Number	Percent	Shares Offered Hereby	Shares Beneficially Owned After Offering (1) Number	Percent
The Coghlan Group, Inc. (2)	30,267	*	30,267	—	—
Pharmascan LLC(3)	61,246	*	61,246	—	—
Ricerca Biosciences LLC (4)	23,667	*	23,667	—	—
eResearch Technology, Inc. (5)	73,554	*	73,554	—	—
Rapid Medical Research, Inc. (6)	24,203	*	24,203	—	—
DaVita Clinical Research, Inc. (7)	34,885	*	34,885	—	—
Seth Herbst	23,424	*	23,424		
KABJA Investment, LLC (8)	23,425	*	23,425	—	—

* Does not exceed 1%.

(1) The percentage of shares beneficially owned prior to the offering is based on 34,611,575 shares of our common stock issued and outstanding as of June 30, 2010 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 Coghlan Group, Inc. ("Coghlan") shares voting and dispositive power with Terry H. Coghlan, who is the chief executive officer and controlling person of Coghlan. Terry H. Coghlan may be deemed to beneficially own the shares listed above. Coghlan's address is 1500 Business Park Drive, Bastrop, Texas 78602.

(3) Pharmascan LLC ("Pharmascan") shares voting and dispositive power with Yair Safriel, who is the controlling person of Pharmascan. Yair Safriel may be deemed to beneficially own the shares listed above. Pharmascan's address is 1201 Gulf Boulevard, Belleair Beach, Florida 33786.

(4) Ricerca Biosciences LLC ("Ricerca") shares voting and dispositive power with Ricerca Holdings II, Inc., who is the controlling person of Ricerca ("Ricerca Holdings"), and SV Life Sciences, Bain Capital and Trinity Equity Investors, who collectively are the majority shareholders of Ricerca Holdings. Ricerca's address is 7528 Auburn Road, Concord, Ohio 44077.

(5) eResearch Technology, Inc. ("eResearch") is a publicly-owned company. eResearch's address is 1818 Market Street, Suite 1000, Philadelphia, Pennsylvania 19103.

(6) Rapid Medical Research, Inc. ("Rapid Medical") shares voting and dispositive power with James E. Fahy, who is the controlling stockholder of Rapid Medical. As controlling stockholder, Mr. Fahy may be deemed to beneficially own the shares listed above. Rapid Medical's address is 3619 Park East Drive #300, Cleveland, Ohio 44122.

(7) DaVita Clinical Research, Inc. (“DaVita”) is a publicly-owned company. DaVita’s address is 601 Hawaii Street, El Segundo, California 90245

(8) KABJA Investment, LLC ("KABJA") shares voting and dispositive power with Keith Aqua, who is a member and controlling person of KABJA. As a controlling person, Mr. Aqua may be deemed to beneficially own the shares listed above. KABJA's address is 14370 Halter Road, Wellington, Florida 33414.

PLAN OF DISTRIBUTION

The common stock to be offered and sold using this prospectus are being registered to permit public secondary trading of such common stock by the selling stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the common stock offered by this prospectus. The aggregate proceeds to the selling stockholders from the sale of the common stock will be the purchase price of the common stock less any discounts and commissions. A selling stockholder reserves the right to accept and, together with its agents, to reject, any proposed purchases of common stock to be made directly or through agents.

The common stock may be sold from time to time to purchasers directly by the selling stockholders and their successors, which includes their transferees, pledgees or donees or their successors, or through underwriters, broker-dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders or the purchasers of the common stock. These discounts, concessions or commissions may be in excess of those customary in the types of transactions involved.

The selling stockholders and any underwriters, broker-dealers or agents who participate in the distribution of the common stock may be “underwriters” within the meaning of the Securities Act. None of the selling stockholders has represented to us that it is a broker-dealer or an affiliate of a broker-dealer. If the selling stockholders are deemed to be underwriters, such selling stockholders may be subject to certain statutory liabilities of the Securities Act and the Exchange Act.

We will pay all expenses of the registration of the common stock pursuant to the Settlement Agreements, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that if the common stock is sold through underwriters, broker dealers or agents, the selling stockholders will be responsible for underwriting discounts or commissions or agent’s commissions.

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, beneficially owned as of June 30, 2010, an aggregate of 31,499 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 by reference to the Annual Report on Form 10-K for the year ended December 31, 2009 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 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 the selling stockholders 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 the selling stockholders 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, 2009 filed with the Securities and Exchange Commission on March 15, 2010;

§ our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010 filed with the Securities and Exchange Commission on May 10, 2010;

§ our Current Reports on Form 8-K (other than information furnished rather than filed), filed with the Securities and Exchange Commission on January 11, 2010, January 19, 2010, January 26, 2010, January 27, 2010, February 2, 2010, February 8, 2010, February 19, 2010, March 3, 2010, March 4, 2010, March 11, 2010, March 16, 2010, March 31, 2010, April 5, 2010, April 15, 2010, April 28, 2010, April 30, 2010, May 10, 2010, May 13, 2010, May 18, 2010, June 11, 2010, June 17, 2010 and June 21, 2010; 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.